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THE CONTEXT FOR WRITING: A DESCRIPTIVE STUDY OF ONE FAMILY-GROUPED, INFORMAL FIRST AND SECOND GRADE CLASSROOM. (VOLUMES I AND II)

The Ohio State University

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THE CONTEXT FOR WRITING:
A DESCRIPTIVE STUDY OF ONE FAMILY-GROUPED,
INFORMAL FIRST AND SECOND GRADE CLASSROOM
VOLUME I
DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Nancy Gaines Platt, A. B., Ed. M.

* * * * *

The Ohio State University
1982

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CHAPTER I
INTRODUCTION

School writing takes place within a classroom context of people, things, and events. The goal of this study was to explore relationships between this classroom context and the language used within it, talk as well as writing. The study took place in a first and second grade informal classroom from the spring of 1979 through the spring of 1980. Data were gathered using a variety of qualitative methods, as children went about their normal classroom lives. Gradually, themes were identified, and used to organize the data. The intention was to gain a picture of the totality of the context, with writing in its place, not only from an outsider's point of view, but as it existed within the minds of the participants.

The focus on the context of writing was derived from theory which proposed systematic relationships between characteristics of the social context and features of language produced (Halliday, McIntosh, & Strevens, 1964; Halliday, 1974, 1975). Additional reasons for this focus came from studies of early language learning which emphasized the critical importance of context (Bruner, 1975; Donaldson, 1978; Snow, 1977).

The purposes for this study were, therefore, first, to understand the meaning structure of the context from both participant and observer perspectives. The second purpose was to explore the possibility of a relationship between the social context and the kind of language produced, emphasizing writing but also including talk. An ultimate
purpose in describing one classroom context for writing was to raise questions for further investigation in other settings.

**Background of the Problem:**

**The Literacy Crisis and Pressure for Accountability**

Writing, along with reading, has become a national concern, as it has before in our history, especially after periods of educational expansion (Judy, 1980, pp. 33-37). Educational institutions and state legislatures have been under pressure from the taxpaying public and from employers to be accountable for their use of public moneys by producing competent readers and writers. Goals have been stated in terms of basic or functional literacy, that is, reading and writing at a survival level for the individual, and at a level adequate for fulfillment of societal expectations (for example, the Basic Skills Improvement Program authorized by the Elementary and Secondary Education Act amendments of 1978). These expectations have often been set at minimal levels, although there is an increasing demand for higher levels of literacy attainment to meet the needs of new technologies (Nymowitz, C. Remedial bosses. *Wall Street Journal*, Jan. 22, 1981, pp. 1; 18). Regardless of the level set, it can be argued that goals have been tied to the immediate needs of the economy rather than to the long-range needs of the individual or of society as a whole.

In response to these pressures and expectations, some legislatures and school boards have instituted competency-based examinations. Many school systems, moving "back to the basics," have narrowed instructional content to testable behavioral objectives. Thus a complex skill such as writing has been reduced to "simpler," more easily measured subskills.
These subskills, actually elements of the language system as defined analytically by adults, are taught directly to children, to be learned and demonstrated out of context of use.

Thus, goals have been set at a functional level, and strategies decided without reference to ways in which children learn. The significance of the problem of writing improvement can, however, be approached through a consideration of alternative goals and strategies.

**Significance of the Problem: Goals and Strategies**

**Goals: Writing as an Aid to Learning, Reflection, and Transformation**

Present goals of the literacy effort emphasize writing to survive, and writing to fit into society. These goals, while in themselves valid, do not begin to exhaust the possible benefits of writing to the individual and to that society. Written language, as compared with spoken language, has a special value because it endures over time and reaches readers out of earshot of speech. The potential power of a literate people to break away from a conservative oral tradition, to develop new ideas and solutions (Olson, 1977, pp. 263-269), and to reconstruct their own social reality (Freire, 1970, pp. 75-76), is barely suggested by this present stress on survival or functional literacy. There is a qualitative difference between learning to use written language to fulfill society's expectations of conventional social and economic behavior, and using written language to examine and possibly change one's personal, social, even political life. Writing to perform minimal tasks such as applying for employment or signing legal documents differs greatly in its function and its demands from writing to express abstract ideas, to make ideas accessible to critical scrutiny, or to
create literature. For writing can do what no other mode, even speaking does: it forces clarification of thinking through reflection (Britton, 1970a, p. 248) and reordering and extension of knowledge (Olson, 1977, pp. 267-270). Further, the "productive rules of language, its combinatorial richness," especially writing, allow one to go beyond experience and transform it (Bruner, 1975, p. 74).

Stubbs, drawing on the work of Goody (1977) and Popper (1972), summarizes the intellectual functions of written language by citing the benefits of record-keeping and the possibility of maintaining objective knowledge formulated in writing (Popper's World III), "independently of the subjective experience of someone who knows it" (Stubbs, 1980, p. 104). Further, knowledge written down is more subject to scrutiny and revision, and "facilitates a critical attitude towards statements and theories" (ibid., p. 105). Barnes, in this same vein, says that language (speaking and writing) "makes knowledge and thought processes readily available to introspection and revision... it allows us to reflect upon thought" (1976, pp. 19-20).

The study of thought and language has a long history (Vygotsky, 1934, 1962; Piaget, 1926), but there is no neat agreement on such fundamental questions such as whether language is essential to thought, or merely facilitates it. The consensus seems to be, however, that writing may in some way aid critical thinking and therefore may lead to change (Graves, 1978, pp. 6-7). This goal is reflected in the statement of standards for basic writing skills programs, as adopted by the National Council of Teachers of English in 1979. Writing is not only to communicate; it is to aid in self-discovery. The goal of
self-discovery through writing is in contrast to and in conflict with the goal of writing to accommodate self to society, and implies a belief that institutions should serve people, rather than vice versa.

Society as a whole, through its agencies, decides upon these goals either consciously or by default, and pays (or fails to pay) to achieve them. A consideration of the range of possible writing goals is therefore appropriate in view of the national effort to improve writing. Within this classroom, although on a small scale and at a beginning level, a range of varied goals or purposes for writing was observed. In theory, these goals or purposes should be related to the talk and writing produced.

**Strategies: Learning the Complex Process of Writing Through Use**

Just as goals can be more broadly considered than the term "functional literacy" implies, so also can the strategies used to reach them be examined. "Basic skills," which are in reality abstract elements of the language system, have been identified as knowledge which needs to be taught. This assumption should be reexamined in the light of current knowledge both of the writing process and of how children learn. It is commonly agreed by many educators, psychologists, and linguists that writing is a complex, integrated process, rather than a collection of separate subskills, to be learned separately and then assembled for use (Britton, et al., 1975, Ch. 2; Downing, 1981; Emig, 1971). Moffett defines writing as involving simultaneous activities which increase in difficulty, from drawing and handwriting through transcription, paraphrasing, and crafting, to the highest level, revision of inner speech. He emphasizes the thinking that precedes
visible writing, at all ages, so that even children dictating stories experience "true authorship" (1979).

Learning of this complex process occurs within a context of use, with children taking active, constructive roles in building and refining their own systems for expressing meaning (Clay, 1975; Graves, 1975; Read, 1975). This understanding of the process of learning to write is at variance with the behaviorist model implicit in the "basic skills" approach. An examination of what is known about children's learning and specifically, about their language learning, would seem to be relevant to the accepted goal of improvement of writing abilities, especially if the goal is stated as development of writing abilities beyond levels needed for survival.

**Need for the Study**

Although work on the context of children's early writing is relatively new and not yet extensive, it rests on a foundation of related thinking and research. This work emphasizes 1) the process and development of writing, 2) language as inseparable from context, 3) human powers which enable construction of systems through inference, and 4) context both as a part of learning to speak, and of speaking and writing in school.

**The Process and Development of Writing**

For many years, writing research was characterized by pedagogical, comparison-group studies. It was assumed that written products and processes were understood. The actual behavior of writers as they wrote in their natural settings was not of interest (Cooper & Odell, 1978, pp. xiii-xiv; Petty, 1978, pp. 75-77).
Over the past decade or so, however, researchers in the fields of linguistics, psychology, and education have examined the writing process, both theoretically (Britton, et al., 1975; Moffett, 1968; Vygotsky, 1934, 1962), and through observational studies of writers at several levels (Emig, 1971; Graves, 1973; Clay, 1975; and Ferreiro, 1980). This work has contributed both an appreciation of the complexity of the writing process, and insight as to the course of development of writing abilities.

An understanding of the writing process has been extended and deepened by Vygotsky's influential *Thought and Language* (1934) through its 1962 English language edition. Vygotsky's conception of inner speech as being the bridge between thought and language has been a powerful metaphor. Inner speech, the first embodiment of thought in an abbreviated, personal form, is language for oneself, at the opposite pole from fully elaborated written language, which requires "a deliberate structuring of the web of meaning" (Vygotsky, 1962, p. 100). Such a metaphor foregrounds the thinking process, and puts into perspective more conspicuous aspects such as handwriting and transcribing. Britton et al., drawing on Vygotsky, Sapir, and others, characterize the process of writing (in contrast to speech) as abstract, one demanding analysis of sound and segment, a second-order symbol system based on, but distinct from, speech. Because of the complexity and abstractness of the writing process, these authors see composition as a three phase process: conception, incubation, and production (Britton, et. al., 1975).

This complexity is confirmed by studies of writers in the process of writing. Janet Emig's *The Composing Processes of Twelfth Graders*
(1971) led the way in considering the thoughts and feelings of writers, including their oral composing behaviors. However, Whiteman writes that even ten years after Emig's study, there are relatively few researchers working on models of the composing process (among them Hayes and Flower, Nold, Perl, and Scardamalia) (Whiteman, 1980).

Studying elementary school children, with an interest in both process and development, Donald Graves, like Emig, used a case study approach along with naturalistic observation. He described the writing processes of seven-year-olds, recording their behavior before, during, and after writing (1973, 1975). His results emphasize the importance of writing as a developmental activity with clusters of behaviors typical of certain stages. Although Graves does identify informal and formal environments, and compares the writing produced in each, his interest is in writing behaviors and development rather than in writing as embedded in the context of classroom interaction. He has, however, recently called for a broadened view of context in writing research (1980, 1981).

Marie Clay (1975) analyzed the writings of kindergarten-age children, and found evidence that they create their own system of writing through approximation and refinement of its features, but in a sequence of their own organization. They practice specific principles such as "directionality" and "linearity," as well as more global concepts of "message" and "sign." These latter indicate they have internalized fundamental ideas of the purpose of writing and its expression through symbol.

Like Clay, but working with preschool children, Emilia Ferreiro (1980) has found that these very young children construct their own
writing system through trying out various ways of relating their letter-like forms to sound and meaning, before they hypothesize an alphabetic principle of relationship. She emphasized the cognitive nature of the process, as children's changing, often conflicting hypotheses evolved in complex ways, over a period of time, toward an alphabetic system.

Charles Read (1975) studied preschoolers' ability to construct their own spelling systems. This they did by using their letter-name knowledge to represent sounds they judged to be phonetically related. Their spellings were unconventional but regular across groups of young children.

The findings of Clay, Read, and Ferreiro, among others, like the findings of those who studied children's early talking in the 1960's, indicate an active, constructive role for the learning child. Just as babies approximate and gradually refine systems of phonology, syntax, and semantics (Brown, 1973) so also do young children develop systems of handwriting, spelling, and punctuation, inferring conventions of the systems from sound and print in their environment.

By the time children are ready for school, therefore, they have begun to build basic understandings of written language. According to Whiteman, the extent of these understandings is now being explored by Harste, Woodward, and Burke, and by Y. Goodman, among others. These researchers are trying to find out what preschoolers know about both form and function of writing (and reading). Harste et al, asked children to perform such tasks as reading common commercial labels, and reading and writing, or pretending to read and write a story and
a letter (Whiteman, 1980). Such work points clearly to the importance of the environment or context in presenting examples of and occasions for using print.

Not only do children have considerable knowledge of the writing system, but they also come to school with a functional oral language, which can serve their writing development. Research in progress by King and Rentel looks at the development of young children's abilities to construct text in three modalities—interactive speech, dictation, and writing. It takes into account the nature of children's oral language resources, in particular, their conversational competence, and their ability to retell and dictate stories (King and Rentel, 1979; Whiteman, 1980).

To summarize the results of recent and current research on the process and development of writing, it is clear that the writing process itself is a matter of many behaviors, verbal and non-verbal, psychological and social, carried out over time, from beginnings in thought to visible expression. In addition, it is not straightforward. "One important recent finding is that writing is not the smooth, linear process it was once thought to be but rather a messy, recursive process with much back-and-forth movement" (R. Graves, 1981).

The development of this writing process involves children actively, as they construct and refine the principles of the writing system through intending meanings and hypothesizing, testing, and refining forms. Children's purposes and intentions draw on their tacit knowledge of oral and written language systems, and move them to create new forms to express their meanings.
Language as Inseparable from Context

The function of children's writing in context. Studies of the development of writing document children's construction of their own systems, and point to the importance of the function of that writing in context of use. For instance children observed by Clay (1975) and Ferreiro (1980) showed they understood that signs, whether conventional or invented, stood for meaning, and could be used to send messages. Harste, Burke, and Woodward (in press) have observed and recorded children's initial encounters with print. They describe four year old Dawn's mock writing which she could read back as meaningful text. Clearly, she understood the function if not all the features of that writing. Megan, on the other hand, used drawing and numerals as well as letters to express her meaning, switching without self-consciousness from one to the other while maintaining focus on message (pp. 12, 14, 19-20).

Context as giving meaning to writing and other communicative modes. Thus, a study of the structure of children's writing systems leads to a study of the function of writing in context of use. The study of function in turn leads to a consideration of the nature of the context in which writing operates, along with other communicative strategies. It is specific contexts that give meaning to modes of communication. Tone of voice, posture, and gesture (for example) refer to the situation just as words do. It is context which enables children both to understand what others mean and to communicate their own meaning to others.

Research has documented children's use of context to understand both spoken and written language. On the basis of their experiences,
they predict the meaning of written language: the toothpaste label Crest means "brush teeth" to the four year old, and the U.S. Mail decal is read "put in mail" (Harste, Burke, and Woodward, in press). In this same way, children have deduced spoken language meanings from their use in familiar events and routines. They use all parts of context and message to interpret meanings, and assume their partners share this information (Cook-Gumperz, 1975, pp. 151, 153).

Children also use the context to communicate with others. Young children rely less on linguistic channels than do adults, and more on other communicative systems - paralinguistic, kinesic, and the setting itself. They also depend upon their audience to know their intentions, their past experience and present circumstances. Their own output may be crude and idiosyncratic - a cry, a pointing gesture, an intonational pattern, a single word - but nevertheless communicative to those who know their context.

Although children are more dependent on context and non-verbal modes of communication, adults also depend upon the context of language use for making themselves understood and for understanding others. Much of everyday adult communication is highly and appropriately context-bound, and depends upon a range of communicative strategies rather than on words alone: a cough, a rise in pitch or stress, a gesture, a grimace. To be verbally explicit in these contexts might be inefficiently redundant, duplicating in words information already shared (Byers & Byers, 1972; Cook-Gumperz, 1977). In addition, unintended messages might be conveyed by the use of unnaturally formal language.
Theories of language and context. A theoretical description of the relationship between language and context has been the goal of scholars from the disciplines of anthropology, sociology, psychology, linguistics, and philosophy. Dell Hymes has written that even though an adequate theory would systematically relate both language and context, "The key to understanding language in context is to start, not with language, but with context" (Hymes, 1972, p. xix). To understand the communicative event, one must go outside of language and study social meaning as embodied in roles, activities, and situations. "There is really no way that linguistic theory can become a theory of language without encompassing social meaning, and that means becoming a part of the general study of communicative conduct and social action..." (Hymes, 1974, p. 202).

One example of this approach is the description by Ervin-Tripp and Mitchell-Keman (1977, pp. 3-5) of sociolinguistic rules which relate language to context. These tacit rules guide people's choices among alternative "events, acts, topics, and linguistic forms" according to situational appropriateness. Among several types are paradigmatic rules of alternation. Thus, in some circumstances, the appropriate paradigmatic choice might be "They are holding a meeting to discuss the issue" rather than "They're sittin' down to rap about it" (Gumperz & Herasimchuk, 1975, pp. 81-82).

Within a chosen alternative, features will predictably co-occur so that choices of vocabulary, syntax, and intonation will agree with each other, or cohere. These interdependent features follow syntagmatic rules of co-occurrence. For example, the co-occurrence of these
features of vocabulary and phonology would be highly unlikely. "They're hav'n a meetin' to discuss the issue" (Ibid., p. 82).

Finally, sequential rules describe the structure of interaction, from relaxed conversation on the one hand to highly constrained ritual speech events on the other. The structure of these events is governed by these sequential rules, so that constituent units follow one another according to a pattern, even in relaxed conversation (Ervin-Tripp & Mitchell-Kernan, 1977, pp. 3-5).

The term register has been applied to the varieties of language produced by the operation of these sociolinguistic rules (Halliday, McIntosh, & Strevens, 1964; Halliday, 1974, 1975; DeStefano, 1978). Register switching occurs when people adapt their phonology, syntax, vocabulary, and such paralinguistic features as intonation, to situational demands. DeStefano (1978) discusses the nature of these register-switching rule sets. When situations change, register switching rules help people predict situational demands and adjust their language accordingly. Registers are not completely different varieties of language, but rather share many or most features in common with each other. They are set apart from each other by a small set of unshared features, or by the changed frequency of a shared feature (pp. 99-103).

The terms field, tenor, and mode of discourse (Halliday, McIntosh, & Strevens, 1964; Halliday, 1974, 1975) have been used to describe aspects of the social context which control the variety of register produced. Accounting for the same variables as do Hymes' and Ervin-Tripp's theoretical formulations, they are used to interpret the social
meaning of the context, and to determine text. By describing field (or the ongoing activity), tenor (the role relationships involved), and mode (the symbolic or rhetorical channel), it is possible to predict the meaning or "configuration of semantic options," as well as those features of vocabulary, syntax, phonology, and paralanguage summarized by DeStefano. Thus there are registers of meanings appropriate to such contexts as mealtime, bedtime, and school lessons, each register of meanings being realized by appropriate grammatical and lexical features (Halliday, 1975, p. 131).

Members of speech communities share rules such as these for registers of language use. The field, tenor, or mode of a situation may convey different social meanings to members of different speech communities, and thus lead to inappropriate language use for that situation in that community. When institutions such as schools bring together individuals from different speech communities, these rule sets may not coincide, and misunderstandings result. For example, Indian school children do not display their competence in contexts which call for different ways of using language than do those of their own community (Philips, 1972). Blacks may be judged non-verbal in the unfamiliar context of a formal interview situation (Labov, 1969). More generally, young children may experience misunderstanding and discontinuity when encountering rules for language use in school which differ from familiar home and neighborhood rules (Bernstein, 1971; DeStefano, Pepinsky, & Sanders, in press; Hymes, 1972). Thus, language and behavior which communicates successfully rests on a
background of shared meanings, that is, a shared if tacit understanding of the field, tenor, and mode of situations.

Such concepts as sociolinguistic rule sets and register help relate language and the social context in a systematic way. Social norms which characterize specific contexts serve to guide speakers in selecting and interpreting meanings, in knowing what to expect. However, scholars differ in the roles assigned to norms and rules.

On the one hand, linguists and sociolinguists see people's behavior as narrowly constrained by selection rule sets which are responsive to situational circumstances. While the referential content may stay the same, the speaker's choice among different ways of saying something must follow both paradigmatic and syntagmatic selection rule sets. These rule sets allow little room for variation, and hence are highly accurate predictors of verbal behavior.

Other scholars, especially ethnomethodologists within sociology, see norms and rules as guiding speaker's choices but not accounting for actual behavior adequately. In their introductory review of approaches to language in its sociocultural context, Ervin-Tripp and Mitchell-Kernan explain the point of view of the ethnomethodologists:

Social categories may constrain what can properly occur or what is likely to occur, but cannot precisely identify what sequences or choices will be made. The rules we describe might be regarded as a resource speakers have to accomplish interactional goals and that listeners have to interpret intent and feeling. If interaction were totally predictable by a listener, it would fail to communicate (Ervin-Tripp & Mitchell-Kernan, 1977, p. 5).

The knowledge of social norms thus prepares speakers and listeners, but they need to apply them to actual events, which may not fit
these norms in every detail. The process of acting on social norms in an unfolding situation requires conversational strategies, as speakers jointly construct these events through interpretation and negotiation. Gumperz (1972, p. 15) has compared sociolinguistic norms such as status and role by analogy to phonemes. Both norms and phonemes are abstractions which have meaning only as perceived in actual contexts. Cook-Gumperz (1977) also deals with the contrast between abstract and actual. She contrasts conveyed and situated meaning. Conveyed meanings are conventional norms; situated meanings are those constructed by people in interaction. Meanings conveyed by norms enable predictable interpretation, according to rules of appropriateness. "Would you like to take out the garbage?" is predictably understood to mean "Take out the garbage." Situated meanings, language in an actual, unique situation, is interpreted by means of para-linguistic, kinesic, and sociological features of speech performance. The importance for this study is that these features, normally unnoticed by adult speakers, are relied on by children.

It would seem, therefore that any theory of language in context, would have to include both conveyed meaning and situated meaning. That is, an understanding of context needs to include both sociolinguistic rules which are based on general expectations for contexts, and strategies for communicating in actual events, which involve using non-linguistic resources to interpret and imply meaning.

Children have demonstrated their abilities to use communicative strategies in order to function in actual situations. Their reliance on extra-linguistic modes has been mentioned. They have shown awareness of other's intentions and knowledge (Shields, n.d.). Problems
which have been thought of as too abstract for preoperational children to solve, are shown to be within reach if presented in the form of familiar, human situations (Donaldson, 1978).

Children are thus dependent on the total communicative context in interpreting and producing communicative behavior. They show a developing knowledge of social rules governing behavior (Cook-Gumperz, 1975) and language in predictable contexts. They also show ability to make use of several channels of information in guiding their interpretive performance in actual situations, and in negotiating social encounters.

Although the context-bound nature of much child and adult communication is necessary and desirable (Hymes, 1972, p. xiv), a role of schooling is to create the possibility for context-free language and thought. Children's communicative strategies need to be broadened so that they are able to be at home in a wider range of speech repertoires, suitable for a wider range of situations, including one which demands context-free, explicit language. School exists to help children learn to confine meaning to the text (Olson, 1977), to give up dependence on extra-linguistic, extra-verbal communicative strategies in order to function within language itself, regardless of immediate context or common but implicit background of experience. Cook-Gumperz holds that helping children develop decontextualized language abilities is the main job of the school (1977, p. 105).

All people need to have areas of their lives in which interaction can be context-bound, resting on shared background. However, they also need access to the power that comes from controlling context-free
language, which allows objective analysis of ideas and institutions. This is the contrast between particularistic and universalistic meanings which Bernstein makes. He believes the teacher can give children access to universalistic meanings best by starting with the particularistic culture of the child: "If the culture of the teacher is to become part of the consciousness of the child, then the culture of the child must first be in the consciousness of the teacher" (Bernstein, 1971, p. 199).

Hymes too sees the need for both. In discussing the (1972) Philips paper on Warm Springs Indian children (referred to above), he says that there is need for a respect for the culture of the children, but at the same time, a need for children "to acquire the mode of language use that will enable them to defend and have control over their own lives in relation to the larger society." He continues: "This dual need, for personalistic and public modes of communication in the sphere of love and in the sphere of power, and to change in the light of them, being different for each person, is not surprisingly very difficult for communities and institutions" (1972, p. xlvi).

To summarize this section on context and language, it can be stated that young children function cognitively and linguistically within their familiar context. They use language along with other communicative strategies to express their meanings, however incompletely, and are understood by those who share their frame of reference. They use their social and linguistic knowledge in adapting appropriately to increasingly varied contexts, and within these predictable guidelines, make creative choices as they interact with others in constructing events.
The ability of children, indeed, of humans, to infer linguistic and social structure, and to apply these inferences in their own constructions, is assumed by studies of process and context, and will now be discussed explicitly in the following section.

**Human Powers of Inference**

Theories of language in context entail a certain view of human learning. This view has underlain the above discussions of both process and context. For children to be able to construct their own language systems, they first have to participate with others in meaningful life events, even before the appearance of symbolic behavior. These predictable interactive life events enable children to infer the meaning of the language they hear, and to imply their own meanings through their own prelinguistic and linguistic constructions.

Humans, including the immature of the species, are now seen as having innate powers which enable learning through inference. Their brain cannot help learning all the time (Smith, 1981) as they proceed to impose order on the undifferentiated stream of sense data that comes to them. This active, constructive process occurs at all levels, from perception to abstract thought. Even though speech sounds are physically continuous, they are perceived as discontinuous phonemes. The continuous light waves from written language, too, are perceived as classes of letters and words. These perceptual processes of categorization operate unconsciously, while by contrast the ordering of propositions in reasoned argument may be highly conscious. What happens to the human learner in life as well as in language is interpreted and
becomes a "theory of the world in the head" (Smith, 1975), or a representation made to one's self of one's experience (Britton, 1970).

Language is a part of this internal theory, (Halliday, 1969) and is learned along with learning about the world. Language (and other, non-verbal symbolic systems) are learned within the context of appropriate, meaningful use. At the same time, the child is building knowledge of the social meanings which characterize various contexts (Cook-Gumperz and Corsaro, 1975; Halliday, 1974, 1975). This integrated knowledge of language and society becomes elaborated and refined with further participation in a growing set of speech events, those repeated occasions for using organized language in certain contexts.

Inference, then, is a human power by which children construct their view of the world, drawing on their experiences with people, things, and language. The child's world view furnishes a framework of expectations (Cook-Gumperz and Corsaro, 1975) which influences interpretation of new experience. For example, young children learn to expect a certain routine of word and gesture - a wave of the hand and "bye-bye" at defined leave-taking times. In school, they develop expectations which guide the appropriateness of their verbal and non-verbal behavior in different situations.

Thus the power to classify and order experience helps humans anticipate. It helps them focus on what is important in their environment and to disregard the rest. It prepares them to respond appropriately in word and deed.

However, as discussed above, reality does not always fit preconceived categories, and people are surprised. Further, there is an
area of choice, and room for individual creativity. Roles, for instance, do not automatically determine behavior. Rather, individuals, who are members of a group but are also unique personalities with free will, interpret role expectations in their own way. Using strategies of interpretation, based on information from outside the syntactic-semantic channel, people construct events together, so that they do fit and make sense. In this way, reality, which is infinitely varied, is cast into norms, not just by individual cognitive operations, but also through joint social processes.

The power of human inference underlies both the abstraction of categories - both linguistic and social - and the assigning to categories of actual events so that they make sense. Because lives are patterned, and some events more probable than others, expectations serve us well. However, people make real choices within these constraints, so that neither language nor social meaning is ever completely predictable or predetermined.

This discussion of the human powers of inference is intended to explain in part how it is that children are able to construct both social meaning and language systems on the basis of experience in the context of their lives. It is also intended to suggest that teachers structure categories of language and behavior clearly for children, (such as parents structure samples of language and behavior clearly so that young children can recognize regularities and abstract rules). In contrast, the verbal and social behavior of young school children, like that of preschool children, may only approximate these clear categories. The teacher's role, like the role of the parent, may be
to accept and to use the child's approximation by contributing what is needed to realize and make explicit the child's meaning. These theoretical speculations will be pursued in the chapters which follow.

**Studies of Language in Context**

Although studies of the context of early writing are recent and few, there is a substantial body of work in the related areas of early language learning, and of language in the classroom. Together, they indicate the importance of the function of language for the language user, and the context which supports that use.

Evidence for the primacy of meaning and the vital role of context is now found in studies of earliest infancy (in contrast to the studies of the sixties which studied children's language only after the appearance of first words) (Halliday, 1980). Through routine interactions with "significant others," children learn about the nature of people and things. This social knowledge helps them interpret language they hear, and enables others to interpret their idiosyncratic, prelinguistic representations (Bruner, 1975; Cook-Gumperz, 1975; Halliday, 1975; Shields, n.d.).

Even before children control words and grammatical structures, they signal the difference between two basic functions, that is between what Halliday (1975) calls the "pragmatic" and the "mathetic" functions. The growth of the pragmatic function is well documented by studies of the growth of children's communicative competence. At the time of entering school, children know how to use language in interpersonal relationships (Borman, 1979; Cherry, 1979; Keenan, 1974; Shields, 1979, among others). They demonstrate knowledge of society through this communicative behavior (Cook-Gumperz and Corsaro, 1975; Halliday, 1975).
They also are using language mathetically, that is, to learn about and reflect upon their world. Mathetic language serves "in the construction of reality" (Halliday, 1975, p. 75). Their comments and questions reveal the organization of their experience, the sense they are making of their world (Britton, 1970a; Wells, 1975). As children talk about their experiences, they are sorting out concepts and using language as "an instrument of thought" (Bruner, 1975).

Thus they come to school with substantial control over the system of their home language, in its verbal and non-verbal aspects (Byers & Byers, 1972). They know how to use this system to communicate with others in ways appropriate to varying contexts. Further, they use language (along with non-verbal modes) to work out and represent their view of the world.

School constitutes a new context, and calls for new behaviors. Some early schooling deliberately tries to make connections with children's familiar contexts of language use, and builds on their tacit knowledge of communication, of people, and of the world (Rosen & Rosen, 1973, chap. 1). Other school situations are discontinuous with children's experience, and put children at a disadvantage because they are not able to use what they know, for example, their ability to converse with peers (Hymes, 1972, xx-xxi).

Studies of classroom language describe this particular new context of school in which children have to function. Some studies have characterized formal properties of teacher-child discourse in structural terms (Sinclair and Coulthard, 1975; Mehan, 1979). Structure has been sought in non-verbal cues to segmented events which alert children to
the changing requirements of changing contexts (Cook-Gumperz and Gumperz, 1978; Green and Wallat, 1979).

Other studies have inferred underlying social meanings from these verbal interactions, especially those related to the teacher's control of educational knowledge (Barnes, 1976; Bernstein, 1971; Edwards and Furlong, 1978; Stubbs, 1976; Walker and Adelman, 1976). The first group, those interested in structure, tends to rely on retrievable evidence through taped and videotaped sequences. The latter uses a more eclectic, historical approach, in which meanings may derive from past, shared experience which the researcher has to investigate in order to understand the present. Meanings are thus tied to underlying relationships in the classroom. The teacher's mode of communication becomes as important as the content. Therefore, these contextual relationships are a subject for research.

Thus classroom language studies have often revealed discontinuities in home and school expectations, in both communicative structure and in underlying meanings. Different social rules apply in school: hands are raised, questions asked to which the teacher already knows the answer, and children's knowledge which may not fit in to the teacher's plan, set aside in order to help the teacher finish the official lesson.

Children adjust to these discontinuities, inferring patterns of new expectations, and using many channels of contextual information to fill in a background teacher often assume they have. Children and teacher show they rely on many unofficial contextual resources to construct events together, to "accomplish classroom lessons" (Mehan, 1974). What children do with language in school, therefore, is guided
by their learning of the norms of classroom culture, but is carried out
creatively as they and their teacher live out and make sense of actual
events.

Although there has been recent work on the relationship between the
psychology of reading behavior and the social context within which read-
ing takes place (Clay, 1976; Griffin, 1977a and 1977b; Hall, 1980;
Harste et al., in press; McDermott, 1977; McKenzie, 1976), studies of
writing in its social context lag behind. Among those who have studied
the context for writing, however, is Florio (1978), who used ethno-
graphic methods to observe the occasions for writing in a kindergarten-
first grade classroom. She emphasized the importance to children of
their make-believe town and post office in giving them a reason to
write, both to those within and outside of their own "Betterburg"
community. In this way, the usual difficulties in writing which stem
from lack of purpose and lack of audience were overcome. This study
emphasizes the communicative function of writing, rather than the mathe-
ic function of writing to learn, and describes the context in terms of
these communicative events rather than comprehensively in terms of the
structuring of roles, relationships, and content.

Some researchers have come to the study of the social context of
writing indirectly through reading studies. For example, Harste et al.
(in press) interpret early encounters with print as social events,
which help children to read: text embedded in them, and which their
early writing symbolizes, however unconventionally.

Bagbahn, in her unpublished dissertation (1980) traced the
development of one child's entry into literacy as it overlapped with
her learning of spoken language. The social, interactional framework of joint action and joint attention schemes supported the child as she refined her concepts of both reading and writing. This framework, derived from Bruner (1975), was applied to language learning in the preschool years in much the same way it was used to guide this study.

Studies of fifth graders (Cartwright, 1979), and of fourth, eighth, and twelfth graders (Collins, 1981) both indicate the potential in helping children overcome the inherent difficulties of the writing process of using the collaborative patterns of conversational discourse. Insights from the writings of Britton (1970a) and the Rosens (1973) emphasize the process of representing one's experience to oneself, and the importance of the network of social relationships which support this representation, through talk, writing, and through other modes.

Problem Statement

The object of this present study was to look at the context in which children wrote, talked, and acted, both to communicate with others and to represent their experiences to themselves. The focus was on the context of this particular classroom, as consisting of certain social meanings which in turn influenced the kind of communication and symbolic behavior children produced. Children's actual production of writing, along with talk and non-verbal representations of various kinds may have merely suggested what their meanings were. In context, however, their expressions made sense to them, and to others who shared their frame of reference. A description of the properties of the context — the structuring of interpersonal relationships and relationships with content, was the first goal of this study. A description of
children's experiences as represented by their writing, but also by their talk and other non-verbal representations was the second goal. Two questions have been formulated which flow from these goals. These goals and questions can be summarized as follows:

Goals: 1. to describe the social context of one first and second grade informal classroom.

2. to describe the language used within the context, with focus on written language.

Questions: 1. What are the contextual characteristics which create meaning in this classroom, and thereby support children as they begin to structure their thought into spoken and written language?

2. What are the contextual characteristics which support children in their development of explicit, context-free language?

Plan of this Study

The remainder of this dissertation will be organized in the following way. Theory and research related to the study of these goals and questions as stated in the above will be discussed in Chapter 2, the Review of Related Literature. Chapter 3 will report the methodology used in this particular study. Findings will be divided between Chapters 4 and 5. Chapter 4 will describe the context of this classroom as structured by the teacher. Chapter 5 will present children's writing as related to their experience in this context. Chapter 6 will summarize these findings, relate them to the research literature, and use them as a basis for suggesting questions to be investigated.
CHAPTER II
REVIEW OF THE RELATED LITERATURE

The literature which bears on the problem of describing the context for writing will be organized around the following topics: ethnography and other qualitative research methodologies; the relationship between language and context; and characteristics of the context as structured by the adult.

Ethnography and Other Qualitative Research Methodologies

The Research Tradition: Qualitative, Naturalistic, Ethnographic

The purpose of this study was both to describe the context of language use and the language used within the context. To describe language in context entails looking at this classroom community as a network of relationships, rather than focusing on a limited, predetermined set of variables (Rist, 1977, p. 47). Furthermore, since these relationships are not necessarily directly observable, but reside at least in part in the meanings and minds of the participants, methods other than direct observation must be used to discover them.

For these reasons, this study was carried out using qualitative, naturalistic, and ethnographic procedures. That is, emphasis was on a qualitative description of relationships rather than on a quantitative enumeration of units (although within the study, some counting was done). Effort was made to study the classroom as it functioned naturally. The attempt was to minimize disruption of the classroom by avoiding experimentation on the one hand, and by fitting
in to its ways on the other. The goal was to understand and record the life of the people in this classroom, and the place of language, particularly writing, within this life, using ethnographic methods.

Thus, this study borrowed from a tradition of research which is more characteristic of European linguistics and of anthropology and sociology than of mainstream educational research. It was Malinowski, the American anthropologist who in a supplement to I.A. Richards' 1923 *The Meaning of Meaning* formulated the concept "context of situation." Drawing on his experience in studying the Trobriand Islanders, Malinowski wrote that utterances have no meaning except in the context of situation. A broadened definition of context "...must burst the bonds of mere linguistics and be carried over into the analysis of the general conditions under which a language is spoken" (1923, p. 306). Two years later, Sapir, an American anthropologist and linguist, developed the concept of "functional relevance." Sapir distinguished between sounds and phonemes, phonemes being classes of sounds which vary physically (for instance, in the feature of voicing), but which nevertheless are "psychologically aloof" from other phonemes (1925, pp. 39-40). This principle, broadly applied, means that the significance of any phenomenon, from sound to overt action, is derived from its meaning in context, and not from any inherent physical property. Hymes states that this principle of functional relevance is important at every level of language and especially to the study of language in context. The significance of linguistic features which characterize styles used in varying contexts lies in the social meaning they symbolize, and not in
sounds alone. One goes outside grammar to social life itself, to discover meanings conveyed by a system of signs (Hymes, 1977, p. 92).

Because the present study endeavors to describe language in its context, it looks to the work of such scholars as Malinowski and Sapir, and those who followed, for example Gumperz, Hymes, and Halliday. All belonged to an essentially European tradition which never forgot context, even throughout the era of the 1960's which was dominated by Chomsky's powerful theories of transformational-generative grammar. Chomsky's efforts to describe a universal, context-free structure of human language led to an interest in the process of "acquiring" this language, and a search for universal patterns of acquisition. Scholars at Harvard, working under Roger Brown, traced these patterns, with emphasis on syntactic and morphological aspects of language. A return to the importance of meaning and context was dramatized by the work of Bloom (1970) which demonstrated that mother and child used contextual, non-linguistic information to understand the meaning of such ambiguous phrases as "Mommy sock." The decade of the seventies has seen growth in the areas of semantics, pragmatics, and sociolinguistics, and a renewed interest in the context of language use, with linguistic structure serving to realize context-dependent meanings. While not claiming to be a formal, sociolinguistic study, this description of one classroom shares the current interest in language as functioning to express social and personal meaning in varied contexts of living and learning.

**Rationale for the Choice of a Qualitative, Descriptive Methodology**

Thus context has been neglected, both in Chomskyan linguistics and the bulk of educational research which has patterned its methods
after those of the natural sciences. According to Mishler, context has often been seen, not as a source of information, but as an "enemy of understanding" to be stripped away in order to identify the source of effects (Mishler, 1979, p. 2). Cronbach, among others, cites the failure of years of this kind of experimental research, and concludes that in the classroom situation, there are too many weak interactions to be controlled and isolated, so that the simpler interactions are hidden by the more complex (Cronbach, 1975, p. 124). When the attempt is made to remove a phenomenon of interest from these sources of confusion, it has been shown that the phenomenon is no longer the same. For example, it is well documented that language in a formal interview situation will be unlike language produced with one's peers (Black, 1979; Cazden, 1970; Bronfenbrenner in Mishler, 1979, p. 5; Labov, 1969).

In a 1970 paper, Cazden calls for attention to variables of situation whose effect on performance has been neglected. This suggestion for systematic exploration of variables across contexts has also been made by Bronfenbrenner, as reported by Mishler (1979). Bronfenbrenner suggests that research be conducted in multiple contexts "to test the range of situations in which a generalization holds" (Mishler, 1979, p. 9). This suggestion recognizes the context-dependence of relationships between variables. However, it assumes that "measurement of variables X and Y be standard from situation to situation," standard measurement of variables being necessary to the determination of whether generalizations hold across contexts (ibid.). Mishler questions the possibility of standard measurement of variables
across contexts, and calls instead for a study of "situated meaning." That is, we would "specify the contextual conditions under which a relationship holds or does not hold" (ibid.). He discusses three research perspectives - phenomenology, sociolinguistics, and ethnomethodology - whose goal is the systematic study of situated meaning (ibid.). A biological rather than physical metaphor thus more aptly describes the organic relationships and interdependences of people as they function together in their ecological setting or context.

Experimental methods in education have a further limitation, given the purpose of studying a human phenomenon in context. The context which people use to structure their behavior is a perceived context, existing in their minds, and also includes their idea of what is in the minds of others. These mental constructs (Magoon, 1977) have great power in anticipating and guiding the course of interaction. Just as the meaning of experience is in what the individual makes of it rather than simply in what happens, so also social interaction is interpretable only if shared and unshared meanings are known. A description of a football or chess game in terms of observable, external evidence would not tell an outsider what the point of the game was; that is, it would not identify the functionally relevant categories as understood by members of that culture (Erickson, 1977, p. 59; Hymes, 1977, pp. 91-93).

Concern for the members' understanding, and for the researcher's understanding as well, marks the varieties of approaches which reflect a common phenomenological perspective. Phenomena of the world can be interpreted in many ways; multiple meanings are possible, depending upon the subject's frame of reference. The researcher, therefore,
in quest of the meanings relevant to those being studied, suspends or "brackets" his or her own preconceptions, in order to learn to interpret reality from the members' point of view. The researcher maintains a dual vision, however, so that implicit and taken-for-granted meanings of the members are kept in awareness for objective analysis (Wilson, 1977; Mishler, 1979). According to Van Manen (1978) those who call themselves by various names—ethnographers, ethnomethodologist, analytic sociologists, and constitutive phenomenologists "all have in common that they wish to treat ordinary social intercourse as a feature of the life-world" (pp. 3-5) rather than confining attention to the idealized, predictable, controllable world of science. Instead of focusing on the empirical structures of teaching, learning, and the curriculum, phenomenology looks at structuring activities themselves. These scholars share an interest in discovering the structure of those latent, unrecognized interpretive procedures which are necessary to cope with the surprises and irregularities of everyday life. The phenomenological perspective, with roots in European phenomenology and symbolic interactionism, underlies these various methods of qualitative, naturalistic research, including that of participant observation used in this study. More will be said below about these different approaches within this general point of view.

To summarize the reasons for using qualitative, descriptive methods, it is necessary first to study social behavior in its context, and second, to expand context to include mental constructs or perceptions as well as observable behavior. These necessities might not apply to studies of purely physical phenomena, such as frequency of eye blinking, or distribution of ages in a community. Rather
than view experimental and descriptive methods as rivals—a question of quantitative versus qualitative—it has been suggested that they each can serve when appropriate to the subject or question of interest. Choice of methodology follows from definitions of the problem. Researchers may "see" different problems through the lenses of their own research paradigms. The question becomes, according to Kuhn, "Which problem is it of more significance to have solved?" (Kuhn in Rist, 1977, p. 46). If the significant problem is based upon the member's world rather than the researcher's world, then methodology needs to be chosen which can reach below the surface to find the perspective members bring to their world. For though items of behavior and language may seem equivalent on the surface and out of context, they may not be functionally equivalent or relevant to the members (Hymes, 1977, p: 92).

Thus, there are numbers of researchers who believe that descriptive studies are an appropriate and necessary way to discover "what makes sense to count" (Erickson, 1977, p. 58), or to discover which units are functionally relevant to this particular group. They do vary in their ideas of the appropriate place in the research process for these methods. Contrary to a common view, these methods are not always preliminary to quantitative, experimental work. Rather, they are to be used whenever appropriate to the question, as one tool within a group of tools. Erickson, who holds this view, summarizes the strengths of each kind of approach:

What "qualitative" researchers have to offer others is potentially valid insight into functionally relevant definitions of social facts. What "quantitative" researchers have to offer the "qualitatives"
is ways of determining the generalizability of qualitative insights, ways of escaping from that tyranny of the single case... (1977, p. 60).

Others, however, believe the function of descriptive research is to explore a specific, small-scale area in order to frame questions for later, larger scale controlled investigation, (for example, Iannaccone, 1975). Iannaccone sees field study as a reiterative cycle of exploration, description, and verification, whose product is hypothesis generation, not testing. "The reconceptualization of life's dilemmas into useful, researchable problems is the basic research venture..." (Iannaccone, 1975, p. 222).

In conclusion, it would seem reasonable to use qualitative methods whenever appropriate. The exploration and description of new areas of study would seem to be an especially appropriate time. Qualitative methods would also be useful within any study whenever "functionally relevant definitions of social facts" are needed.

**Varieties of Approaches within Context Based Studies**

Researchers from several disciplines study phenomena in context, but with varied approaches and goals. In spite of these differences, elaborated below, all would seem to share a common view of human learning, which assumes that people work hard to infer regularities and impose order on their experience so that the social reality is a sensible, ordered reality. People draw on contextual information - the concrete setting, the background and assumptions they share with each other, gesture, posture, and intonation - in interpreting language and situation. Their interpretations are their own constructions of both linguistic and social systems, as they build their own meaning
(Halliday, 1975, p. 120). These constructions guide their expectations and their behavior (Cook-Gumperz, 1975; Ervin-Tripp & Mitchell-Kernan, 1977; Magoon, 1977). Those who study phenomena in context recognize this psychological ability to classify according to salient features, ignoring irrelevancies. In terms of social meaning, real events in all their irregularities are perceived as orderly and "normal," through an active, interactive, constructive process of human mind and human action. Some call these outcomes social norms.

Different groups of researchers have emphasized different parts of this process. The idea of social norms as static, objective facts with an existence independent of perceivers, has no current force (Johnson, 1975, pp. 18-19). However, those whose work has centered on describing different contexts and the language and behavior associated with them, have tried to describe expectations which people perceive as normal. Thus Ervin-Tripp and Mitchell-Kernan have identified sociolinguistic rules for linguistic features which co-occur, follow, or alternate in predictable ways, depending on the context of use (Ervin-Tripp & Mitchell-Kernan, 1977, pp. 3-4), as described briefly above (p. 13). The patterning of these features is associated with expectations of what is appropriate in various contexts, or norms in people's minds.

Close to, and interconnected with social norms, are social rules. Cognitive anthropologists have also been interested in describing these rules, that is, what people need to know in order to anticipate the scenes of their culture (Frake, 1964, p. 112). Frake describes the ritual offerings of the Subanan people as religious behavior.
which can be expected in certain contexts. He contrasts feats which are predictable (or "uninformative") with those which are less predictable, occurring in response to unscheduled crises, as one of a set of alternative possibilities for dealing with those crises (pp. 124-125). Frake and other cognitive anthropologists share with Ervin-Tripp the goal of objective, formal description of social contexts in terms of rules which reveal people's idealized constructs (Frake, 1964, p. 128).

The terms etic and emic have come from cognitive anthropologists (Pike, 1954), to denote the difference between an external description of events as they appear to an outsider, and the internal meaning of those events to the members of the culture. The chess game referred to above could be described in etic terms as a sequence of physical moves in time, the point of the game - its emic meaning to the players - not easily recoverable by the uninitiated observer. These terms contrast what can be observed from an outsider's perspective, as people go about their daily lives (the etic approach), with how people see their lives from the inside (the emic approach). Again, the assumption is that people create, construct, and maintain their own emic categories, and that these constructions vary in various cultures, situations, and individuals. The challenge to the researcher in discovering emic categories while retaining etic objectivity is an aspect of methodology important to acknowledge, and will be discussed below.

A somewhat different approach from cognitive anthropology has been taken by phenomenological culturalists (cf. Geertz, 1973).
While both cognitive anthropologists and phenomenological culturalists are concerned with emic phenomena, they look at different aspects within the emic dimension. So, for example, cognitive anthropologists seek to discover the cognitive structures people use to predict events and make sense of their lives, the definitions of what every member must know (cf. Frake, 1964; Spradley, et al., 1972).

In contrast, phenomenological culturalists like Geertz, search for underlying motivation and meaning (Van Manen, 1978, p. 8) rather than for these cognitive structures. Geertz sees behavior and language as symbolic, and the ethnographer's charge as uncovering the bottom layer of that meaning. There is no simple rule which when applied yields the meaning of a piece of behavior. Many individual points of view, many cultural traditions come into play in interpreting behavior. Geertz borrows the term "thick description" from Ryle, and uses Ryle's wink example to illustrate the multilayered, indeterminate nature of thick description. An eye blink, an etic phenomenon which has no social meaning, may on the other hand be a wink. This wink however, may be a burlesqued wink, as it may also be a burlesqued wink being rehearsed. Thus, the search for meaning goes deep, and demands synthesis of many strands of information. Therefore, the emic understanding, a category in a native taxonomy to cognitive anthropologists, is for phenomenological culturalists a many-layered particular event which derives meaning from individual and cultural history and motivation. Geertz (1973) summarizes his semiotic view of culture:

Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has
spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning (p. 5).

Still another approach to the study of context is exemplified by ethnomethodologists, whose interest is in the "interactional work" done by people to create contexts jointly, and to display to each other the meanings they are creating (Garfinkel, 1967, 1972; Leiter, 1980). An emic knowledge of cultural rules or norms helps people expect the probable, but interactional strategies or interpretive procedures are also needed since no set of rules is ever complete enough to specify the requirements of particular situations. Rule-based classification does not automatically fit actual situations, nor specify how to make them fit, so "ad hoc ing" is necessary. People use "practical reasoning" in order to make sense of fragmentary data. Thus every child learns these "modes of practical reasoning," along with learning the system of language itself and its rules for appropriate use, all of this knowledge being tacit and out-of-awareness (Gumperz & Hymes, 1972, pp. 301-309).

Practical reasoning is based upon three processes by which members make sense of their joint interaction: indexicality, open-endedness, and reflexivity. Indexicality refers to the fact that language never fully expresses (or indexes) all that is meant; part of the meaning is always in the situation. Speech fragments, though prescriptively undesirable and descriptively incomplete, may in fact be optimal in terms of communicative effectiveness. Open-endedness is the ambiguous quality of interaction which by its ambiguity allows for a changing interpretation by participants as it develops.
Reflexivity means that it is necessary to look into one's own interpretive practices when studying those of others. Thus, the method of study becomes the subject of study as well, and interpretive practices, usually ignored, are made explicit (Gumperz & Hymes, 1972, pp. 305-307).

Therefore, rules of speaking appropriately, and rules of interpretation are both necessary. Knowledge of determinate rules of speaking is essential for intelligible use of indeterminate rules of interpretation. Sociolinguistics, then, is presupposed by ethnomethodology (Gumperz & Hymes, 1972, p. 309).

To summarize this brief review of some different approaches to context description, it could be said that each approach emphasizes a different aspect of interaction within context. Sociolinguists have formulated rules which people follow predictably in adjusting their speech to the situation, and in interpreting the meaning of others' speech. Cognitive anthropologists, also interested in rules, try to discover the way in which people's knowledge of the world is classified which enables them to act as members of their society. Phenomenological culturalists, while also interested in the member's emic perspective, go beyond cognitive categories or linguistic rules in a search for the motivation and symbolic meaning of behavior. Similar in its indeterminancy, the approach of ethnomethodologists emphasizes people's behavior in actual situations, as they interpret complex reality to make it fit the sense of what is normal.

A constructivist view of learning is shared by all of these approaches. Meanings are understood to be a product of members' own understanding rather than a result of external environmental forces.
The meanings people construct are guided but not determined by their anticipation of future events. The creative possibilities of making new meanings, together with the complexity and uniqueness of each real life event, make their behavior probable though not predetermined as though by static rules.

The approach taken in this study was not identical with any one of those discussed above, though it was influenced by all. That is, emic as well as etic categories were sought, meanings and interpretive procedures as well as rules. Thus, the approach was eclectic; methods, on the other hand, were drawn from anthropology and ethnography. The research background for these ethnographic methods will now be given.

Methods of Ethnography

Ethnographic methods, the traditional tools of anthropologists who use them in doing field studies and writing ethnographies, are available for any researchers whose approach and goal is to study the context within which language is used. Those following any of the approaches described above might use ethnographic methods from time to time in order to reach their goals, with the possible exception of ethnomethodologists, who seek to locate the rules people follow in structuring their interaction from a record of the interaction itself (Mehan, 1979, p. 23).

There is a literature describing specific aspects of ethnographic methodology, which can be adapted for use in school studies. However, Ogbu (1981) makes the point that many of these adaptations are superficial, revealing a lack of training on the part of educators trying to produce practical results rather than add to basic understanding.
He further criticizes many school ethnographers for neglecting to study classrooms in their larger setting, particularly in their real and perceived relationship to the economic structure of the community.

However, as Ogbu says, the use of ethnographic methods in school studies is barely two decades old (p. 4). Therefore criticism is probably to be expected and a not unhealthy development. Meanwhile, literature which furnishes guidance and authority for these new kinds of studies can be drawn on to explain the procedures common to ethnographic studies, many of which were used in this study. What some writers have said about these procedures is summarized and discussed below.

**Articulating the research question.** Rather than determining variables ahead of time, the researcher is free to discover what the problem is in the course of the research, guided by Malinowski's "foreshadowed notion" of what may be of interest (in Wolcott, 1975, p. 113). Discovering the problem means discovering what is important to people in their setting, that is, discovering relationships and perceptions of relationships, rather than isolated fact and external behavior only. Wolcott and others believe "...the ethnographer is committed to look at people and events in a total milieu rather than only at bits and pieces" (Wolcott, 1975, p. 113; also Iannaccone, 1975, p. 223; Wilson, 1977, p. 253). The ethnographer is also committed to uncover the perspectives of the participants, their manifest and latent meanings, while also understanding their behavior from an outside, objective perspective (Wilson. p. 253). Frake talks about describing scenes and the circumstances which lead members to expect them, rather than simply recounting events (1964, p. 112).
The concern for perspective includes that of the researcher him or herself which must be recognized for its effect on the research. Wolcott summarizes advice from anthropologists Redfield (1953), Freilich (1970), Spindler (1971) and Wax (1971) that fieldworkers report on their own feelings about people and events under study, the effect of their presence on the situation, and the change in themselves as a result of their experience (1975, p. 119). Wilson emphasizes the necessity of monitoring the reaction of people to the fieldworker, as a way of comparing what they do when they are with the worker and when they are with others (1977, p. 254).

The purpose of studying people in the totality of their setting, including their own perspectives and meanings, is indeed to articulate the research question, or as Iannaccone says, to reconceptualize life's dilemmas, to define the problem (1975, p. 222). Problems and relationships have, in fact, become identified in the course of these school ethnographies rather than having been defined or even sought beforehand. Examples include the recognition of "unofficial reading events" (Griffin, 1977; Hall, 1980; Hickman, 1981), the salience of conflict in a study which originally set out to study the nature and etiology of teacher decision-making (Phelps, 1980), and similarly, a study of collective student activity whose original aim was a study of Piagetian moral justice (deVoss, 1980).

Process of research. The phases of ethnographic research are generally said to include entry, establishment of role, data collection,
data analysis, interpretation, and reporting. All writers emphasize the importance of the researcher as the main instrument of research during these phases. Because of this, Wolcott thinks small scale projects carried out by one person are better than large ones, in which delegation is necessary (1975, pp. 114, 115).

Entry into the setting is a process to be handled carefully, as on its success hinges the establishment of role. The role of the researcher - how others see the researcher - will in turn influence the availability of data (Wilson, 1975, pp. 254-255). The researcher will become a "participant-observer" in order to understand the world of the participants, both subjectively and objectively. The participant role yields the frame of the participant; the observer role preserves objective awareness. These techniques derive from anthropology and community-study sociology, and are necessitated by the need to study phenomena in context, including human perspectives (Wilson, 1977, pp. 246, 250).

Because this participant observer role encompasses seemingly contradictory activities and identities, much has been written about the possibility and the process of maintaining this dual perspective or split vision (cf. Geer, 1969; Gold, 1969; Wilson, 1977, pp. 250, 259; Wolcott, 1975). The first step in preparation for this role is thorough study of the area of interest, its theory and its research (Wilson, 1977, p. 251; Wolcott, 1975, p. 114). This results, of course, in an orientation to certain problems and theories, which must be made public and explicit. Wolcott "...accept(s) that the field worker needs to grapple with his own underlying assumptions and to recognize the kinds of evidence he is most
attracted to in building his account" (1975, p. 114). The underlying assumptions which shaped the approach to this problem will already have become apparent, and will be set forth more explicitly in Chapter 3.

It is, therefore, commonly agreed that researchers necessarily carry their own assumptions, preconceptions, theoretical orientation, and bias with them as they enter a new setting. However, as participant observers they depend upon being able, in phenomenological terms, to "bracket" their preconceptions. The resultant tension in roles is productive, in that the disciplined researcher is able to view behavior simultaneously from many points of view (Wilson, 1977, pp. 250, 251, 259).

Data collection is accomplished by a variety of techniques, used by the ethnographer who is on the scene, observing and interacting. McCall and Simmons name five techniques which are considered to fall within participant observation, including the role of participant-observer itself (McCall and Simmons, 1969, p. 1, note 3). These are: direct observation, necessary because people aren't able to see and report on their own social organization; informant interviewing, for information about what happened when the researcher was not on the scene; document analysis, or records of facts and events not directly observable; respondent interviewing, concerning people's thoughts and feelings, as a check on the researcher's observations; and direct participation in the culture under study, so as to experience it as a member (McCall and Simmons, 1969, pp. 4-5). These and other specific techniques such as enumeration and sampling (Zelditch, 1969, p. 9), are not peculiar to anthropological fieldwork. What is
distinctive, however, is the "ethnographer's commitment to being present in person on the scene over an extended period of time as well as to utilizing a number of approaches for gathering information" (Wolcott, 1975, p. 122). Along the same lines, Lofland says that qualitative field research is "organizationally and technologically the most individualized and primitive of research genres," and "In order to 'do' qualitative field research, one needs only himself, time, some people to watch and/or talk to, and writing materials" (Lofland, 1974, p. 110).

Choice of which of these specific methods to use should be made according to kinds of information needed. Zelditch has categorized methods according to their adequacy and efficiency for obtaining different kinds of information. "Best form" and most efficient are: surveys for frequency distributions, interviews for norms and status, and participant observation for incidents and histories. All forms are usable for all kinds of data, however, as long as their limitations are recognized (Zelditch, 1969, p. 17). Thus, variety in methods and flexibility in their use in response to the developing needs of the study are distinguishing characteristics of ethnographic fieldwork.

Wilson summarizes the advantages of gathering data through use of these varied techniques, especially that of participant observation:

In other ways, the data gathered by participant observation is significantly different from that gathered by other methods. The researcher links together the information he gathers by various methods in a way that is nearly impossible with other approaches... For instance, he compares the following: (a) what a subject says in response to a question; (b) what he says to
other people; (c) what he says in various situations; (d) what he says at various times; (e) what he actually does; (f) various non-verbal signals about the matter (for example, body postures); and (g) what those who are significant to the person feel, say, and do about the matter (Wilson, 1977, pp. 256-257).

Regardless of the data collection techniques, therefore, there is the goal of comparing and cross-checking data by relating seemingly similar data obtained from different sources, in order to discover what is really "functionally equivalent," that is, what the underlying meanings of the various participants are. So that, what might seem like the same classroom event to the outsider could be interpreted in different ways depending on one's perspective.

**Data analysis.** As may be apparent, there is no crisp line between collecting and analyzing data. Instead, according to Iannaccone (1975), there is a characteristic progression of stages during field work, as data collection moves toward analysis. During the first, exploratory stage, data begins to be collected, and the numbers of alternative propositions held at the outset are narrowed, resulting in identification of themes. These themes become the basis for categories, which are "saturated" as more data are collected in this second stage, often through use of enumeration and sampling. New data may lead to accommodation of categories and modification of themes. During the third phase, data are rechecked through a search for "negative instances." Again, themes and explanations may be modified, yielding a basis from which hypotheses may be derived for future verificational studies (Iannaccone, 1975, pp. 226-227).

Both research instruments and research process, therefore, share the characteristic of flexibility in response to new data, and in
this characteristic they contrast sharply with an experimental "scientific" methodology, and its rigorous separation of hypothesis-formulating and data-collecting stages, in which blindness to the hypothesis is to be preserved. Instead, in ethnographic field work, new data suggest categories, generalizations, and themes at different levels of abstraction, and ultimately lead to the formulation of theory. This process of generalizing and abstracting from the data begins as soon as data are collected, and the nature of these generalizations influences the plans for the collection of data, for example, what to observe, which people to interview, and what questions to ask. Conversely, new data may force revision of these tentative generalizations and themes. This is the reiterative cycle Iannaccone describes. Glaser and Strauss (1967) have called this method and their book *The Discovery of Grounded Theory* in which theory is tested against real data, emerging hypotheses against observed reality.

The generation of hypotheses, therefore, could be described as the product of tension between structures of the mind, and observations of the senses, and as such, is not a completely describable or reportable process. Overholt and Stallings (1976) summarize these two aspects of the process as inductive and abductive. The researcher operating inductively records observed regularities and organizes them in empirical generalizations. The abductive process is "the first starting of a hypothesis and the entertaining of it," the taking of an inferential step. This question of "how a hypothesis comes to be caught in the first place (Overholt and Stallings, 1976) is one askable
of all science, but especially pertinent to ethnographic research in which the generation of hypotheses is the major goal.

While the catching of hypotheses is subtle and often idiosyncratic, many ethnographers use the phenomenon of their own surprise, and their awareness of contrast, conflict, or paradox, to raise questions and suggest a framework for analysis. For instance, a contrast between the ideal (what people say) and the real (what they do) can furnish a focus for analysis (Wolcott, 1975, p. 124).

These surprises are more noticeable in the early stages of participant observation, before any strangeness of the culture has worn off. Nelson says "A researcher may ... systematically examine the small surprises one normally feels when going into a new situation, but it is necessary to do so before they become commonplace and cease to attract attention" (1980).

To summarize, the phases of data collection and analysis can best be thought of in Iannaccone's terms of exploring data to "catch" tentative themes; collecting data to exemplify categories based on themes; testing for instances which do not fit; and modifying categories and themes in response to those instances. The customary functions of analysis - to reduce the data by coding them into categories, is therefore accomplished. This cannot, however, be a mechanical process, since with changes in categories coding directions change. An additional complication is that relationships (often of interest in studying phenomena-in-context) do not fall easily into mutually exclusive categories.

Interpretation and reporting of data is of course essential. An ethnographer must be a writer and storyteller (Wolcott, 1975,
The question of the proper balance in the report between data and generalization is, however, debated. Lofland cites those whom he calls genericists as favoring a ratio of 60 to 70% example to 40 to 30% interpretation or frame. Empty frames with no concrete data are seen as dull because too abstract, but data with no framing, interpretation, or clue as to structure or process is also dull. In the ideal situation, frames grow out of data, but are also inter-penetrated with data. "Framing and qualitative materials coexist as one whole each depending on the other for the "interest" a reader has in the frame or in the qualitative material" (Lofland, 1974, pp. 107-108).

The objective of presenting enough primary data is to provide the reader with a basis for judging the adequacy of the interpretation (Wolcott, 1965, p. 124). In a more extreme form, Mehan in Learning Lessons (1979) presents the whole body of audiotaped data, and accounts for all of it in his analysis. Thus his data are completely retrievable, allowing a reader the possibility of an alternative interpretation. It would seem that he is able to do this because his data are limited to tape and contextual information, and his interpretation limited to formal, structural patterns of discourse.

If the researcher's goal is to test generalizations by coding and counting examples which do and do not fit, then the inclusion of all or much data makes sense. If, on the other hand, as Glaser suggests, the goal is to generate theoretical ideas, then at this stage, testing, even provisional, is not necessary (Glaser, 1969, pp. 218-219). Those researchers who are trying to generate theoretical ideas are thus relieved of the problem of presenting all data to the reader in
an effort to substantiate generalizations. Glaser notes that the reading of these many illustrations is burdensome, since they interrupt the flow of general ideas. Only enough illustrative material as "facilitates comprehension" should be included (Glaser, 1969, p. 225).

Robert K. Merton, as quoted by Glaser (1969, p. 217), encourages the reporting of "a detailed account of the ways in which qualitative analyses actually developed. Only when a considerable body of such reports are available will it be possible to codify methods of qualitative analysis with something of the clarity with which quantitative methods have been articulated."

Such reports would include an account of the research and theory which informed the researcher's observations and organizations of data. In the next section of this chapter, theories of language and context which relate to this study will be reviewed.

The Relationship Between Language and Context

Language Theory Expanded to Include Use: Hymes

Among those who have worked to formulate a theory relating language and context, are Hymes, Halliday, and Bernstein. For more than a decade, Hymes, an anthropologist and linguist, has stated that in order to relate language and context, fundamental changes in linguistic theory are needed. In 1971, Hymes called for "... a theory within which sociocultural factors have an explicit and constitutive role... (1971, p. 271), and in 1977, "a study of language that is inseparable from a study of social life... (1977, p. 169). In 1979, when urging collaboration of educators and linguists, Hymes wrote that "changes in the foundations of linguistics" are needed before application can be made to educational problems" (1979, p. 10).
The principle of contrastive relevance. Hymes justifies the place of sociocultural factors in a reformulated linguistic theory on the basis of the principle of contrastive relevance. That is, to know how to interpret features of language, one must know whether they can be counted as the same (equivalent), or whether they signal a difference (or contrast). Whether a phenomenon is classified as "same" or "different" depends on functional rather than formal characteristics, a distinction made by Sapir in 1923 between an element in a system of signs and a physical event (Hymes, 1977, p. 166; Sapir, 1949, pp. 33-45).

At every level of language, from the phonetic at one end to levels of use at the other, functional characteristics of linguistic elements are only evident unless viewed from the next higher level. To interpret the highest level of language, that of language use, one must go beyond language itself to social knowledge, in order to make sense of the language. Hymes uses sex differences in language and society as examples. Knowledge of the roles of men and women in society is necessary if one is to note and interpret differences between men and women's speech. Knowledge of social life is also required to cast the following two dissimilar utterances into the same category of greeting (to decide they are functionally relevant): "Hi!", and "Well, I'll be a son of a gun, if it isn't Sid Mintz" (Hymes, 1977, p. 168).

This principle that classification of functional equivalence needs to be made from the level above operates at all levels within language itself, including the lowest level, phones. Unless one knows the phonemic categories of English, one would not be able to tell which
phonetic sounds were significant and which were to be disregarded. This higher level psychological knowledge of phonemic categories enables speakers to know which sounds are relevant in contrasting the words and meanings. The contrast between phonemes is functionally relevant; the phonemes /b/ and /f/ function to contrast bed and fed, bell and fell. These categories also help people know which sounds don't make a difference in distinguishing meaning. For example, the difference of aspiration between [k] and [kʰ] is not significant; it is an irrelevant contrast and therefore [kʰ] can be categorized as an allophone of the phoneme /k/.

This example has been given to illustrate Hymes' point of view that decisions of contrast or equivalence can only be made from the vantage point of the next level. At one end, phonemic knowledge enables a speaker to know which phonemes to disregard; which to take account of. And at the other end, knowledge of social meaning enables a member of that society to know how to interpret language-in-use. In each case, knowledge of linguistic elements alone — phones at one end, spoken or written text at the other, will not contain the necessary information for the classification necessary for interpretation.

At the level of use, beyond these levels of linguistic form, Hymes illustrates the principle of contrastive relevance with his own example of these apparently different phrases: "Hi!", and "Well, I'll be a son of a gun if it isn't Sid Mintz." They are, in spite of formal differences, both functional members of the category of greetings (1977, p. 168).
Hymes would thus extend this principle of contrastive relevance beyond its accepted application in the description of language as a formal system, to include language as it is used. Choices people make in using language result in varieties of styles which express various social meanings. Choices of communicative means — for instance, wording, syntactic structure, intonation — are made in response to differences in situation, and result in differences in style (1977, p. 173). To know how to interpret the meanings of these stylistic variations, one must go outside language to an ethnographic inquiry into social life itself. Hymes uses sex differences in language and society as an example. Knowledge of the roles of men and women in society is necessary if one is to note and interpret differences between men and women's speech. He points out that these stylistic differences may occur at every level of language — through choice of pronunciation, wording, structure, and subject matter. Style is therefore to be thought of as a configuration of features rather than another new level of language. A further difference is that stylistic features need not characterize all elements of language, unlike levels of sound, syntax, morphology, and semantics, which apply to all exhaustively. One feature alone may indicate style (1977, p. 168).

It is because each level is interpreted by the one above, that Hymes writes of the necessity for ethnographic inquiry which will yield understanding of social meanings needed to interpret language as it is used. For Hymes, the starting point is with social meaning, with the "plurality of worlds...constituted in the lives and experience of participants in a group or activity" (1977, p. 171).
Just as there are many worlds, many meanings, so are there many styles. Linguistic inquiry interprets styles as codes of language use, starting from ethnographic understanding of the meanings they encode (1977, p. 171). "The level of cultural worlds completes the chain of levels within which structure is to be discerned through functional relevance" (1977, p. 172).

Communicative competence in using language for many functions. Hymes' theory of language contrasts with the Chomskyan view in several respects. In his 1971 "On communicative competence," he rejects Chomsky's primary emphasis on form or structure, and on syntax within form, along with Chomsky's definition of competence and performance. Hymes redefined competence in terms of use, appropriate in relation to sociocultural features of the situation. Competence also took in non-cognitive factors such as motivation (1971, p. 283). He called this newly defined competence "communicative competence," which included ability to use all communicative means, non-verbal as well as verbal. Hence language was placed within a larger framework (1971, pp. 277-279; 1972, xxviii).

Just as the concept of communicative means was broadened, so was the concept of the functions of language, from a focus on the referential function to a recognition of the importance of other functions. Language has more than two faces, one toward referential meaning, one toward sound, linked by rules; it must also have a "face toward communicative conduct and social life" (1971, p. 278). The interpersonal or expressive function is of equal importance, and is intertwined and interdependent with the referential (1979, pp. 7-8).
Hymes summarizes by saying that language is used for many purposes, and linguistic resources are organized in terms of many purposes. "To recognize that language comes organized in terms of use is to recognize that language has more than a referential function, more than a single kind of meaning" (1972, p. xxii).

Speech communities and their communicative repertoire. A theory which unites form and function, language and social life, leads to case studies of language in use. Their goal will be to discover the particular communicative worlds of children in particular speech communities (1971, p. 277; 1979, pp. 1, 3). Variation in both meaning and form is to be expected (in contrast to Chomsky's homogeneous speech community, an abstraction (1972, xxvi). Although the ultimate aim is the formulation of general principle, the starting place is with particular "worlds" and their members, with their "history, valuation, and outlook," and with the language they use (1977, p. 171; 1979, p. 7).

The concept which is used to organize such descriptive studies of particular communities is that of communicative repertoire, a concept which Hymes credits to John Gumperz. This is a comprehensive term which includes 1) the communicative means available to a person, group, or community, and the meanings associated with these means; 2) the contexts of situations, and 3) relationships of appropriateness between the means and the situations (1972, xxxiv, xxxv).

People who share a communicative repertoire may or may not speak a common language, but will share common ways of using and interpreting language (1972, xxxvii). These ways are called "speech acts." Utterances are not merely referential, but they do something. Thus the
concept of speech act draws together the realms of language and social life, and constitutes the **communicative means** by which people use language for various purposes in **contexts of situations** (1972, p. xxvii). The interpretation of speech acts is possible only if one knows the social meaning, and not merely from a literal interpretation of their form. For example, "Would you please close the door?", a question, and "It's cold in here!", a statement, both function as acts of requests, and both are appropriate in certain situations. They are interpretable only from this higher standpoint of ethnographic understanding of meanings and means which express them appropriately in situations (1971, pp. 278-279).

Hymes also discusses the concept of sociolinguistic interference, a consequence of differences in language use rather than language form. He talks of the "confrontation of different systems of competence," in which styles of communication have different underlying meanings. That is, speech acts from one communicative repertoire are interpreted in terms of another (1971, p. 287). Again, it is not a question of objective linguistic difference between language or dialects. "What must be known is the attitude toward the differences, the functional role assigned to them, the use made of them. Only on the basis of such a functionally motivated description can comparable cases be established and valid theory developed" (1971, p. 289).

Classrooms may be the meeting ground for more than one speech community when children's communicative competence is different from that of the school. Hymes suggests that a dual effort is needed: to allow children to use their natural competence (1972, xx) while helping them learn another set of competencies, specifically that of
the school. Hymes discusses Basil Bernstein's idea that all children need to be able to control an elaborated, universalistic, explicit code of meanings and communicative means, in order to see their lives and their institutions objectively, and so be able to control them (1972, xlvi). If teachers understand the existing system of language use, new "speech habits and verbal training" will stand a better chance of acceptance, since innovations will not "cross (the existing structure's) grain" (1971, p. 288).

The foregoing discussion has been based on only a small portion of the extensive writings of Hymes. Without attempting to summarize or evaluate his work, the purpose here has been to suggest his fundamental orientation to language as a system which includes dimensions of use and style, as equal to those of form and reference. Language, one among many means of communication, is bound to the social context whose particular values and meanings it expresses.

Implications for education and linguistics. Hymes (1979) calls for a partnership between education and linguistics in order to develop this newly formulated linguistic theory. Teachers as researchers, working with linguists, will help discover the particular character of the speech communities represented in their classrooms, and will therefore come to be able to interpret the social meanings which children express through their own communicative means. "Ethnographies of speaking" will produce knowledge of actual speech communities and language use within them. Hymes notes indifference to or discrimination against diversity, saying "It is hard to find people who sense a need to understand objectively the school child's communicative world. It is a world seriated into a multiplicity of contexts of
situation and ways of speaking suitable to each" (1979, p. 3). The ethnographer needs to look with the objectivity of a stranger at the wholeness of the classroom situation, in order to understand the part played by children's and teacher's ways of speaking (1979, p. 4). With respect to studies of literacy, it is necessary to understand the role of reading and writing, to decipher the codes associated with their use, and not just the linguistic codes themselves (1977, p. 171).

Other theories of language and context. How does this view of language in context compare to the theories of others? Hymes himself distinguished his approach from ethnomethodologists and from discourse analysts. His criticism of ethnomethodologists is on the basis of their reduction of cultural worlds to the interpersonal, interactional processes which constitute it, to the neglect of "received tradition, and environmental and social structures" (1977, p. 176, note 5). Hymes sees the need of all three types of conditions and origins to be considered, (i.e., traditions, structures, and interpersonal processes), with the possibility there may be others as well. He writes:

The fine insights of the ethnomethodological movement in sociology run the danger of reducing the whole to the third [i.e., interpersonal processes] as if the fact that cultural worlds are constituted by participants could be enlarged to the proposition that they are solely or wholly so constituted, or that only their constitution was worth of study (1977, p. 176, Note 5).

Thus, Hymes seems to acknowledge the reality of "personal, constitutive activity," by which people constitute their cultural worlds. Yet he goes behind the data of interaction itself to see a
role for history and for larger social and environmental patterns. Since this view is multifaceted, and open-ended, it is not determinis-
tic or simple, and does differ from some ethnomethodologists who admit
data only from interaction and then attempt to account for it exhaus-
tively (Mehan, 1979).

This same kind of difference appears in Hymes' criticism of studies of
discourse analysis which concentrate on the linguistic aspect of
language use to the exclusion of its social meaning. Discourse analysts
often observe and describe characteristic sequences of exchange in
various settings. Hymes' example is the buying and selling encounter,
which can be carried out by two questions: "Do you have any coffee
left?" "Do you want cream?". Studies of such exchanges do produce
descriptions of the organization of language. However, they do not
relate these structures of use to social meanings which led to these
particular choices among alternatives. His comment on this point can
stand as a summary of his overall point of view: "... the full pur-
suit of form-meaning covariation would not stop with consequences for
linguistic structure. It would discover something of the resonance
and consequences of this instance of a genre within cultural worlds"
(1977, p. 174).

Language as the Realization of Social Structure: Halliday

The British linguist Halliday shares with Hymes a concern for
relationships between language and the social system. Both Halliday
and Hymes see social factors as constitutive of language, rather than
as a static background for language. They emphasize the importance
of underlying meaning, which derives from social structures ("semi-
otic structures" Halliday calls them) outside of language. Halliday
quotes Hymes as saying "'A theory of the sort needed here starts with social life and looks in at language; thus functions guide and structures follow' - we might add 'social life and the social structure'" (Halliday, 1975, p. 21).

The articulation of language and society is accomplished through meaning: "Linguistic structure, the internal workings of the language system, will appear as derived, as the form of realization of linguistic meanings; and linguistic meanings are themselves the realization of social meanings" (Halliday, 1975, p. 21). Thus Halliday views language as social interaction, with the linguistic system "coherent not only within itself but also with the culture" (1975, p. 13). The child who learns the language, learns the culture at the same time, "learning one semiotic system through the medium of another one in which it is encoded" (1975, p. 11).

Thus, for both Hymes and Halliday, function - what one can do with language in social life - is a key concept, and precedes structure in development (Halliday, 1969, p. 27; 1974, p. 13). Structure - words as spoken or written - is the realization rather than the starting point. The function of any particular utterance is understandable in its context of use. What it does in the situation depends upon the social situation itself rather than only upon its linguistic form, which may or may not signal significant differences (See Hymes' principle of contrastive relevance discussed above, p. 47).

**Functions of language.** For both Halliday and Hymes, major types of functions include more than the traditional naming or referential functions of language. Hymes' view has already been stated, namely that there are "two fundamental, complementary general kinds of
function, or meaning at work. They [the referential and expressive] are intertwined in reality, but our way of thinking about language has separated and opposed them" (Hymes, 1979, p. 8; also, Hymes, 1971, p. 278). Halliday calls the referential ideational, expressive interpersonal, and adds a third, textual. These three properties of a text are realized through the adult lexicogrammatical system, and together characterize any text in relation to its context. The ideational function interprets experience, reducing its phenomena to manageable numbers of classes. The interpersonal function expresses the speaker's participation - the roles involved, feelings, wishes, attitudes, and judgments. The textual function relates what is said to what has been said, and relates this text to the context of situation. It functions to ensure that the discourse is relevant (1974, pp. 19-20). The child uses language to observe, to talk about something (the content or ideational function); to intrude or do something (the participatory or interpersonal function), and to form relevant text (the textual function). Since the form of the lexicogrammatical system reflects these familiar functions, it is made easier for the child to take it on (1975, p. 12).

Sociocultural variation and language: Hymes compared to Halliday. Any contrast between Halliday and Hymes would allow for their different interests and emphases. Hymes the anthropologist calls for many ethnographies of speaking in specific speech communities in order to build up empirical knowledge of many different sociocultural patterns of meanings and their communicative means of expression (Hymes, 1979, pp. 3-4). Halliday seems to take a more abstract approach to the
question of cultural transmission through language. His interest in variation is in the universal processes by which variation in the social structure is related to variation in the meanings people have access to, and this to variation in the linguistic expression of these meanings. These two emphases are not in conflict, nor does Halliday's lack of discussion of the principle of contrastive relevance (in those terms) imply lack of agreement with Hymes, although this principle is the explicit framework for Hymes' theory which leads him beyond language form to language use and social meaning.

Learning the culture through language: Halliday compared to Hymes. Halliday, on the other hand, unlike Hymes, focuses on children's learning of society and of language. He writes that in his 1974 Language and Social Man he asks how the child becomes socialized into his culture through language (1975, p. 26). From almost the very beginning of life, children use language or protolanguage in interaction with others, to satisfy their needs. This social communication is carried out by idiosyncratic but systematic patterns of sound which signify meanings. This network of meaningful sounds becomes elaborated and differentiated, as the child has more meanings to express (learned in interaction with others who transmit the "meaning potential" of the "social semiotic"). Thus, as there are more meanings to express, the communicative means develop, until at about eighteen months, the child abandons his or her own system and takes on the conventional lexicogrammatical system of the adult language (1975, Learning How to Mean, 1974, pp. 15-17). It is not surprising that Halliday objects to the phrase "language acquisition" as if it were a separate entity "out there," since he views the child as an
active creator or builder of a potential for meaning and a means for its expression (1980). Furthermore, the process of building a language is a social, and not only a psychological one: "The construction of language is an interactive, intersubjective social process" (1980).

From human to social man through interaction. It is in Halliday's theory of social man, in contrast to Hymes' communicative competence that some substantive differences appear. A human being becomes social man through interaction with others. In this way, human beings learn to hold a variety of roles, and become members of society and "personalities." That is, they become themselves through others (Halliday, 1974, pp. 3-11). This is in contrast to the idea of communicative competence, which takes as its starting place the mental powers of the individual. For although "communicative competence" is concerned with communicative behavior appropriate to varying social contexts, it is fundamentally an individual, cognitive concept. It asks what individuals must know to behave appropriately (1974, p. 9; 1975, p. 21). Halliday would rather "(treat) the individual as a whole in interaction with other individuals..." rather than "as an assemblage of parts" (1974, p. 8; 1975, p. 21). The development of the human being into a personality is accomplished largely through language, used in interaction and participation in society:

From this point of view, language is the medium through which a human being becomes a personality, in consequence of his membership of society and his occupancy of social roles. The concept of language as behaviour, as a form of interaction between man and man, is turned around, as it were, so that it throws light on the individual: the formation of the personality is itself a social process, or a complex of social processes, and language - by virtue of its social functions - plays the key part in it (Halliday, 1974, p. 11).
Describing the context: field, tenor, and mode. A second real contrast might be made between Hymes' and Halliday's characterization of the context. Since both accept that language varies with the situation, the question arises for each of how to describe the situational context. Hymes has devised a list of various situational factors: form and content, setting, participants, ends (intent and effect), key, medium, genre, and interactional norms (Hymes, 1967, pp. 58-65).

Field, tenor, and mode are suggested instead by Halliday as a framework for describing the context (described briefly above in Chapter 1). This framework can be used to specify situation-types, rather than each situation, and can relate "upward to the higher order of linguistics and social systems, as well as "downward" to the text produced in situation types (Halliday, 1975, p. 130). Although Hymes has more categories, these can be regrouped into field, tenor and mode, as Halliday does (1975, pp. 130-131). Both are aware of the same kinds of factors. With a concern and respect for diversity, for the multiple cultural worlds and speech communities which co-exist. Hymes seems to have adopted an open-ended approach that starts with the particular and admits all relevant factors. Halliday's framework of field, tenor, and mode, on the other hand, is more general, and in theory accounts for all possibilities. In addition, it is related to other symbolic orders above and to text below, within a larger theory which mediates linguistic text and social structure.

Register is Halliday's name for this intermediate level of field, tenor, and mode. Halliday sees a register as a semantic configuration
rather than a set of lexicogrammatical features. This semantic configuration links the linguistic system on the one hand and the semiotic organization deriving from the social structure on the other (Halliday, 1975, p. 131). The dimensions of field, tenor, and mode serve to characterize and interpret the situation. Text reflects these dimensions of the three major functions described above: ideational, interpersonal, and textual. If field, tenor, and mode are specified adequately, then the characteristics of the text can be predicted. Field (Hymes' "setting" and "ends") refers to what the participants are actually doing in the context of situation, (for example, buying and selling,) but not necessarily what they are talking about (for example, the weather). Tenor (Hymes' "participants" and "key") refers to the role relationships between participants, relationships of temporary or permanent duration, degrees of formality or of technicality. Mode (Hymes' "instrumentalities" and "genre") specifies the channel of communication, whether spoken or written, and the part language plays in the context of situation, the rhetorical function language has, whether to persuade, explain, soothe, control, or to help the action along (Halliday, 1974, pp. 48-50; 1975, pp. 13-14).

Halliday summarizes the linguistic consequences of these three dimensions. The field of discourse, determining content, will influence vocabulary choice and choice of grammatical pattern. The tenor of discourse determining roles, will influence the formality and technicality of speech or writing, and the speaker's choice of dialect or speech variant. The mode of discourse specifying the channel of communication influences the speaker's mode (forceful to hesitant), modality (judgment of probabilities), and the pattern of grammatical
complexity and lexical density. Writing, with a higher proportion of content words, is more lexically dense than speaking, and is also grammatically simpler. Speaking, on the other hand, is more complex but lexically less dense. This distinction between the characteristics of spoken and written language within the dimension of mode will be drawn on in the analysis which is to follow in Chapter 5.

This predictability of text may help explain how members of a society make sense of language around them. Expectations derived from participation in many contexts of situations help people understand what they hear and read (Halliday, 1974, p. 53). Again, this is a psycholinguistic process which hinges for success on sociolinguistic experiences.

Thus this comparison of Halliday and Hymes demonstrates that in spite of different approaches, both are trying to reformulate linguistics to include the social dimension in an integrated, systematic way. Both see linguistic choice as constrained by situation. For Halliday, text is choice, that is, what was meant as opposed to what could have been meant, the choice of this rather than that from the paradigmatic environment (Halliday, 1975, p. 10).

Starting with children's uses of language in context. The human environment, through which children learn their culture and language, and become what Halliday calls personalities or role complexes, offers a different starting point for education. Often, the focus has been on children and their cognitive abilities, especially on their weaknesses, rather than upon the contexts of situation within which they become themselves, through the language of interaction. Both Halliday and Hymes are strongly in favor of recognizing and
building on the strengths children bring to school, and both see these strengths in functional terms: What are children able to do through language (and other communicative means)? What functions in their lives do these means serve? What have children learned of their culture through interaction in their human environment? Or, to put it another way, how have they learned to use language in the situations of their lives?

For Hymes, children's strengths could be said to consist of their communicative competence in familiar contexts of situation which make up their speech communities. Halliday looks at strengths in terms of functions and meanings young children have developed. In his paper, "Relevant Models of Language" (1969) Halliday contrasts the richness of children's early language use with the limited models they are apt to encounter in school. By the time children enter school, they have used language for a variety of functions, and have developed a potential to mean appropriate to their culture, through interaction with others. Halliday posits seven basic functions, six of which arise out of children's interaction with their environment, and the seventh, out of their representation of their experience by means of language itself. These basic functions continue, and are elaborated and differentiated, although their realization shifts from children's invented protolanguage to the adult lexicogrammatical system. By the time children enter school, they have developed models or images for these uses:

instrumental: language used to get things done, to satisfy material needs, used along with gestures, and cries in context
regulatory: language used to regulate other's behavior, derived from children's many experiences of being regulated by others. Control by threat, by rational explanation, by emotional blackmail, are three possible ways in which children hear language used to regulate and socialize them.

personal: language used to become aware of the world of self, especially of the self as a speaker. Language makes the self public as an individual who has choices of what to say and do.

heuristic: language used to become aware of the world of the non-self by exploring the environment through language, seeking explanations, using language to learn to talk about learning, e.g., using the terms "question," "answer," "why."

imaginative: language used to create one's own environment, and to talk about creating, e.g., using the terms "story," "make up," "pretend."

representational or informative: language used to communicate about something to someone who does not already possess the information; to refer to parts of the real world through a linguistic message, to transmit "content." (Halliday, 1969, pp. 28-33; 1975, pp. 18-22).

Halliday says that for many adults, the representational use of language is the one of which they are conscious, but that it is not the dominant function for children. Schools may emphasize the representational function - the communication of content - while neglecting the full range of functions which for young children are meaningful. That is, the school's meanings may be narrower than the child's:

But it is precisely in relation to the child's conception of language that it is most vital for us to redefine our notion of meaning; not restricting it to the narrow limits of representational meaning (that is, "content") but including within it all the functions that language has as purposive, non-random, contextualized activity (Halliday, 1969, p. 35).
Contexts of Home and School; Meanings Called for by School Contexts:

Bernstein

The British sociologist Bernstein, has been interested in this question of possible discontinuity between the culture of the child and the culture of the school. His concern, like Hymes', is for discontinuities in children's home and school speech communities, and like Halliday's, for discontinuities in children's home and school models of language use.

Social structure and patterns of language use. Bernstein linked these discontinuities to differences in the structures of social class and of families, which were reflected in characteristic meanings and patterns of language use. These characteristic meanings and language use patterns were learned in the following "critical socialization contexts" of children's lives: regulative, instructional, imaginative or innovative, and interpersonal (these derived from Halliday's list of functions above) (Bernstein, 1971, pp. 15, 198).

For reasons originating in social and family structure, and transmitted through these critical socializing contexts, Bernstein said that working class children learned a "restricted code" of meaning and language function. Middle class children on the other hand, learned an "elaborated code" of meaning and language function. For example, whereas working class children were oriented toward particularistic orders of meaning, middle class children were oriented toward universalistic orders, (particularist meanings being those which are "context-bound", understandable only if the original context of the utterance is known, and universalistic being "context-
These terms "restricted" and "elaborated" refer not to a lack of grammar or vocabulary, but to an "orientation toward" certain kinds of meaning (for example, particularistic or universalistic), and a tendency to use language for a certain range of functions in certain contexts. Differences between groups are thus not simply a matter of which uses of language they control, much less of which language variant, but more fundamentally, of which contexts are seen as calling for which uses. For example, will children see the context of telling a story, as one which calls for explicit language? Will mothers see the context of regulating children's behavior as one which calls for explicit language use? The assumption is that linguistic means to express ideas explicitly are available to all, but that social groups vary in their orientation to meaning in situations. Because of differences in social relationships and roles, children will learn to interpret the demands of the situation in ways of their social group (Halliday, 1974, pp. 25-26; Bernstein, 1971, p. 197).

School contexts and different symbolic orders of meaning. The school may produce discontinuities "between its symbolic orders and those of the child" (Bernstein, 1971, pp. 183-184). That is, children may not interpret the contexts of situation they meet in school as calling for the same uses of language the school expects. Specifically, the school may demand that children use language to explore the world and interact with others verbally. As a consequence of children's patterns of socialization, they may not be accustomed to interpreting the meanings of these contexts as calling for these uses.
This mismatch between "symbolic orders" of meaning is evidenced in the school's emphasis on the representational function of language—that used in "organizing experience through language" (Halliday, 1974, p. 24). In the earlier discussion of Halliday's functions, it was said that this representational function was the least familiar to children, and yet the one most emphasized in school. While over-emphasizing the representational function, schools are unaware of and so neglect to help children gain control of certain other key functions:

The "restriction" is a restriction on the range of uses of language. In particular, it is likely that [the child] has not learnt to operate with language in the two functions which are crucial to his success in school: the personal function, and the heuristic function (Halliday, 1969, p. 35).

The personal model is the child's intuitive "awareness of language as a form of his own individuality," awareness of the "self as speaker" (Ibid., p. 31). Through hearing the self speak, the child gains a sense of self. Through offering the self to others in speech, the child's sense of individuality is reinforced and created (Ibid., p. 31).

The heuristic model, on the other hand, is the child's use of language to learn about the non-self, to ask not only for facts about the world, but for "explanations of facts" (Ibid., p. 31).

Halliday (1969) gives reasons for the importance of these two functions, stating that the ability to operate in the personal and heuristic functions is not picked up along with vocabulary and syntax, but has to be learned:

In order to be taught successfully, it is necessary to know how to use language to learn [i.e., the heuristic function], and also, how to use language to participate as an individual in the learning situation [i.e., the personal function]. These
requirements are probably not a feature of any particular school system, but rather are inherent in the very concept of education (p. 35).

Halliday thus furnishes an example of home-school discontinuity, in comparing the models of language use children have built up during their preschool experience, and those called for but not always consciously developed in schools. Bernstein claims that middle class children come better prepared to cope with the different expectations of the school since they have encountered these models of language use in their critical socialization contexts.

**Application of Bernstein's ideas to this study.** Although Bernstein's concern for social class differences is not directly applicable in this study, his view of language use as reflecting patterns of relationships in society and in families has general relevance for a classroom study, even one in which school-community differences are not obvious or marked. The following application of Bernstein's ideas to this study is suggested.

Young children arrive in school with communicative competence in the speech community of home and neighborhood and with experience in using language for a range of functions carried out in their particular home and neighborhood "contexts of situation." The school gathers children from many such families and neighborhoods. Even if, by objective measures of social or educational level, there is little variation, each child will be encountering other children from a different subculture, if not speech community. The range of variation will be wider than children have experienced before. In addition, the culture of the school and of their classroom in the school represents a new and different context for behavior and language use,
no matter how homelike. Thus there is, even in a relatively homo-
geneous situation, potential discontinuity for all children when they
come to school. Concepts such as restricted code, while perhaps not
intended by Bernstein in quite this way, can be construed to stand
for the meanings which are particular to any family or neighborhood
group. These meanings are based upon a common history and a common
"baggage of shared assumptions" (Mary Douglas in Halliday, 1974,
p. 25). Since these assumptions and history are commonly held, there
is no need for members of families or peers to spell them out to each
other. Hence an outsider may not be able to retrieve these meanings
from what is said. Utterances are implicit, or in Hasan's term,
exophoric, referring to features in the context, outside the spoken
text (Halliday & Hasan, 1976, p. 18).

Children growing up in families and neighborhoods have learned
to use language and other communicative means to express the meanings
of their own family and neighborhood culture, and their language has
functioned successfully for them, satisfying their intentions and
purposes. Within these contexts of culture, they have learned to
select communicative devices to meet the appropriateness demands of
various contexts of situation. In the course of learning language,
they have learned the meanings of their culture, and they have begun
to become a "personality" (in Halliday's sense of a role complex)
within this culture.

The child entering school is already "social man." Bernstein
agrees with Halliday and Hymes that children's patterns of language
use should be accepted as inseparable from their view of themselves
in their human environment (Halliday, 1974, p. 25; Hymes, 1972,
His opposition to the view of children as "deficient" is strong. He sees the consequence of labeling children "culturally deprived" as amounting to rejection of them and their parents, their culture and its symbols, and their way of life:

All that informs the child, that gives meaning and purpose to him outside the school, ceases to be valid and accorded significance and opportunity for enhancement within the school (Bernstein, 1971, p. 192).

Instead, Bernstein would base children's early schooling experience on their strengths, and on an acceptance of their own symbolic system. At the same time, there is no question that he intends all children to have access to universalistic meanings, as he states the need to separate ends and means:

We need to distinguish between the principles and operations, that is our task as teachers to transmit and develop in the children, and the contexts we create in order to do this. We should start knowing that the social experience the child already possesses is valid and significant, and that this social experience should be reflected back to him as being valid and significant. It can be reflected back to him only if it is a part of the texture of the learning experience we create (Bernstein, 1971, pp. 199, 200).

This theme of balance between familiarity and novelty, already sounded by Hymes and Halliday, will be found below in the discussion of the work of C. & H. Rosen, and will be used as well in the analysis and interpretation of the data of this study.

Emphasis on institutions: a further contribution. The institution is responsible for balancing familiarity and novelty, for accepting children's symbolic, particularistic orders of meaning and extending these toward wider, more abstract orders. This institutional
focus of Bernstein's is a valuable contribution to discussions of literacy and learning. Schooling as well as child-rearing are placed in larger contexts of cultural transmission and change, and of political and economic power (1971, p. 192, 200).

Not only does Bernstein see schools as part of society (see also Ogbu's 1981 criticism of school ethnographies which ignore their larger cultural context, as referred to above), but he also directs attention to contexts within schools for which they are responsible. Halliday's general definition of language as "the ability 'to mean' in the situation types, or social contexts, that are generated by the culture" (1974, p. 35) can be applied to the school and classroom. Teachers generate social contexts, and so make meanings available and bring about certain uses of language. Contexts and learning experiences are to be created which incorporate children's experience. Bernstein concludes, with feeling:

If we spent as much time thinking through the implications of this [i.e., creating contexts which reflect back children's experience] as we do thinking about the implications of the Piagetian developmental sequences, then possibly schools might become exciting and challenging environments for parents, children and teachers (1971, p. 200).

The Triangle of Discourse

Hymes', Halliday's, and Bernstein's theories join language and context within one framework, and make connections between the kinds of language used on the one hand, and the context in which it is used on the other. These contextual factors also appear in discourse theories of other scholars (e.g., Britton, 1970a, 1975; Moffett, 1965, 1968; Freire, 1968; Hawkins, 1970). In these theories, relationships within the context are given different names but recur as
concepts: expressive and referential (Sapir and Hymes); tenor and field (Halliday); audience and function (Britton); audience and subject (Moffett). They seem to reflect universal dimensions of human existence, and to recognize that life is at once social and individual, that the world is both human and inanimate, and that individuals, groups, and objects are bound together in a continuous, interlocking relationship. The triangle I, you and it is used by Moffett (1965, 1968) to describe the structure of discourse. However, this triangle could be said to symbolize life itself, as well as the universe of discourse which represents life. The speaker has two relationships, one to you, the audience, and one to it, the subject. Taken as a whole, the triangle of discourse stands for and includes all elements of context (and of life) to which language relates.

Toward abstraction and remoteness: Moffett's model. Moffett's triangle of discourse combines structural description and a developmental model with pedagogical implications. His rhetorical dimension, that between I and you, is a continuum of increasing distance between speaker and audience. Speech for oneself is at one end, and writing for an unknown audience at the other, with conversation and correspondence in between. The I-it, speaker-subject dimension is a continuum of increasing levels of abstraction from the reality of "primary moments of experience" (1965, p. 21). At the level of least processing of experience is perception, a recording of "what is happening". This is followed by memory, a narrative reporting of "what happened". Analogical thinking enters to generalize "what happens," and by transformation and combination of generalizations, theories are formulated as to what "will, may, or could happen". The direction
of growth and change is toward a more remote and diffused audience, removed in space and time, and toward a subject which is "less and less matter and more and more idea" (1965, pp. 21-25).

Moffett connects changes in the distance between speaker and subject, and change in distance between speaker and audience with changes in the characteristic of the text produced: "Each relation - and of course the two must be taken together - entails certain necessi­ties, and shifts in these relations entail changes all down the line, from the organization of the whole discourse to individual word choice" (Moffett, 1965, p. 23). Thus Moffett relates linguistic choices to contextual features.

This discourse theory derives from psychological theory - from Piaget and Bruner - rather than from sociological, sociolinguistic, or child language study. The emphasis is on the development of the individual away from "a private world of egocentric chatter to a public universe of discourse" (Moffett, 1965, p. 24), away from the here and now world to a world of "inner, neural events which are free from the constraint of immediate space and time (Ibid.).

These dimensions, however, can also be seen as global characteris­tics of the context, much as Halliday's field and tenor characteristics which teachers can and do modify. Moffett's formulation includes a pedagogical application. Teachers can control these dimensional variables of audience and subject, giving children experience in using language at a range of levels of abstraction, beginning with direct, concrete experience on which children impose their own categories. Children can also use language for a range of audiences, starting with those who are known and responsive.
Dimensions of the writing situation: function and audience.

Britton et al. The findings of Britton et al. (1975) are presented in The Development of Writing Abilities (11-18), using this same framework. Over 200 pieces of writing were categorized along these two dimensions: the nature of the task, or its function, and the nature of the demand on the writer, or its audience. This category system was used to trace the development of children's "ability to modify their writing to meet the demands of different situations and thereby move from one kind of writing to another" (1975, p. 9).

Again, the assumption is that language, writing in this case, was sensitive to situation, and that the writer's linguistic choices would reflect the nature of this situation. Function and audience dimensions, which were used to characterize the writing situation, corresponded to subject and audience in Moffett's triangle of discourse, to field and tenor in Halliday's conceptualization of the social semiotic, and to referential and expressive functions in Sapir and Hymes' thinking.

Function and audience in every utterance. Every utterance, every piece of writing is about something and is addressed to someone, whether that someone be self or an unknown audience. Moffett says, "The discourse unity of somebody talking to somebody else about something is what we must never lose." He is opposed to a teaching approach which separates composition into "analytical elements," presumably at the cost of these relationships (1965, p. 25).

Halliday's (1975) account of the development of Nigel's language shows these two dimensions of relationships first are expressed by two separate macrofunctions, the pragmatic and the mathetic, and then are taken over by the lexico-grammatical system so that every
utterance can be said to embody both an ideational and an interpersonal relationship, reflecting these dimensions in the human situation. Britton, though here referring to teachers' language in the classroom rather than to language in general, expresses this interwovenness of audience and function:

> It is true then that every word the teacher utters counts. We do not use language sometimes to establish relationships and at others to pass on information, for even the most neutral piece of instruction exercises some effect upon our relation with the listener (Britton, 1970a, p. 188).

**Functions of Language: An Aid to Thought as well as a Means of Communication**

Theories of discourse using a triangular model place a broad interpretation on the function side of the triangle the I/it relationship. Many other researchers seem to emphasize the communicative function of language, that is, they construe communicative competence more narrowly. Their studies seek to detail what it is that children need to know in order to use language appropriately in new settings, especially schools. They segment the stream of behavior into contexts, and identify the contextualization cues which signal appropriate communicative behavior for these contexts (for example, Green and Wallat, 1979; Gumperz, Cook-Gumperz, and Simons, 1979).

However, not only does language have a communicative function, but it also functions to aid thought and learning. This point of view is shared by numbers of scholars, among them Vygotsky (1934, 1962), Sapir (1970), Bruner (1975a), Olson (1977), Britton (1970a) and Moffett (1968). Sapir brings these two functions together:

> The primary function of language is generally said to be communication. There can be no quarrel with
this so long as it is distinctly understood that there may be effective communication without overt speech and that language is highly relevant to situations which are not obviously of a communicative sort. To say that thought which is hardly possible in any sustained sense without the symbolic organization brought by language, is that form of communication in which the speaker and the person addressed are identified in one person is not far from begging the question (Sapir, 1933, 1970, p. 15).

From external to internal conversation. According to the theory above developed by Moffett, two corners of the triangle of discourse embody the separate elements of discourse which later become internalized in thought "when speaker and the person addressed" are one. These two elements - the audience and the subject - are part of the external situation, outside the speaker. With practice in communicating externally with someone about something, children become able to carry on a dialogue within themselves, alternating roles of speaker and listener, reader and writer. This concept is the rationale for practices such as the use of drama and small group discussion which externalize thinking processes as preparation for internalized dialogue and solo discourse. As development and schooling proceed, abstraction from the concrete here and now setting increases as does distance from a known conversational partner, requiring the individual to converse within the self, structuring solo discourse without help, and using language symbols to represent experience (Moffett, 1968, pp. 69-70, 73, 91-2). Moffett writes:

... the tool of thought is an instrument socially forged from biological givens... In order to generate some kinds of thoughts, a student must have previously internalized some discursive operations that will enable him to activate his native abstracting apparatus (Moffett, 1968, p. 70).
Vygotsky and inner speech. Moffett's theme of social discourse preceding and preparing for internal dialogue and sustained solo discourse is in part derived from Vygotsky's theory of the social origin of inner speech, as set out in his monograph Thought and Language (1934, 1962). In this, Vygotsky traces a complex, interdependent course of development of the two lines of thought and language. Social speech, the first kind experienced becomes "speech for oneself", as the child discovers its usefulness in guiding action. Vocalized speech for oneself then becomes internalized as silent inner speech, a highly condensed, abbreviated, predicative, idiosyncratic form, where it functions to assist thinking, with no communicative demands to meet. Vygotsky's idea of the progression from social to inner speech illustrates a pattern of development he calls common to all the higher psychological functions, that is, development from "interpsychic to intrapsychic function, i.e., from the social, collective activity of the child to his more individualized activity ..." (1962, p. 133; Britton, et al., 1975, p. 39). This pattern of development will be discussed further in this review.

Britton: Representing the world to self through language. Britton, in common with Vygotsky and Moffett, gives key importance to the human ability to abstract from and symbolize experience, with the help of language. The progression of abstraction Moffett outlined was enabled by "verbal thought," as Vygotsky called it (1934, 1962, ch. 7) - language serving internalized thought, and allowing manipulation of meanings via inner speech.

Britton has brought together the thinking of philosophers Cassierer and Langer, and of psychologists George Kelly and Bruner.
(among many others) to formulate a conception of human beings, who, alone among animals, have a need to symbolize and represent their experience to themselves. Thus, rather than responding directly to stimuli from the outside, people respond in terms of the representation of life they have constructed. This representation furnishes a "storehouse" of past experience, "retrospectively." It serves to help them anticipate the future, "prospectively." Thus, people impose order on their experience, creating their own categories, their own version or representation (Britton, et al., 1975, pp. 77-8). Further, this representation can be modified with future experience, and improved upon in imagination (1975, pp. 29-31).

The symbolic system of language is the prime, though not sole, means of constructing one's representation, of making sense of reality. It "... serves to reduce to order the multiplicity and variousness of human experience" (Britton, 1970a, p. 204). It allows creating, and interrelating categories (Ibid., pp. 194-195), and manipulating these relationships. Sapir's views quoted by Britton restate again the symbolic, mediating role of language in representing reality:

Language is ... an actualization in terms of vocal expression of the tendency to master reality not by direct and ad hoc handling of this element but by the reduction of experience to familiar form (Sapir, 1933, 1970, pp. 14-15).

It is noteworthy that the means of representation are broader than words for Britton. For example, he considers all three of Bruner's stages of information processing symbolic, a term Bruner reserves for the highest. Thus, the action and perception-based enactive stage, and the iconic stage of imagery are both ways of "imposing organization on experience." Bruner's third stage, his symbolic, Britton therefore
calls "linguistic" (Britton, 1970a, pp. 190-193). They are, thus, three different levels and modes of abstracting and representing the same world experience. Britton points out that a *verbally organized world schema* acknowledges that "what is organized is far more than words." He continues by suggesting the many kinds of representation which are woven into the fabric of this verbally organized world schema:

Woven into [the schema's] fabric are representations of many kinds: images directly presented by the senses, images that are interiorized experiences of sight, sound, movement, touch, smell and taste: pre-verbal patterns reflecting feeling responses and elementary value judgments: post-verbal patterns, our ideas and reasoned beliefs about the world: images derived from myth, religion and the arts (Britton, 1970a, p. 29).

While language is less than life, and not all of life's experiences can be articulated and formally manipulated, Britton, like Bruner, Vygotsky, and others, nonetheless sees a special and critical role for language, one which is not a potential of other symbolic systems of representation (except mathematics). The special characteristic of language is of course that it can be used to operate on itself, enabling manipulation of words and ideas by other words (Britton, 1970a, pp. 190-193). Bruner (1975a) has named the ability to use language in this way analytic competence, beyond linguistic and communicative competence, which Bruner defines as follows:

We shall label it analytic competence, and its principal feature as with Piaget's formal operations (cf. Inhelder and Piaget [1958]), is that it involves the prolonged operation of thought processes exclusively on linguistic representations, on propositional structures, accompanied by strategies of thought and problem-solving appropriate not to direct experience with objects and events but with ensembles of propositions (Bruner, 1975a, p. 72).
Language allows the freeing of thought from action and imagery, but more significantly, it also allows the transformation of words and thoughts into "a new and powerful form that is not possible by other means" (Bruner, 1975, p. 74). This level of hypothetico-deductive thinking is the same as Moffett's highest level of abstraction from unprocessed reality, (and appears also as the most abstract level of informative language within Britton's transactional function).

The foregoing discussion of language as an aid to thinking is not intended to deny the importance of language as communication. Indeed, the roots of abstract thought have been traced by these scholars back to early, social, i.e., communicative speech. Language to communicate and language to shape experience are both needed, the former leading to the latter. Britton cites the complementary contributions of sociology in emphasizing the communicative situation, and of psychology, in focusing on individuals and their successive construals of their confrontation with the world:

The effect of this convergence of thinking has been enormously powerful. One general effect is to set up, alongside a sense of the importance of language as a means of communication, a sense of its value to the user. With a communicative incentive, that of sharing experience, the speaker shapes experience, makes it available to himself, incorporates it, so shaped, into the corpus of his own experience. Children using language in school are busy structuring their own experience and weaving into its fabric the experience of others (Britton et al., 1975, p. 79).

Contextual Support for Development

Social origins of individual processes. The development of children's internal powers of thought is a psychological, individual matter. Yet, paradoxically, there are indications that individual
development comes through social experience. Britton quotes Buber as saying "'Experience comes to man "as I" but it is by experience "as we" that he builds the common world in which he lives'" (Britton, 1970a, p. 19). This world would include the language used both as means of communication and as tool of thought.

Vygotsky's theory of the social origins of inner speech has already been referred to above. Britton, too, has taken social speech as a starting point from which differentiated functions of writing develop. He uses Sapir's concept of expressive speech, by which the speaker reveals thoughts and feelings to a trusted other who shares a context of meaning, and therefore understands in spite of the implicitness of language. With greater demands to communicate with an audience and to do or make something with language, explicitness will increase (Sapir, 1970, pp. 10-11; Britton, et al., 1975, pp. 10-11, pp. 81-82).

Expressive language, though like "egocentric speech" in being idiosyncratic, implicit, and "staying close to the self (Britton, et al., 1975, p. 82) nonetheless has social origins in that it arises out of talk and action with others in concrete situations. Britton sees speech as "part of a chain of mingled utterance and action" (1970a, p. 97). He quotes Sapir:

[Language] ... substitutes for [experience] in the sense that in those sequences of interpersonal behavior which form the greater part of our daily lives speech and action supplement each other in a web of unbroken pattern (Sapir, 1934, 1970, p. 9).

Britton finds characteristics of expressive speech in what he calls expressive writing, the central function in his spectrum of functions. The expressive function is the matrix out of which develop
the transactional function at one end and the poetic at the other end of the spectrum. Children's writing is characteristically close to the speech like expressive, as they use their linguistic resources built up in speech, including the model of family conversation, and write, often implicitly, for an intimate audience, who knows their meaning already. As they grow and have experience in writing for a range of audiences and in a range of functions, their language becomes more explicit and more differentiated. They use it transactionally, as a participant in the setting, to get things done in the world, or poetically, to stand back from life and reflect on it as a spectator, freed of demands to act in it, and able to attend to form of language and pattern of events, thoughts, and feelings, as well as message (Britton, 1970a, Ch. 3; Britton, et al., 1975, pp. 10-11; 81-82).

Thus from social origins of speech comes these highly differentiated and individual functions and forms of writing. The central feature of development is the initial, social experience within which the child encounters speech, along with action as a means of communication. Out of these social experiences with functional language develops inner speech (Vygotsky) as the foundation of thinking (Bruner, Moffett). Out of expressive speech develops writing for more remote audiences and for more diversified functions (Britton, Moffett). While it is not suggested that these theories are identical, they do share an important feature, that is, the recognition of the social origin of speech, and therefore the social origin of both higher cognitive and linguistic processes, including writing.
Socially mediated learning. A major theme of Vygotsky's Mind in Society (Cole, Scribner and Souberman, Eds., 1978) is the social mediation of the development of language as a tool of thought. In papers written during the 1930's, the relationship between development of self and nature of social environment is elaborated. Human environments are characterized by "artificial stimuli," that is, by socially created tools and signs - especially language - which have their effect on the nature of the child's experience. As these tools and signs vary in kind and quantity with time and place, so the nature of children's experience and therefore learning will vary. In Vygotsky's words, "If one changes the tools of thinking available to a child, his mind will have a radically different structure" (Vygotsky, 1978, p. 126).

Thus, this theory is historical and cultural, rather than universally predictable or deterministic. As Mind in Society's editors John-Steiner and Souberman summarize, Vygotsky "focused upon the historically shaped and culturally transmitted psychology of human beings" (1968, p. 122). Out of this dynamic opposition and interaction of psychological, biological and social influences will evolve the particular course of a child's mental, linguistic and social development (1968, p. 123).

This theory focuses on the nature of the social environment which enters into a child's individual development in a constitutive way. In contrast to Piaget's view of the biologically determined stages of development as a child interacts with the world, Vygotsky gives a role to human inventions as "tools" (Vygotsky, 1978, pp. 123-124). The importance of context is again indicated with focus on its social nature.
The zone of proximal development: learning mediated by interaction. By virtue of their greater power, maturity, and responsibility, parents and teachers play a dominant role in structuring the nature of the context within which children grow and learn. The influence of adults goes beyond that exerted through direct interaction. Of great importance, they structure children's context by arranging and mediating encounters with the material environment, with organized knowledge, and with people. They stand beside children, as it were, helping them carry out their intentions, (I to it), and express their meanings (I to you).

In this, adults act for society, making available to children historically created tools and signs in the environment. With these tools and signs, including language, children can learn to change their environment and control their own learning. Tools give mastery over nature; signs give mastery over self. Both free people from needing to respond to their immediate environment, by interposing a socially created system between self and world. Signs, especially speech, become internalized and linked with thought, allowing planning, controlling, and imagining. Tools are obviously an intermediary between man and nature, extending and transforming human powers. Both allow the uniquely human characteristic of being able to change oneself. As Vygotsky's editors write: "Perhaps the most distinguishing theme of Vygotsky's writings is his emphasis on the unique qualities of our species, how as human beings we actively realize and change ourselves in the varied contexts of culture and history" (Vygotsky, 1968, p. 131).
Before these socially produced tools and signs are internalized to become the means of learning and control for individuals, they are "elaborated" in interaction with others. This elaboration takes place in what Vygotsky calls the zone of proximal development. This zone lies between what the child can do independently and what the child can do with guidance from an adult or a more advanced peer. As Vygotsky wrote in Thought and Language:

> What the child can do in cooperation today he can do alone tomorrow. Therefore the only good kind of instruction is that which marches ahead of development and leads it; it must be aimed not so much at the ripe as at the ripening functions (Vygotsky, 1934, 1962, p. 104).

The development of human potential for complex, abstract, transforming mental activity would seem to necessitate a period of dependence upon more mature members of society (Vygotsky, 1978, p. 131). The zone of proximal development, at the end of which skills and knowledge are internalized, is characterized by external, social processes. John-Steiner and Souberman comment on the advantage of the long period of dependency since the individual is introduced to the benefits of cultural knowledge in "an optimal setting for learning," i.e., "within the supportive context of family and community" (ibid, p. 132).

Vygotsky's essay "Interaction between Learning and Development" (1978, pp. 79-91), focuses on this distinction between learning which awakens a potential for development, and development, an actual, matured function available for independent, individual use. His interest is particularly in the functions which have been awakened though are not yet matured, the zone of proximal development created by learning, an indication of potential:
We propose that an essential feature of learning is that it creates the zone of proximal development; that is, learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. Once these processes are internalized, they become part of the child's independent developmental achievement (Vygotsky, 1978, p. 90).

Thus, socially elaborated tools and signs are made available for internal, independent use, through learning, a process of interaction. Vygotsky cites examples from specific areas of learning and development. Language he says is a paradigm example:

Language arises initially as a means of communication between the child and the people in his environment. Only subsequently, upon conversion to internal speech, does it come to organize the child's thought, that is, become an internal mental function (Vygotsky, 1978, p. 89).

He notes too that, according to Piaget, reasoning in discussion precedes internal reasoning, cooperation with others prepares for moral judgment, and acceptance of rules in group play comes before voluntary, internal regulation by self (1978, p. 89).

Vygotsky calls for research in specific subject areas to "describe the internal relations of the intellectual processes awakened by school learning," x-ray descriptions of developmental processes "inside the head of each individual child," descriptions which will yield an "internal, subterranean developmental network of school subjects" (1978, p. 91). Specific studies will be needed, since development in children never follows school learning the way a shadow follows the object that casts it. In actuality, there are highly complex dynamic relations between developmental and learning processes that cannot be encompassed by an unchanging hypothetical formulation (Vygotsky, 1978, p. 91).
The concept of a zone of proximal development thus names and focuses on a process, familiar both theoretically and intuitively to educators. By separating development and learning, attention is placed on the need for a guided learning experience over time, before mastery can be expected to develop (1978, p. 90). By conceptualizing a period during which interaction is critical, Vygotsky provides for the non-deterministic influence of particular historical and cultural contexts to enter into and change private mental development, a point of entry for teachers who can affect context. By contrasting school learning with preschool development, Vygotsky emphasizes the new element in children's experience that school adds, while recognizing the links the school makes with existing development - a theme of familiarity and novelty which recurs in the literature.

The relevance of the zone of proximal development to the present study lies in the importance it gives to the relationship with adults and more capable peers, both in the immediate interaction and through adult structuring of the context. However, the nature of this relationship is suggested by Vygotsky in general terms only: assistance, cooperation, collaboration, guidance, collective activity, showing children "various ways of dealing with the problem" (p. 86), imitation, and so on (Vygotsky, 1978, pp. 84-91). It is the more specific characteristics of this relationship that the remaining section of this review will discuss.

**Characteristics of the Context as Structured by the Adult**

This final section of the literature review will focus on the characteristics of the context as structured by the adult, both at home and at school. Examples will be selected of work in child
language learning and in school language use (including writing) which bears on the relationship between context and text. Brief comments on curriculum, as representing the institutionalization of policies concerning the structuring of context, will close this final section and this review.

Child Language Research

Over the past decade or more, research in child language learning, taken as a whole, has pointed to the importance of the social context as motivating and enabling the construction by children of their language. The trend has been to study this construction at earlier and earlier ages, even beginning before speech.

**Prelinguistic scaffolding.** Children use human powers of inference in constructing their language, including the essential but often taken-for-granted inference that others share the same world (Shields, n.d.). They are innately able, through feedback, to develop a schema for intersubjective events. According to Bruner, early experiences with others - eye to eye contact, reciprocal smiling and vocalizing, imitation of adult's gestures, following the observer's line of regard, distinguishing people from things - help children infer that such intersubjective events constitute a special category of events. The intentional or intention-like behavior of others aids in this process (Bruner, 1975b, p. 8).

Bruner's 1975 "Ontogenesis of speech acts" discusses these intersubjective events. His argument is based on the proposition that pre-linguistic structures of action and attention are reflected in the structure of the language. Thus, action structures of agent/action/object are expressed as subject/verb/object; attention structures
of topic/comment are expressed as subject/predicate. Bruner states his hypothesis:

We shall illustrate two crucial ways in which the structure of language may be in very good correspondence with the psychological events and processes that it must encode. These instances are offered to explore the hypothesis that early language, to be acquired, must reflect the nature of the cognitive processes whose output it encodes. One instance has to do with the isomorphism between a central linguistic form, predication, and the nature of human attention processing. The second is the relationship between linguistic case structure and the organization of action (Bruner, 1975, pp. 3-4).

Children, in interaction with their mothers, learn sequences of action through ritual games such as peekaboo or games of handing objects back and forth. They also learn to share attention with the parent who helps them notice something, then comments on it. Both kinds of conceptual learning, as mediated by the adult, prepare children to take on grammatical forms since these forms fulfill understood functions.

The important role of the adult in the "action contexts" of early language learning is emphasized by the proviso Bruner adds to McNeill's claim. McNeill had said that fundamental concepts about action and attention must be available to children at the beginning of learning in order for language acquisition to take place as it does. "I should add to this, perhaps, the proviso that these concepts must be the ones that are developed in mutuality with a speaker of the language" (Bruner, 1975b, p. 6, emphasis added).

What the mother does is to help children distinguish and signal different segments of action routines, such as the order (and reversible order) of agent/action/object. The mother also follows the
child's line of regard so that both are focusing on the same thing, and then comments or acts on it (1975, p. 9). Children learn to mark these segments with phonological patterns which seem to prepare a place for real words which follow (1975b, p. 10). Mothers were observed to impute intentions to children's behavior, either as intentions to act or intentions to share a field of attention. Mothers also standardized action formats to allow children to predict and signal segments of joint action, for instance, marking the end of sequence with completives, e.g., "There!" Mothers who began as agents gradually shifted children's attention away from themselves as agents, to the action, which children then come to take over, in a reversal of roles.

More generally, the adult "... operates not so much as a corrector or reinforcer but rather as a provider, an expander and idealizer of utterances while interacting with the child..." so that the child can extend "... rules learned in action to the semiotic sphere. Grammatical rules are learned by analogy with rules of action and attention" (1975b, pp. 17-18).

This 1975 work of Bruner's has been discussed in some detail in order to illustrate the essentially indirect way mothers (and other adults) help children learn to talk, that is by structuring the context rather than by teaching the text. Bruner has described specific ways in which the adult made the structure of the situation clear, marking segments, focusing attention, and gradually changing roles and routines. Children abstracted these structures first, and then marked them with unconventional sounds, thereby showing an intuitive understanding of the symbolic function of language.
Ratner and Bruner (1977) called this adult activity "scaffolding" and detailed further the structure of ritual games. Peekaboo and object hiding games consist of a limited semantic domain, a clearly segmented and therefore predictable task structure with junctures for insertion of language markers; reversible role relationships so that the child gradually takes over initiating moves in the game, finally controlling both verbal and non-verbal elements; variableness of elements either by mother or child; and a "playful atmosphere" within which the child is free to practice without fear of consequence.

Cazden has commented on these two (Bruner, Ratner & Bruner) articles, and has related them to other studies of discourse scaffolding within Vygotsky's framework of the zone of proximal development. In "Peekaboo as an instructional model: Discourse development at home and at school" (1979), Cazden cites work on these ritualized language games as dramatic examples of the supportive adult role in structuring the context of action and early language learning. Cazden summarizes their salient features: the script is enacted by the mother in the beginning, with the child gradually taking a more active role. The mother guarantees the child's success, and at the same time, keeps the child's interest and activity by introducing change, for example, by varying roles and routines. Bruner's term "scaffold" for this supportive adult role is qualified by Cazden who points out that the scaffold must self-destruct when the need lessons, and be replaced by more complex scaffolds for more advanced constructions (Cazden, 1979, p. 12).

Early language. Cazden, like others given as examples in this review, is interested in the construction of language in use, that
is, of conversation, rather than of formal grammar alone. She summarizes studies which bear on learning of conversation, including Snow's study referred to below and the work of the Scollon's (1979). The Scollons describe "vertical constructions" to which children and adult both contribute, the child stating something, the adult asking about it, and the child commenting. The adult is helping the child to take over the independent role of commenting on a topic adding new information (Cazden, 1979, pp. 13-14).

Cazden also cites the study by Stoel-Gammon and Cabral (1977) in which the mother is found to prompt children for more information by asking questions. The child's "Fell ground" is followed by the adult's "Who pushed you down?". This use of language by the child to report on something gone by was most successful when both the adult and child had been present at the event, and the child was explaining to a third person who had not been there (Cazden, 1979, p. 13).

The scaffolding of conversational discourse illustrated in these studies was interpreted by Cazden as preparation for solo, narrative discourse which also requires provision of new information in each utterance. It was suggested that children became literate, therefore, not only by being read to and seeing others read, but by interacting with adults as well (Scollons in Cazden, 1979, p. 13).

All of the studies referred to by Cazden can be covered by Vygotsky's (1962) phrase "speaking under adult guidance" (Cazden, 1979, p. 18). Vygotsky related speaking under adult guidance to the zone of proximal development, an area of performance within which children were able in collaboration to surpass what they could do
alone (Cazden, p. 17). Scaffolding as understood to mean supporting the joint construction of text could be used to describe the adult role in the research cited in this section of the literature review.

Snow's (1977) "Conversation between mothers and babies" summarizes findings which characterize mothers' speech to babies, and found these modifications important because they enabled babies to learn how to converse. Snow proposed that mothers operated on the basis of a conversational model, acting as if babies could reciprocate. Therefore, mothers used turn allocators like tag questions and "Hmm?", and used questions and greetings which allow (according to the mothers' conversational rules) the child's response to be treated as communicative. These and other maternal speech behaviors - for example, semantic and syntactic simplicity, redundancy, clarity, high pitchedness, and so on - can be similarly interpreted as ways of setting up (and teaching) reciprocal conversation.

Snow's work is one example of a child language study which underlines the primacy of social interaction, and of conversation as the way in which language is first used (compare Vygotsky). Furthermore, it illustrates the assymetrical characteristic of the adult role, since the adult bears the responsibility for carrying the conversation.

Another study which documents a supportive adult role is Shugar's (1978) "Text analysis as an approach to the study of early linguistic operations." She bases her rationale on Halliday's definition of text as language in operation, systematically related to contexts of interdependent activities. Before children can put two words together, they can contribute to the adult's text with one word that either repeats, substitutes for, or conjoins with the adult contribution.
Thus children are able to be relevant and also innovative, varying the sense within their limits. Though they are limited in not yet being able to contribute information unknown to the adult, they can produce shared information which will be contingent upon the adult language (p. 229). Thus, the adult contribution is larger:

The burden of the game falls heavily upon the adult, who must identify and explicitly recognize what the child is talking about, in order to establish commonality of reference situation (Shugar, 1978, p. 231).

Together, adult and child jointly construct a text which coheres within itself as well as with the context. A developmental progression is proposed, from non-text to contribution to text, to text as own production (pp. 228-229). This early, jointly produced text is found to express the same cognitive relations as children's independent texts which follow, showing children's cognitive structures are already formed before being able to be independently expressed (p. 250).

Shugar's work emphasizes what very young children are able to do with language in the way of being both relevant to adult text and innovative. It also describes a strong role for the adult "as major partner in text construction, who influences the transmission of cultural meanings as well as the learning of language forms" (pp. 250-251).

Halliday (1975) describes the learning of language as one of constructing a meaning potential, an individual process which takes place within a social context. The small group of people who are close enough to the child to know what is in the child's mind, are "there on the inside of the child's head, so to speak; not only do they
know what he or she means, but they also know what the child understands." They follow the child as he constructs his language, and construct it with him, both the protolanguage and then the mother tongue (Halliday, 1980, p. 10).

Halliday calls this process "tracking" by which adults convey that they have understood the child, and that the child's message has succeeded. Tracking he views as "absolutely essential" to early language learning. Thus, Halliday, like Shugar, suggests the importance of joint construction of text, based on intersubjective understanding and shared reference.

A longitudinal study by Wells (1979) of early environmental factors in learning to talk has reported results which indicate an association between the quality of early language interaction and later success in school language and reading achievement. The early interaction of successful children is characterized by the mother's ability or willingness to accept and develop children's contributions (p. 87). Mothers make an attempt to understand their children's intentions, and then modify their own language in order to comment relevantly on the child's inferred meaning. Communication is more successful when children initiate and mothers infer the topic and build on it, an asymmetry which makes sense according to Wells, since children are talking from their own, already organized experience instead of having to reorganize their experience to match that of the speaker (Wells & Nicholls, in press, p. 8). In an example of conversation between a mother and 23 month old Mark, Mark initiates a topic with sounds meaning "Look at this," and "Birds, Mummy." Mother establishes intersubjectivity with "mn," then asks "What are
they doing?" giving him a chance to comment "Jubs bread" (i.e., "The birds are eating bread") (in press, pp. 7-8). What the mother is doing in these and other examples is "accepting what Mark says and then helping him to develop and extend his own meaning" (in press, p. 10).

Thus, linguistic ability is not confined to control of formal elements of language, but is defined as appropriate use of form, including resources of vocabulary, syntax, and intonation (1979, p. 85). Children as speakers need to make their language relevant both to a range of situations and to the listener's needs in order to make their own intentions clear (ibid.). They learn how to do this, i.e., how to negotiate meaning through dialogue or conversation, in interaction within shared enterprises, against a background of shared experience.

Wells and Nicholls (in press) stress the "collaborative nature of meaning making through conversation ... because we believe that in the early years it is conversation that forms the essential matrix for learning of all kinds" (p. 3). Wells' (1979) results suggest that those children who have had experience in using language to negotiate meaning are more likely to enter school with a higher level of linguistic development and to have a higher level of reading attainment after two years in school (1979, p. 87).

In Wells and Nicholls (in press), characteristics of the adult role are specified in more detail, based on a retrospective study of parents' speech to thirty-two fast, medium, and slow developers. Parents of fast developers were more likely to: acknowledge their children's utterances; extend their meanings; direct and control
their behavior through speech; provide contrasting information as a means of indirect correction; repeat or paraphrase their own utterances to be sure children understood; and use expressive utterances such as "that's nice." Wells and Nicholls conclude:

It is not surprising to learn, therefore, that the average number of adult utterances in each speaking turn was greater for the parents of the fast developers, for quite frequently such an adult would, in one turn, acknowledge a child's previous utterance, extend it in some way and then provide a paraphrase or partial repetition to ensure that the child would understand the meaning that was being added (Wells & Nicholls, in press, pp. 13-14).

The adult role was summarized as being one of helping children to develop topics they initiate within practical activity, and then keeping the conversation going (in press, p. 14).

Summary: field, tenor, and mode in learning to speak. In summarizing common themes of these selected studies of prelinguistic and early language development, one would certainly note the importance given to conversation as a mode of discourse which prepares for later solo discourse, as demanded in school, both spoken and written. Since conversation is a joint activity, there is also emphasis on the crucial role of the adult. The adult "teaches" the child to converse first by structuring the contexts of shared activity, so that the child first learns such cognitive distinctions as those between agent/action/object and then learns to mark them linguistically, by invented and then by conventional signs. These interactive contexts are highly routine and thus predictable, yet constantly vary, maintaining a balance between familiarity and novelty.

Children's language plays a growing role in these interactive contexts, but the adult role continues to be one of scaffolding, that
is, of helping the child to do what the child could not do alone. The adult does this by taking the major (but not sole) responsibility in the joint construction of text. It is up to the adult to infer the child's meaning on the basis of shared context and history. Then the adult confirms by restating the child's meaning. Having established joint reference, the adult then extends that meaning with more talk, often repeating to confirm. Such joint text building is enabled by the ability of mother and child to share meaning - to know that each is understanding the other.

The structuring of context by mothers and other caretakers in early language learning could be described in terms of *field*, *tenor*, and *mode*, Halliday's dimensions for interpreting contextual meaning. It could be said that *field* (what is taking place) is characterized by a clear, yet dynamic structure, highly predictable because routine and redundant with the physical context, yet changing in detail so that interest is maintained and invariant features made abstractable. *Tenor* (the relationships of the participants) is one of supportive collaboration, with the mother's focus on understanding the child's meaning, not on correcting the child's linguistic form, and on supplying the form needed to help the child's meaning to be understood and verbalized. *Mode* (the part language and other communicative means play) is flexible, as multiple channels are available for expression of meaning - non-verbal as well as verbal, with action gradually coming to be replaced by sound, and protolanguage by language.

According to Halliday's theory, the characteristics of *field*, *tenor*, and *mode* predict the register of the text. Texts produced by
mothers and young children could be expected to be highly exophoric, that is, to refer to meaning outside the text in the situation, understandable only to those who shared a history and a present context. Text would also be realized through unconventional, idiosyncratic means, as children used their own protolanguage or language with its particularistic connotations, along with non-verbal means to complete their meaning. Yet the text would be appropriate to the context, to the activity underway (its field), to the relationships of intimacy and mutuality between its participants (its tenor), and to the flexibility of channel (its mode).

A contrast can be made between context and text, by considering the context to be the product of adult structuring, and comparing it with that part of the text as produced by the child. One can assume that context, with its characteristic of a redundant yet dynamically changing field, non-threatening and supportive tenor, and flexible mode, creates optimal conditions for learning. In contrast to a "delicately tuned" context which makes a clear field optimally accessible, the child's text is a crude approximation of meaning, idiosyncratic, and exophoric, when looked at apart from the supporting context and the adult text which completes its meaning.

Yet, in spite of the crudeness and fragmented characteristic of children's texts, they are received as meaningful expressions of intentions. The adult role is, therefore, both to create this finely tuned context, and to collaborate with the child within it, focusing on mutual meaning, and supplying needed means for its expression.
School Language Use as Structured by the Teacher

Can this understanding of the context of home language learning, particularly of the adult role in that context, be applied to learning language in school? In order to do so, the school context needs to be considered first.

Differences between home and school language. Wells (1979) compares the contextual conditions of home and school, and finds major differences. He notes that the transition from home to school is a transition to a new social setting in which patterns of social interaction are changed:

Starting school involves a change from one social setting to another that differs from it in a number of ways: in size, in organizational patterns and routines, in the possibilities for one-to-one interaction, in the goals that are set and the means that children are expected to use in achieving them, and in the values that are put on different skills and competencies (Wells, 1979, p. 80).

Furthermore, this change is "mediated" by language. Therefore, children's success in making the transition will depend upon their ability to communicate effectively (Wells, 1979, p. 80).

Negotiation of meaning, as characterizing earlier mother-child talk, was found to be relatively uncommon in the Wells data (Wells and Nicholls, in press, p. 14). Frequently, a teacher is more concerned to "achieve a shared understanding on her own terms" than to understand what the child's expectations and intentions are in order to negotiate a shared understanding (in press, p. 15). Children differ in their ability to help adults communicate with them by responding to teacher initiated "non-negotiable questions" (in press, p. 17). The implication is not that teachers should always talk like parents, but that there
should be more opportunities for negotiation of meaning, especially for those children who find the transition to school difficult.

Related to the negotiation of meaning is the initiation of topics. Wells and Nicholls (in press) reported that children who initiated their own topics at home could extend them (with help) whereas if the mother initiated the topic, children were unable to reorganize their own experience in order to match that encoded by the mother (as discussed above, p. 90). In schools, children do not often initiate topics, but rather respond to teacher's initiatives (Wells, 1979; Mehan, 1978; et al.), seeking to take on her meaning, putting their own aside (Edwards and Furlong, 1978, p. 107).

Indeed, much of the large literature that describes classroom language focuses on characteristics that set it apart from ordinary conversation (such characteristics as "known answer" questions, and positive or negative evaluations of children's responses, not usual in ordinary conversation).

Other work brings out differences in contextual support for children's performance. After growing up using language with familiar others in a here and now context, cooperatively constructing text, in school children are often expected to perform alone, to understand language out of context and to produce well-formed "complete thoughts." Within the new context of school, children are assumed to understand teachers' often implicit instructions, and so of necessity develop their own, unconventional interpretations, which, though logical, may be "wrong" (Cicourel, et al., 1972). They are assumed to control personal and heuristic functions (Halliday, 1969) and so are given no
explicit help in learning to use language in these ways which, however, are essential to success in school.

Differences in the characteristics of school language have been related to differences in the patterns of interaction in the classroom. Philips (1972) describes alien "participant structures" in which Indian children were expected to operate, and their inarticulateness under these circumstances. The ways in which people related in the classroom were very different from those familiar ways of the community.

The work of Black (1979) illustrates the same point. Children's language in more formal classroom situations was not as complex linguistically as it was in natural play situations with peers.

**Homelike characteristics of school language.** The foregoing works have illustrated ways in which the conditions for school language use are different from those of the home. However, there are examples (e.g., Cazden, 1979; Walker and Adelman, 1976) of the opposite case, of ways in which school language conditions were like those at home.

After looking at "speaking under adult guidance" at home, Cazden (1979) asks if assistance is available to children in participating in school discourse, a different variety of talk from that used at home. She found a homelike kind of assistance in research by Willes (n.d.) who noted that nursery school teachers responded to children as if children's behavior were appropriate school behavior, imposing a model of appropriateness on them (as Snow, 1977, had found mothers doing in interpreting babies' noises and facial expressions as meaningful).

Walker and Adelman (1976) contribute an anecdote from a secondary school class which illustrates a homelike use of language in that the
group, like a family, had a history which made their language understandable to each other. The class's chant "Strawberries, strawberries," which greeted the end of an inadequate student recitation had reference to the teacher's usual comment that the offering was "Like strawberries — good as far as it goes, but it doesn't last nearly long enough" (pp. 138-139).

Relating home to school learning. A strong case for relating home to school learning has been made by Britton (1970a) and C. and H. Rosen (1973). Underlying their case is the conviction that, along with change, there should be continuity with earlier learning. Learning in school takes place as it does at home; the fundamental process is the same. That is, children construct their own representations of experience within a setting that is both concrete and social. The ideas of Britton and the Rosens about the context for learning in school will be summarized here in terms of field, tenor, and mode, and their point of view will be adopted to organize the rest of this review.

Field, what is going on or being done, the subject or content of the experience, relates to children's intentions and purposes, and to their reasons for acting and for using language. In school, it can stand for the way in which content or subject matter is made available to children, the kinds of experiences provided for them by teachers, and the kinds of purposes they take on from teachers as their own. These scholars emphasize the importance of authentic, primary, direct experience. This experience, often with "small-scale and random events" (Rosen and Rosen, 1973, p. 32) takes place in the concrete present, where children can act directly upon their environment.
Through this exploratory action, and through exploratory talk, they place their own classification on experience. Their categories may not fall within traditional subject matter boundaries, but will represent their own abstractions rather than another's readymade organization (Britton, 1970a, pp. 135-137). Britton claims that "talking and doing" should be the major stress through the primary school (i.e., from ages five through seven), and that "Language must continue to grow roots in first-hand experience" (Britton, 1970a, p. 138). According to Sapir, it is in this early, first-hand experience that language acquires its vitality, being "learned piecemeal in constant association with the colour and the requirements of actual contexts" (Sapir, 1933, 1970, p. 10). These "early experiences of words with things," their "vital connexions" with each other, are seen as underlying later, more abstract language use and conceptual thought (Britton, 1970a, p. 136).

Like Britton, the Rosens (1973) believe that children should encounter content through direct experience, and should have time to become deeply involved in this experience:

[Children should be given] time to develop thoughts, ideas, systems of work and learning situations of their own, ... leaving them unharried and unhurried to work at their own pace (Rosen and Rosen, 1973, p. 27).

Behind this recommendation is a common understanding of the learning process as being one of abstraction of one's own meaning from experience, organizing one's own representation of meaning (Rosen and Rosen, 1973, p. 41). Talk and writing are seen as ordering and giving meaning to this experience (1973, p. 57, 135), thus functioning in learning as well as in communication.
Children's own intentions are central to this view of field. The content of the curriculum is selected by children who, through interaction with it and through language (and other means) represent its meaning to them. The teacher structures the field through arranging the environment, so that it is clear, through simplification and redundancy, while at the same time being interesting, through variation, change, and novelty (Rosen and Rosen, 1973, p. 32), (the balance between familiarity and novelty noted above as characterizing the peekaboo game) (Ratner and Bruner, 1979; Cazden, 1979).

Within this field, children's initiative can function. Their intentions and purposes can lead them into exploration, talk, and writing. In describing a teacher-led discussion, the Rosens show that children's contributions cannot or should not be "marshalled" by the teacher to her predetermined ends, and "that once her theme has moved the children, they will have their own places to go" (1973, p. 52).

Thus children's own curiosities and "pre-occupations" furnish motive power for moving them into the field of content or subject matter, and into producing language (or text) which is rooted in their experiences in the field:

> It is only those affairs which create real preoccupation which can make children reach out for the language to express new understanding, new questions and new perceptions (Rosen and Rosen, 1973, p. 28).

Children's curiosity thus provides a link between present interests and new possibilities:

> The more the school is in tune with the curiosity of the children within it the greater the chance it will become the initiator of new inquiries,
Tenor is the interpersonal dimension, and describes how people are allowed to relate to each other within the classroom community. Tenor is established through decisions of the teacher relating to power and intimacy.

Britton (1970a), drawing on Buber, argues for a tenor based on respect and trust. He makes the point that the relationship between teacher and children cannot, however, be reciprocal. It is the teacher who is professionally responsible for knowing and reaching each individual child as well as for knowing "the world" in order to select from it for the child. The teacher is also responsible for managing the group, having ultimate authority over it (1970, p. 183). The teacher's influence is dominant in creating "a context in which a rich variety of language can flow with ease. It is not a case of democracy" (Rosen and Rosen, 1973, p. 39).

A relationship built on respect and trust, within the teacher's overall authority, contrasts with that of a "pseudoparent" who pretends parental love. It is also different from a relationship built on the teacher's subject matter specialization. Britton advocates a relationship which is professional rather than "pseudoaffectionae." He believes that subject matter should be chosen which relates to the 'pupil's own reality' (in Buber's words) as well as to the teacher's special knowledge (Britton, 1970a, p. 186).

A professional teacher relates to children through mutual involvement in what has been selected from the world, that is, in a third thing outside themselves. David Hawkins (1970) also uses Buber's
framework of I, thou, and it, (as did Moffett, 1965, p. 11; see above, pp. 68-69). Hawkins talks of the importance of the "human role" in addition to a rich material environment. There is often a need for someone "to contribute the adult resonance." More generally, it is through others that we become ourselves, "through resonance with others engrossed in those same matters" (Hawkins, 1970, p. 47). This relationship between I and thou, therefore, is established through common interests in an it, common involvement in subject matter, a common theme for discussion (Hawkins, 1970, pp. 47-49). Connie Rosen, as quoted by Britton, makes the same point:

I can only aim at making a triangle of myself, the children and the activities outside both of us but in which we are both involved for different reasons... The talk I am aiming for is the talk that arises from shared experiences, experiences enjoyable and interesting to all of us, organized and yet allowing the children freedom to express themselves. Talk that will encourage comment and criticism and lead them to think about what is happening to them. In the course of such activities I would hope to build a relationship where they could feel safe to talk about anything that concerned them... (Rosen, 1967, pp. 27-28, in Britton, 1970a, pp. 140-141).

Her last idea, that children who share experiences with adults will feel safe to talk, is extended by Britton in a 1977 address, to include all that is learned by doing. He notes that security is an essential condition. Children need to feel safe if they are to dare to try, to dare to learn through doing (which is the only way they can learn).

If children are to be seen, not alone in isolation but in the context of their "engrossment" with things of their world, they are also to be accepted in the context which they bring from home - their language, and their family and community values. This is a generally
agreed-upon tenet of all works cited in this review. Acceptance of
home language and values means that teachers will focus on understand­ing children's meanings, rather than on evaluating either their
linguistic form or their home meanings. Like parents who were found
to "scaffold" their child's language, jointly completing texts
(Shugar, et al., below), teachers track children's meanings by know­
ing what they might be, and assisting children in their expression,
while allowing them to have their own meanings. More will be said
below about this acceptance of old meanings in relationship to the
school's purposes in extending toward new meanings (Rosen and Rosen,
1973, pp. 38, 43, 52, 64).

Thus, Britton, Buber, Hawkins, and the Rosens (inter alia)
describe relationships of respect and trust, in which teachers and
children are mutually involved in explorations of the world. The
teacher encourages a "shared life" based on respect and trust by
developing a "delicate web of relationships" (Rosen and Rosen, p. 32).
In the Language of Primary School Children, the authors discuss the
power and importance of a school's shared life:

For it is the particular kind of shared life created
by all those who work together in a school which
determines how language will be used by teachers
and pupils. It is the voice of this shared life
which marks out the boundaries of possible dis­
course (Rosen and Rosen, 1973, p. 21).

They add that as difficult as it is to analyze the meaning of a school,
onetheless, children read this implicit meaning "more quickly and
thoroughly than they learn many prescribed tasks," and in doing so,
"discover what it is possible for them to say" (Rosen and Rosen, 1973,
p. 21).
A "shared life" is encouraged in many ways. The teacher "knits" together children into groups through talk (p. 43) and experience. A folklore develops from this talk and experience; and a background of assumptions and conventions is implicitly understood by all (p. 39). The teacher also leads children to cooperative ways of behaving, thinking, and talking, through suggestions for sharing ideas and activities with others (p. 37).

The quality of language (and of thought) is related to the meaning of the school and the delicate web of relationships within it. The Rosens suggest that growth in talking and thinking can be brought about by the encouragement of social interaction. For example, sharing of interests leads to new thinking and action: one child's discovery of a bone led to collecting, labeling, writing, sketching, and reading by others. "From one child's personal discovery and curiosity others had become interested and joined in the investigation" (p. 32). Children encounter a diversity of people greater in school than in the home. This gives them practice in coping with differences, and in learning to use "the language of reconciliation" (pp. 25-26). A conversation among friends about a topic of interest requires "disciplined attention" to each other in order to ensure relevance (p. 34). Thus, social relationships support and motivate intellectual and linguistic growth. The kind of shared life "marks out the boundaries of possible discourse" (p. 21).

Mode, the third term borrowed from Halliday, refers to the place of language in activities (field) and the personal relationships (tenor). What channels in school are available for communication and representation of meaning? Are other, non-linguistic modes encouraged
or allowed? All channels of communication and representation are used in preschool years; non-verbal systems such as intonation and posture, as well as the here and now context are sources of information. Children symbolize their experience in gesture, scribbling, art, construction, dramatic play, as well as in talk and writing. Are, or should these varied means be encouraged in school? At the same time, is there impetus toward the growth and differentiated use of language? Britton's view is that language will be one mode only of symbolic representation (1970a, p. 193, 276-279).

However, Britton claims that language has "peculiar virtues" among symbolic means (1970a, p. 193), since it allows ordering and shaping of experience, and reflection upon it. Furthermore, it permits going beyond experience by extrapolation, the "projection of potential meanings into the raw material of experience," as Sapir said (Britton, 1970a, pp. 201-202). Thus, language as a symbolic mode is worth developing since it aids higher thought.

These higher functions of language arise from the matrix of expressive speech. This kind of speech, being close to the self, will be highly exophoric, that is, it will refer to meaning beyond the text, and will be expressed non-verbally as well as verbally. It will also be highly personal since it reflects the particulars of small children's limited experience. Expressive speech is used to make sense of experience, as "... every new field of interest for [children] is likely to be investigated, explored, organized first in talk" (Britton, 1970a, p. 166). To understand the meaning of this talk, one must be close to the experience which generates it.
From this expressive matrix will develop a range of functions, as demand for new uses of language bring about new forms (for example, the poetic or transactional of Britton; levels of abstraction of Moffett; heuristic, imaginative, informative of Halliday). However, expressive talk continues to function at any age as a first draft in which ideas are worked out and tested with other people, again in an atmosphere of mutual trust, with no fear of censure. In addition, expressive talk not only functions in the formulation of ideas, but it is the means by which people interact and influence each other. In school, "it makes possible a new series of teaching/learning events, for children in talk learn from each other" (Britton, 1970b, p. 10; see also Rosen & Rosen, 1973, pp. 268-269).

Mode, then, for young children in school, should be familiar in its likeness to earlier means of communication and representation. Expressive talk (and writing) should be expected and valued. However, school should also include the possibility of new ways of using language for new purposes. Again the balance between old and new applies.

The meaning of the classroom, as embodied in its tenor or social relationships, and in its field, or experiences with content, will affect the mode of expression allowed. In a classroom which encourages cooperative relationships and direct, primary experiences, the mode will be mixed, non-verbal as well as verbal, as it was in early language at home, and is in much of adult, everyday talk. New uses of language - more complex and understandable even apart from the situation - will also occur, as mutual "preoccupations" and "engrossment" place new demands on the language.
The key to this development toward new functions and new forms
is the maintenance of a vital connection between language and experi­
ence (Rosen & Rosen, 1973, p. 64). Children's early language use,
like their drawing, is a symbolic, not literal representation of their
experience. It is a selection from experience but doesn't represent
everything they know, either of language or of life. This early,
often implicit and idiosyncratic language needs to be accepted
"hospitably" as it occurs in context of experience and along with other,
non-verbal modes of expression.

Acceptance of the old, however, needs to be accompanied by
"pressure" towards the new:

We need then to create these situations which exert
the greatest pressure on [children] to use their
latent resources, to provide those experiences
which urge them towards the widest range of langu­
age use (Rosen & Rosen, 1973, p. 64).

Some have held that children needed to learn language first, in
order to understand experience. On the contrary, rich and varied
experiences need to come first, since it is in ordering them, reflect­
ing on them, and communicating about them to others that a wide range
of language is learned (Ibid., p. 64).

The Context: A Dynamic Balance between the Familiar and the New

Field, tenor, and mode in early language learning and in school,
a summary. The framework of field, tenor, and mode (Halliday, 1974),
has been used to discuss the theories and findings of scholars working
in the areas of child language and of language in school. Together,
these three dimensions can be used to interpret the meaning of the
context, and here have been used to describe the structuring of
conditions for learning, including learning to write. The teacher's decisions in each of the areas are made indirectly, both through long-range planning and through immediate interaction, as teacher and children jointly bring the curriculum into being.

Those whose work has been discussed in this chapter accept the view that children have powers to abstract and construct their own representation of the world including their own system of language. They also place increasing importance on the human environment, and specifically, on the adult role which enables children to be active, constructive learners.

Research in early language learning shows that the adult "scaffolds" the learning of behavior and of conversational discourse. Other researchers have asked if this scaffolding role could or should apply to teachers of young children. The parent scaffolds learning by presenting a clearly structured but changing context, so that a balance between familiarity and novelty is maintained. Within this finely tuned context, children approximate adult language, making their intentions and meanings understood through multiple communicative means to adults who are "tracking" their meaning. While in a "zone of proximal development," children are helped to do what they can't do alone, until they develop independence in that area of learning. Then the scaffold is withdrawn and a new scaffold provided for the next zone of proximal development.

By analogy, the teacher will scaffold children's learning by providing a clear, redundant yet changing field, and in a collaborative tenor, will assist the child in his or her mode of representation of meaning, accepting language fragments and helping them make sense.
Taken together, these kinds of relationships describe the context of the classroom, and determine the register of texts produced. In spite of the causal relationship suggested, the process is not static or simple. Changes in field, tenor, and mode are made as the needs and interests of individuals and the group change. These changes affect each other as well as the resultant text.

The changing context: new possibilities out of the familiar.

The changing nature of the context is developed as a major theme of the Rosens (1973). Throughout their book there is an emphasis on the need not only to accept but also to extend children's language and meanings. The small scale of the school, the homelike furnishings, the encouragement of interaction and cooperation, the provision of shared experiences which build a common background for children — all of these develop a family-like situation in which children can function comfortably. They can continue to use language and behaviors which they have learned at home, supported by a context of people and things they understand (for example, pp. 12, 31, 38).

However, this familiar context not only supports familiar ways, but opens children to new ways:

It is the scale of most primary schools which is potentially their greatest advantage. They can be almost domestic in their ways of living and so become a very satisfactory transition from private to public for young children. For its own purposes the primary school can have the best of both worlds, both the warm intimacy and also the promise of new explorations, both the welcoming acceptance and also the wider circle of others (Rosen & Rosen, 1973, pp. 23-24).

Through scaffolding, the teacher structures experiences that are not only redundant and clear, but within this overall clarity have features
of novelty and change. The language heard in school - "how human beings within the school walls talk to one another" - reflects both the familiar and the novel strands:

Here too the near domesticity of the school and its difference from home create a special kind of language, nurturing what has already developed and also saying new kinds of things in new ways (Rosen & Rosen, 1973, p. 24).

This principle of familiarity and novelty characterizes each dimension of field, tenor, and mode. The "wider circle of children to play with" (p. 27) affects the tenor. Schools not only accept children's curiosity but make room for it to be taken further," this characterizing field (p. 28). In a discussion, the teacher assists children to express their own meanings in their own ways, or modes, but exposes them to new modes through her own contributions (p. 45). Thus implicit "home meanings" which do not always communicate to others are accepted, but contributions to a common topic are encouraged (ibid.).

This subtle pressure toward new meanings and new language arises from a home-like web of relationships existing among children and teacher. The Rosens elaborate this idea:

When a school creates this kind of living context a delicate web of relationships is established which is as complicated as that in any home. As complicated but different, for it creates new possibilities, new speculations, new styles. It is out of these novel features in the situation that language can develop. Activities which are different in quality, which lure the children to think and behave in new ways, also prompt them to reach out in language and take hold of more of the resources available to them (Rosen & Rosen, 1973, p. 32).
Writing in Context: The Role of the Teacher

The writing process: a recapitulation. One of the new possibilities that the school context encourages is the use of writing to express thought and to communicate to others, with gradual growth toward explicit, decontextualized and differentiated text expected. However, given the inherent abstractness and difficulty of formal writing, the familiar, homelike connection is important. Writing is far more than a mechanical, motor process, and involves the transformation of inner speech, of simultaneous, fleeting thought to ordered, sequential language. In this, writing, a solo performance, is very different from speech, especially for young children, who are used to constructing text with others, and using the fullness of all communicative means—gesture, intonation, situation, and others—to complete their meaning.

Overcoming the difficulty of writing through contextual structuring. The inherent abstractness of the writing process may be mitigated for young children through the structuring of the context for writing. An indirect approach as advocated especially by the Rosens and by Britton, emphasizes the teacher's responsibility for the quality of life lived in the classroom community. In theory, the texts produced by children will reflect these characteristics. This distinction between a "direct assault" on language (Rosen & Rosen, 1973, p. 103), for example, in the form of "immediate spurs" to writing (ibid., p. 40), and an indirect approach which allows children to explore and reflect on the world with others through language (and through other modes as well) is summarized by the Rosens:
The discussion of children's language must never lose sight of the context in which it occurs, not simply the immediate spur to speech or writing but the life from which language draws its meaning and the extent to which the school situation inhibits that meaning or nurtures it (Rosen & Rosen, 1973, p. 40).

Writing, then, is not a subject, but a "way of looking at life and therefore a way of living" (Rosen & Rosen, 1973, p. 103). The questions to ask are not "What kinds of writing have we covered?" but "What are the children doing?" and "What sort of talk is going on?" (p. 154). Finally, because teachers can't know the inner states of individual children there must be room for them to write in a climate of acceptance of the "particular anxieties, fears, delights, passions, curiosities and obsessions which are dominating their lives at the moment" (p. 103). Nor is it always possible to know or control which particular experiences lead to children's writing (p. 151). Therefore, teachers "will explore areas with children and leave open how the children take up her initiative" (p. 103).

Thus, the teacher is responsible for the context - for providing new opportunities for doing interesting things with others, including opportunities to think, talk, and write about them. Children are responsible for their own actions within this provided framework, and for making their own choices, even though these may be approximate, crude, or unconventional in form. In this, the parallel with observed characteristics of parent and child interaction in early language learning is evident. The parent structures the context so that the field is clear, the tenor supportive, and the child's mode, approximate as it may be, accepted.
Young children's written texts. Given a school context which is like that of a home with respect to the scaffolding role of the adult, what will characterize the texts produced by young school children? Both Britton (1970a, p. 174) and the Rosens (pp. 95, 144) expect that the form of children's early writing will be expressive. That is, like expressive speech, it will reveal as much about the child's feelings about the experience as it does about the experience itself. Britton gives an example of a piece of writing ("How I Filtered my Water Specimens", 1970a, p. 178) which is transitional in that it contains expressive, personal features along with an objective account. He advocates gradual progress toward mature transactional language "to ensure that 'the self' is not lost on the way:

Expressive language provides an essential starting point because it is language close to the self of the writer: and progress towards the transactional should be gradual enough to ensure that 'the self' is not lost on the way: that on arrival 'the self' though hidden, is still there. It is the self that provides the unseen point from which all is viewed: there can be no other way of writing quite impersonally and yet with coherence and vitality (Britton, 1970a, p. 179).

Children should not be restricted to set forms or purposes, such as "creative" or "informative," but should be free to explore language, "free to write in a way which shows how they feel about things" (Rosen & Rosen, 1973, p. 95). If freed from having to please the teacher by writing "informational" pieces or imitating literary forms, their undifferentiated personal, expressive writing will contain much variety, including "embryonic kinds of writing (Ibid, p. 124). Thus their writing will move naturally toward more defined and differentiated functions of adult language, for example, informative, persuasive, narrative
functions, or in Britton's terms, toward transactional language on the one hand, and poetic language on the other (Britton, 1970a, p. 174).

Just as children's sense of purpose is closely tied to the expressive mode, so is their sense of audience. That is, they write for themselves, for the "satisfaction of saying it," rather than for any particular audience (Rosen & Rosen, 1973, p. 141). Consideration of the needs of a reader, especially an unknown abstract public, is not characteristic of very young children's writing. They aren't able yet to play the role of their missing conversational partner, or to be their own, internalized reader. This underscores the importance of scaffolding by a teacher who provides an audience interested in helping children express and extend their meanings (Ibid., p. 138).

The text children produce could be analyzed in terms of its sense of audience, its purpose, its form, or according to other, more quantitative and less subjective criteria: measures of length, vocabulary, syntactic complexity, even according to cohesive devices used within the text (Halliday & Hasan, 1976). However, the theories of such writers as Britton, the Rosens, and of course Halliday, and the implications of child language research, suggest that the analysis of the context within which writing is produced will yield more fundamental insights. In this final section below, terms of field, tenor, and mode will be used again, but this time, with respect to writing. Again, Britton and the Rosens will supply the main argument, to which work of other researchers will be related.

The context for writing: field. The field for writing can be discussed from the teacher's point of view and from the child's. The
teacher has prepared a context within which children can experience "content". They can think and talk about what has happened, and then write and otherwise represent their selection from this experience. The Rosens elaborate the characteristics of these experiences. They need not be exotic, but can be drawn from "the small-scale stuff of children's world", to which the teacher is sensitive, and which children may be helped to see in a new way (1973, p. 112). There is a need for first-hand experience, which cannot be replaced by television or even books (ibid., p. 114). Materials in the classroom can complement out-of-class visits, and can mediate otherwise remote subjects, for example, Africa (ibid., p. 127). In addition to concrete experience, teachers contribute experiences with literature. Literature is of value because it is enjoyed for its own sake. In addition, it extends and transforms children's experience. It also extends children's language by letting them hear the language of books, and gives them "sources of new ways of saying things" (ibid., p. 111).

These experiences with the concrete world and with the world of literature are shared with others (ibid., p. 94). The teacher is a part of this interaction as through talk, and "at all times, and not only on those occasions preparatory to writing, he led them to introspection and observations of their own" (ibid., p. 117, emphasis added). Again, an interactive tenor supports the child's intellectual activity.

Through these kinds of experiences, through social interaction, and through provisions for representation in many modes, including writing, the teacher structures the field. Within it, children will find their own way to select from and use their experiences (ibid., p. 103).
What do children do in this field? First, they enter into their experiences, almost becoming a part of them. For example, children who observed snails were "looking for themselves," and were showing through their writing they could "in some sense ... be the snail and feel with it" (ibid., p. 129). Children also take from these experiences what is significant for them (ibid., pp. 88, 89, 94-95), "sifting, selecting, and also evaluating life" with the aid of language (ibid., p. 149). They are probably not aware of their own mental processes in doing so. Their underlying purposes could be assumed to derive from the human power and need to make sense of and transform experience. Both Britton (1970a, p. 179) and the Rosens agree that writing gives children a chance to "work out what they think, to record their doings, and to sort out their feelings" (Rosen & Rosen, 1973, p. 142). Hence they use expressive language. Through this working out process they "reveal meanings in their lives" which they otherwise wouldn't recognize (Rosen & Rosen, 1973, p. 123), thereby moving what was implicit toward the explicit. The gap in time between writing and being read gives the writer a chance to "wrestle with his thoughts, to work and re-work his formulation of projection or transformation of experience" (Britton, 1970a, p. 248).

When seen in this way, the purposes of literacy can be profoundly radical. The child's implicit objective in using language to reflect on experience, can go beyond transforming experience to transforming the self and the world. The Rosens say that, though many schools are happy, accepting places, some go beyond "to transform children's ways of thinking and feeling", and this they do through writing. For most
children, this could only happen through school experience (Rosen & Rosen, 1973, pp. 152, 155).

The relevance of this interpretation may become clearer when compared with another view, which stresses the primacy of the communicative purpose in children's language use. This view is evidently based on the fact that children's spoken language develops through communication, and the observation that much school-required writing lacks elements which make early communication successful – that is, a context which makes language function, channels of gesture, posture, and intonation along with words, and a co-conversationalist with whom to construct and interpret meaning. Such an emphasis characterizes the research of Florio & Clark (in press), which detailed the uses of writing in the first weeks of school in a second/third grade classroom. Florio and Clark look at writing as one communicative option, and ask how it functions for children in their lives. Like speaking, writing is learned in a tacit way, its users not aware of their own processes or of the profound social and intellectual consequences of writing for them. Like speaking, there are tacit norms for appropriate use, for social roles, and for values and beliefs associated with writing, which are learned through use. Unlike speakers, young writers in a new school situation lack shared background and the officially sanctioned use of other, non-verbal channels of communication. Therefore, they must adopt a decontextualized perspective (Cook-Gumperz, and Gumperz, 1978, in Florio & Clark in press, p. 11). Cook-Gumperz and Gumperz suggest that children be helped to learn the written culture through the medium of the oral.
The study by Florio and Clark (in press) contributes documentation of a writing occasion within a supportive oral language context. An occasion for writing - the writing, illustrating, and sharing of safety rules following a safety assembly - grew out of oral language, and like talk, provided a clearly structured purpose and audience. The teacher scaffolded children's writing (using a term borrowed for the present study) and supported them as they collaborated orally in formulating ideas drawn from a shared experience. She used the familiar oral culture to scaffold new skills of literacy such as the abstraction of main ideas and revision of text.

Although there occur several references to the intellectual benefits of literacy, the dominant emphasis is on the social uses of writing, that is, on how writing functions as one expressive alternative (p. 3). An earlier article by Florio (1978) (described in Chapter 1 above), stresses communicative purposes for writing as brought about by a town and post office theme in contrast to writing for one's own satisfaction, to reflect, or to transform experience. Social activity within a community was seen as overcoming the inherent remoteness and isolation of writing. Florio and Clark thus emphasize writing in context, writing that is related to the lives of children, and they emphasize a context which provides occasions for meaningful writing. They have not focused on the question of how to structure a context which brings about a range of uses, including the use of language to learn and to reflect, but have concentrated instead on ways a teacher can bring about the choice of writing as a communicative means.
The context for writing: tenor. Any discussion of a scaffolded field has implications for tenor (again showing the interdependence of these concepts and the impossibility of separating them except for analysis). Questions of tenor are questions of power, and therefore will affect field and mode also. Does the teacher promote children's own selection from and interpretation of experience in the field? Will the teacher require writing within predetermined modes? Will the teacher allow non-verbal as well as verbal modes?

All decisions the teacher makes could thus be ultimately reduced to decisions of power. However, the tenor dimension relates most specifically to the structuring of interpersonal relationships along dimensions of power and intimacy.

As has been discussed above in connection with the triangle of discourse, and with the general discussion of tenor, it is advocated by many that the teacher's (explicit) focus should be on the object of mutual interest, rather than on the child. In the case of writing, this focus will be the child's text, and particularly the meanings that lie behind it, rather than its surface manifestations.

The Rosens (1973, p. 89) give an example of this focus. They describe a teacher of young children who listens to them talk about their pictures, then helps them decide what to select from this talk as a written record, and finally writes the text with or for them. Teacher and child are mutually involved in the meaning the child has initiated, while the teacher scaffolds the child's composition and transcription. Through talk that precedes or prepares the way for writing, and through helping the child record text, the teacher can give a new, wider importance to the child's ideas:
The teacher is able to follow the fine textures of a child's life and is able to help him to interpret it. She gives a kind of prestige to what would otherwise be overlooked by the children, and to the kinds of discoveries she is helping them to make about themselves and others and their relationship with people (Rosen & Rosen, 1973, p. 111).

Through this supportive relationship which is focused on helping children formulate their own meaning, the ingredients of early conversation are available for writing. The teacher acts as audience and reader, as provider of security. Teacher and child can collaborate in construction of text through extension of the child's oral language and thinking, as the teacher draws out children's comments on the topics they have initiated (compare Scollon & Scollon's vertical constructions in child language learning as discussed above). Thus the teacher helps children sustain speech as preparation for writing by encouraging them to amplify their ideas in conversation, by asking "Yes, and then what happened?" "Was there anything else you saw?" (Britton, 1970a, pp. 165-166). Social relationships, therefore, are of benefit to intellectual growth, including the growth of writing abilities.

Two recent studies contribute to the exploration of the relationship between interpersonal relationships and writing, one by P.J. Cartwright, and the other by J. Collins. An unpublished dissertation by Cartwright (1979) describes seven fifth graders' writing experiences in an open classroom, and documents the kind of collaboration this structure allowed. Children were free within broad limits to choose when they would write, and with whom they would work. It was taken for granted that they would use each other, as well as adults and materials in the room as resources in their work.
Cartwright found children supporting each other during pre-writing, writing, and post-writing phases (after D. Graves, 1973), helping each other choose and shape topics, assisting with spelling and punctuation, and acting as audience and proofreader. She noted that children checked their own definitions with each other when carrying out individual assignments, thereby gaining practice in abstracting through explaining to one another. The teacher's idea was that writing was difficult, particularly writing of a sustained, sufficiently long piece, and therefore required shared effort, especially if children were to "write what they think." In Cartwright's judgment, "the teacher provided the climate for cooperative work" (p. 26). Collaborative effort among children is another indication of the kind of tenor encouraged through which intellectual growth can take place, according to the theorists discussed throughout this review.

Collins (1981) ascribed the problem of weak or inexperienced writers to their dependence on the mediation of spoken language (p. 3). Inexplicit writing is inner speech transformed only enough to meet the needs of spoken dialogue, and not into the "explicit and autonomous meaning characteristic of written language." To understand this writing, the reader must be familiar with its context (p. 7). Collins draws the pedagogical implication that since speaking and writing interact in the composing process, they should interact in the classroom as well (p. 8). Teachers should accept students' first drafts as indicating their developmental level — what they can do independently. Through cooperative talk within the students' zone of proximal development, teachers should help them revise toward explicitness. Cooperation, a characteristic of talk is assumed to exist in writing. However,
"[r]eal cooperation, of the sort that asks for and helps to achieve explicit meaning, might lead eventually to the independent construction of such meaning" (p. 8).

These two recent studies have been referred to because they show an approach to writing through the structuring of the tenor of the context. Collaboration between peers and between children and teacher draw upon children's conversational strengths and allow them to go beyond what they can do alone.

Context for writing: mode. Children doing things (field) with friends (tenor) are given a choice of mode in which to represent their experiences. The part that language plays in the events in which children participate is flexible. First, children have had experiences with many ways of representing experience, including art and music (Rosen & Rosen, 1973, p. 93). Rather than be confined to set forms such as "creative" or "informative", children are allowed to find their own forms, and are expected to write expressively about their own part in and feeling about their subject (ibid., pp. 95, 111, 117). Book-language will appear in their writing not because it is required, but because it has been internalized and is being tried out (ibid., pp. 110-111). Flexibility applies to the mode of the surface characteristics of language too. A "fair copy" may be appropriate for public display, but much writing, by and for the writer, can go unedited and uncopied (ibid., p. 110).

Why, amid these flexible choices of communicative and representational means would a child choose to write? The Rosens ask this, and state that writing will seem worthwhile if it captures not only children's experience with the world (for example, of crabs, shrimp, and
fish in a rock pool), but their feelings about that experience and their part in it. Through writing, children work out what they observed, and also how they did it, that is, their own unique story:

The features of crabs and shrimps each child shares with others but his story of how he found out is his own. It is only in the careful telling that it can be elaborated into this unique event. The re-excitation made possible by the fully formulated expression of the experience raises the value of it, makes it a more durable possession and in the end makes returning to such experience and such exploratory encounters with the world seem more inviting. We are ... [concerned to organize an] attack on life which takes in not only the beginnings of a scientific approach but also has the personal and social qualities present in and fostered by these pieces of writing (Rosen & Rosen, 1973, p. 135).

Thus, a consideration of mode - the choice of writing over speaking, drawing, and so on - leads back to a consideration of field - children's content experiences and their purposes in representing them. Britton believes that early writing is undertaken for "the delight of utterance" (a term from Oakeshott, in Britton, 1970a, p. 91). Writing is undertaken not to communicate, since children will rely on speech for that, but to produce "written objects". There is joy in making things, and in saying things. These come together in homemade and embellished books, or in stories gathered in a folder, which become part of the group's possessions (1970a, p. 164).

Summary: Text, Context, and Curriculum:

The Role of the Teacher

Thus, field, tenor, and mode can be considered as predictors of the register of text, its "range and variety" reflecting the "range and variety of experience being offered to [children] (Rosen & Rosen, p. 123). Though, in comparison to adult writing, it is relatively
undifferentiated in function, and unadjusted to the needs of a remote audience in degree of explicitness, early writing will make sense in context. Context may be needed to complete children's text. This will include the material setting but, of even greater importance, the adult who helps by scaffolding children's text construction. The sense made by text will not be limited to social, communicative content, but will include the sense that children make of their own experience through the process of writing.

Field, tenor, and mode can also be looked at as dimensions of the curriculum, not as existing formally on paper, but as enacted by people. Subtle features of the context become institutional, even if implicit, policies which children learn to abstract and interpret. The context constitutes a communicative network (Bernstein, 1971), a speech community (Hymes, 1971), a resource for meaning potential to be created by children (Halliday, 1975). The nature of the network of this community will affect the text produced as well as the content learned. This relationship is summarized in Barnes' title, From Communication to Curriculum.

The teacher's role is to build this communication network, speech community, and resource for meaning, both through long-range and immediate action. The teacher's focus is on weaving the "web of meaning" by encouraging qualities of authentic experience and cooperative relationships in classroom life. The experiences of life are recognized as being larger than the symbols used to represent them. Language is only one, albeit powerful, symbolic system, along with other, also valid means of representation (Britton, 1970a, pp. 28-29, 278; Hetzer in Vygotsky, 1978, pp. 110-113).
The teacher structures the context so that children are doing things with friends, including participating in speech and writing events and situations. Connections with children's past experiences are maintained, as teachers "stand beside" children, helping them succeed in new experiences which fall within their "zone of proximal development." Old ways of acting and of using language are accepted in their implicitness and informality. New meanings and new forms, including explicit language, are made available through new experiences and through the opportunity to talk them over and to represent them. Talking with trusted, known people about matters of mutual engrossment is a familiar way of acting, a way learned at home along with learning the home language. When teachers knit children into groups through shared experience and talk, they are using old, home-like forms to bring new content. A classroom organization is family-like in having its own history and folklore, its network of interactions and informal ways of communicating. Yet it has wider possibilities than a family. Within the security of familiar ways of talking, acting, and relating, demands for new forms of spoken and written language can be made. Children acting, talking, and writing together can discover new meanings in themselves and the world, and in the process, develop new ways of expressing them.
CHAPTER III

METHODOLOGY

The immediate purpose of this study was to look closely at the context for writing of one classroom, in order to understand and describe it. The ultimate purpose was to propose possible relationships between the teacher's structuring of the context and children's texts, their writing in particular. The exploratory, descriptive nature of the study indicated a qualitative methodology, the development of which will now be reported.

The report will start with a schedule of the study, and the apportionment of time within this schedule. Next, the consecutive and often overlapping phases of the study will be discussed in the following order: 1) the articulation of the research question, a process which continued through the study; 2) selection and description of the research setting; 3) the researcher's entry, personal bias, and establishment of role; 4) collection of materials; 5) analysis of materials; and 6) reporting and interpretation of findings. The chart below (Figure 1) illustrates the continuous nature of the problem articulation process, as well as the overlapping nature of the other processes.
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Figure 1. Apportionment of Time Among Phases of Research: April, 1979 - November, 1981
Schedule of the Research

This study was underway for over three years. Much of this time was used for analysis, interpretation, and reporting of data. In contrast, only forty-five days were given to data collection. However, these forty-five days of field research were spread over more than a year. Major participant observation was carried out during the spring of 1979 and the spring of 1980, with contact maintained during the intervening fall and winter.

Articulating the Research Questions

This study has roots in many earlier, unreconstructible experiences of the researcher - reading, writing, observation and conversation. Thus, the formulation of a research problem began before plans were made for the study itself, and indeed continued throughout the study. In retrospect, progress toward articulation was seen to be marked by a series of "problem statements" and an official dissertation proposal midway between the two periods of intensive observation. Central to the formulation process was reflection, note taking, outlining, and writing during the data collection period, ordering the data after collection was completed, working within the data, and back and forth between the data and the literature. Finally, the writing process itself forced analytical thinking and made a final contribution to the refining of the research question so that it could be articulated as it is at the end of Chapter One.

Selection and Description of the Research Setting

Characteristics. This study took place in a first and second grade family-grouped informal classroom of twenty-eight children during
the first year, and of twenty-five the second. This class was taught
by one teacher, with a student teacher present for most quarters.
Children also had instruction by others in the "special areas" of
art, music, library, and physical education. In addition, many
parents participated on an occasional or regular basis, working with
individuals, small groups, or with the whole class.

This classroom had two affiliations. First, it was one class-
room among 18 in this public elementary school, located in an afflu-
ent suburb of Columbus, Ohio. Second, it was one of 16 classrooms,
housed in three separate school buildings which together comprised the
elementary section of the Informal Alternative Classrooms, offered by
this school district. This teacher, therefore, was responsible, in
different ways, to two people: to her building principal, and to the
Coordinator of the Informal Project. She was also a member of two
groups - the other teachers in her building and her fellow informal
classroom teachers. The examination of these relationships, as they
actually functioned, linking the teacher to two different organiza-
tional structures, is beyond the scope of this research, but has been
indicated here as a context for the teacher and classroom as a whole,
existing as they do with a system or set of systems.

The classroom was, of course, part of a school, and the school
part of a school district. Its place within this larger educational
structure has also been outside the explicit scope of this study. So
too has been the community from which the children came, and the
"communicative worlds" (Hymes) of their families. The fact that there
were no obvious cultural differences between school and constituency,
between teacher and pupils, removed this kind of issue from consideration.
Thus, it was hoped the more universal processes of literacy learning would stand out.

**Reasons for choosing this setting.** One advantage of this setting, therefore, was its relative lack of cultural diversity. Another was the research opportunity offered by an informal classroom. The emphasis on speaking and writing ("productive language use") was usually greater than in other kinds of settings, which tended to stress so-called "receptive" activities of listening and reading. In short, an informal setting promised to provide more for the researcher to observe.

Six and seven year olds were chosen because they could be expected to exemplify a range of developmental stages as they moved in their own ways from an earlier, oral culture to a school culture emphasizing reading and writing. A family-grouped classroom would provide an even wider developmental range, and would increase the possible kinds of interaction between children. In addition, some of the same children could be observed over a year, and their behaviors compared as they traveled through a second year of a highly redundant curriculum.

Research was limited to one classroom, not only because of limited resources, but for the positive reason that a "fine-grained" study was desired. Small-scale events might otherwise be lost in a more quantitative, comparative study. Yet, these subtle, often fragmentary observations might suggest or reveal what was of significance to the members of the classroom, and contribute to a more general understanding of what is involved in learning to be literate.
This classroom, therefore, had characteristics particularly suitable for this study: an informal type of organization, with cross-age or family grouping, and the children themselves, who for the most part, came from secure, educated homes, which shared the school's valuing of literacy. Yet they were still new to reading and writing so that a range of early stages of literacy behavior could be expected.

Beyond these objective reasons for selection of this classroom, other, more personal reasons must be acknowledged. The researcher was led to consider this teacher's classroom on the strength of past associations with the school district, both as a parent, and through some years of graduate study. Although she was not familiar with this particular teacher, classroom, or school, she was influenced after a first visit by feelings of interest in the life of this classroom, and by a sense of compatibility with its style.

The Researcher's Entry, Personal Bias, and Establishment of Role

Entry into the setting was facilitated by the Coordinator of the Informal Education Project who arranged a meeting with the teacher and a visit to her classroom. After hearing of the general purpose and plan for the study, the teacher (hereinafter called Mrs. Bridges) agreed to participate. Field work actually began with that meeting, the transition to actual data collection having been eased both by these personal mediations and by the researcher's familiarity with informal classrooms in general.

Bias enters the research setting along with the researcher, and is here made explicit, because it has unavoidably had an implicit influence. The researcher had been profoundly influenced by her past experience of informal education through preservice and inservice
programs, and through her graduate studies. More generally, a constructivist view of learning and language learning had been internalized through these experiences. Preparing the way for these later, academic interests was her own early background of informal (then "progressive") elementary and secondary schooling.

This is to suggest that there was a pre-observation bias which functioned throughout the research process, from selection of the setting to the final interpretation of the data. Weick (1979) has said that "... presuppositionless inquiry is nonsense," and Wilson (1977) agrees, advising a thorough study of theory and research and then suspension of that knowledge through "bracketing" one's preconceptions, in the words of phenomenologists. In this way, the researcher is able to see what the natives see, but also to make explicit what they take for granted. Yet without preparatory study, the researcher might not have become interested in the subject, might not have been able to formulate general problem statements, nor "to inform initial focus" (Wilson, 1977, p. 260).

The researcher's analytic summary, written after a month of participant observation, documents the efforts to recognize her prior orientation and to approach what was, in general, a familiar setting as if it were strange:

I've tried to put all this structure of presupposition aside, and observe children writing and doing many other things, with an open mind. Since I chose a room I liked intuitively, it has been difficult not to justify this choice by seeing familiar theories behind every instance of classroom behavior, and ignoring instances which did not fit (Progress Report, June, 8, 1979).
Role involved not only how the researcher saw herself, including her own preconceptions and research processes, but also how she saw how others saw her. Field notes and analytic summaries from the early days of participant observation record both of these perspectives, as a role was being defined.

From these records, it would seem that the researcher was more uncertain about her role than were the children. She realized there were several alternative roles which seem natural ways of participating. Writing after two weeks in the field, these alternative roles were noted to have been played, mentally or in actuality: that of teacher (initiating help to individuals or controlling behavior by raising eyebrows); resource (as if a parent with something to contribute); a supervisor of student teachers (reflecting back positive impressions of the student teacher's conference with a child); and as evaluator of practice, "finding it hard to resist becoming enthusiastic about certain events, activities" (4/25/79). This introspective summary ends with a resolve and a question:

"As a student of this classroom's social system, I will consciously try to take on the role of participant-observer, and leave behind those of parent, supervisor, teacher, evaluator. However, how am I to participate as an adult in this setting unless I participate in ways adults normally do in a classroom, as a sort of extra teacher? Will this role evolve, or will children's independent ways of working mean that they will not turn to me for help or with ideas?" (4/25/79).

Children, meanwhile, seemed not to notice the presence of the researcher. At the end of the third morning of observation, a child standing in the front of the lunch line asked the researcher for her name. A marginal comment in the notes for that same day says "Children
don't seem to notice me, be curious" (4/19/70). After almost a month, children were judged to have become used to the researcher, who decided to begin taking photographs:

I found that children were not disturbed by picture taking. Most ignored. Ken was interested in light meter. I think John mugged a bit. But for the most part, they did not seem to act differently for the camera as they had been doing all along. It was probably good not to have tried this earlier, until they had become used to me as a regular twice/weekly fixture. (5/10/79)

The role definition, which seemed to match both children's and researcher's perceptions, was that of "friend of the class." This role was one shared with a number of adults - school personnel, parents, and visitors from the university and community. In fact, this observer was sometimes confused with others who came in with somewhat the same frequency and attitude (6/8/79). It could be said this was not a classroom with just two clearcut categories - "the teacher" and "the children." In addition to the ordinariness of adult visitors, children's matter-of-fact acceptance might be explained by their preoccupation with their activities and their friends. The researcher was accepted with politeness and friendliness, yet was more a person to work and walk around than an object of interest, or even a resource to turn to for help.

The relationship between the teacher and the researcher was positive and friendly from the start, and was strengthened by the sharing of experiences as adults (along with the student teacher), observing and enjoying the same events and same children. Field notes record the researcher's concern that the study not be a burden to the teacher. It was necessary to interview the teacher, and the researcher was
encouraged to do so, yet was hesitant to take this time from the teacher's preparation or rest time. However, the teacher did not seem disturbed by either the researcher's inner questions or outer actions. She described her lack of concern by saying in the beginning that she and the student teacher would go about their business, thus putting the researcher at ease and presumably preserving the naturalness of the situation (4/25/79).

Collection of Materials

Materials were collected over the forty-five day period of participant observation, visits occurring on three mornings a week, usually Mondays, Wednesdays, and Fridays. Mornings were chosen because the direction and focus of the day seemed to be set during this time. There was variety in morning events - in content, length, and scheduling. Many "morning" events evidently took place in the afternoon, and "afternoon" events had their follow-through in the morning. Four afternoon visits confirmed these judgments. Therefore, even though visits were concentrated in the mornings, the participant-observer had a sense of the total day.

Within this participant-observer approach, these methods were used: 1) note-taking; 2) photography; 3) collecting children's writing; 4) interviewing with and without audiotaping; 5) audiotaping of small group and whole class events; and 6) collection of other materials.

Note-taking. Rough notes were made on every visit, were typed up as soon as was possible, and added to the cumulative record of observation. During this transcription process, notes of events were amplified as they cued the remembering of more detail. The process was also an
occasion for reflection, or reflection on the reflection that was already in the rough notes, and therefore contributed to the ongoing analysis of the data (to be discussed further below).

These notes - one hundred fifty-eight pages in all - served several purposes, primarily the recording of what actually happened in the classroom - what the teacher and children did, and their material environment. It was also used to record two other related processes: planning the research and analyzing the data. These "notes from the researcher to herself" were kept physically separate from observational notes through bracketing, use of red type, column arrangement, and so on. In this report, they are placed in parentheses. It is assumed that reflecting and writing through note-taking affected materials collection and the developing interpretation of those materials. However, some notes may not have had a practical outcome, but may rather have helped the researcher to recognize an insoluble problem which had to be lived with, such as the impossibility of being everywhere and seeing everything simultaneously, a logical truth but one which had to be accepted through experience (4/27/79).

Excerpts illustrate the use of these notes to plan the research process in several ways. (Their function in analysis is discussed below.) First, problems, the insoluble and the merely difficult, were articulated:

(How can one do case studies without breathing down children's necks?) (5/3/79)
(... won't my collection of their work interfere with the contextual features I am interested in?) (5/3/79)
(How elicit children's purposes?) (1/24/80)
Next, method and purposes were questioned:

(What is the value or reason to try to collect every piece of writing?) (5/3/79)
(What am I really interested in?) (1/24/80)

Other notes functioned as memos of possibilities:

(Could do more of this kind of survey.) (5/10/79)

or decisions:

(I decided that I needed to collect samples of first graders' writing ...) (5/10/79)
(Plans: photograph room displays as did last spring) (11/14/70)
(Collect: all thought ramblings from 11/20/79 and Xerox.)

or research tips:

(Tips for field work: when you have a small question, ask children directly as I did above, rather than wait to ask teacher later) (5/28/80)

**Photography.** Photographs, made with a Nikon, f 1.4 lens, using high speed black and white film and available light, documented the physical setting of the classroom, children's and teachers' activities, and examples of children's work, written and otherwise. There were eight films taken beginning about a month after entry into the setting, and extending throughout the observation period.

Photographs were taken with the intention of recording the visual aspects of the context which might otherwise escape notice, or which were difficult to describe in words. They were thus to aid the researcher's perception and memory.

Two unanticipated uses for them developed during this study. One, they were used during interviews to elicit children's understandings about this classroom, and two, they were used during the analysis of the teacher's structuring of space and role relationships to check
the researcher's generalizations about typical arrangements of people and things in the classroom. Both will be discussed further below.

**Collecting children's writing.** It was judged important to preserve the context in which writing was produced and in which written products had their place. A consistent attempt was made to minimize interference with the normal course of writing, including the disposition of written products. Instead of collecting and keeping children's writing, or soliciting special sets of papers for this study, children's home-made books and their "thought rambling" tablets (in which each child wrote throughout the year in response to common experiences), were borrowed overnight to be photocopied and returned the following morning. A file was established for each child of samples from the first year of observation, and of the complete thought rambling tablet for the second, in addition to any other writing which was available.

Other sources of writing samples were whole class sets produced for specific purposes, rather than to be displayed or read by others. For example, children wrote in their own words to ask parental permission for class trips. Rough drafts of newsletter articles were also available after the newsletter had been typed. These originals were given to the researcher.

A third source were class charts which several contributed to during the course of theme studies, and therefore, did not belong to any one child once taken down from the wall. Many of these were given to children, but a sampling of this kind of group writing was given to the researcher.

Certain difficulties were recognized in collecting children's writing. Children did write voluntarily, unofficially, and without
public awareness, it was discovered. "Dishtub interviews," during which children showed the researcher what was in their own dishtub, including writing or writing fragments, as well as in-process observation of this voluntary writing (e.g., making tiny notes to put in tiny boxes, 5/17/79) uncovered some of this type. Likewise, how much was written at home was not known; some of this home writing was shared at school. How much writing was done at school and taken home before it could be copied by the researcher was also an uncertainty; this was known to have happened. However, since it was never intended to collect all the work of the class or of any one child, these limitations were not held to be serious.

*Interviewing with and without audiotaping.* Children, teacher, and student teachers were interviewed for the general purpose of obtaining an inner view against which to check the direct observations and generalizations of the researcher. Their views on the same subject were also compared with each other. Children's perspectives on their classroom life were sought. What was considered normal, what was the usual, taken-for-granted way of doing things? What had meaning and importance for children, and what were their real purposes for doing what they did? How did writing fit into these values and purposes? The teacher's thinking behind her planning and her actions was also of interest, and was pieced together from interview data and from her actions.

In actuality, there was great variation in interviewing situations for a number of reasons. Methods were tried, evaluated, and changed in an attempt to improve their effectiveness. Interviews
ranged from spontaneous, brief exchanges to planned events. Some of these interviews were taped and thus were available for more detailed analysis, while others were summarized in field notes only. Finally, the choice of which children were interviewed often depended merely on who was available.

Spontaneous interviewing seemed to elicit information without changing the context of the activity to any degree. Children could be asked "Do you always do X in this place?" or "What do you call this place/activity/thing?" without seeming to deflect them from their pursuits or make them self-conscious. For example, during the handing back of math folders, Jed was asked about math procedures:

He explains that you have four math papers each week. Friday you finish up, get a sticker. He said you didn't have to do math first, but can do when you want. (5/4/79)

Similarly, the teacher and student teacher could be interviewed during "breaks" as they reflected on and planned activities. Their responses to casual questions, and their unpremeditated comments about curriculum and individual children often revealed their point of view and values:

I ask GB whether there is a set order in which children have to do work. She says there is no set order. But she observes some go right to math "for security." (1/17/80)

Teacher interviews - more extended conversations and planned conferences were also held, in addition to these spontaneous exchanges. Many were audiotaped. Most were held in the room while a few took place in the teachers' lounge. The purpose of these interviews was to confirm the observations of the researcher about practice, and to give the teacher an opportunity to explain her philosophy of teaching.
Each planned conference centered on but was not confined to a certain area of discussion. The researcher raised general questions which related to her observations, and then entered into an extended conversation with the teacher. There was no formal schedule of questions. These conferences were originally planned to be held weekly. In fact, they were not, even though the presence of a student teacher made this possible, and the teacher encouraged it. The researcher was reluctant to impose on the teacher's time, and in addition, found herself following in increasing detail the activities of the class, and therefore had to choose between the classroom scene and an interview away from the action (a choice the teacher also seemed to find difficult). Because of this situation, questions for the teacher were accumulated far beyond the available time to discuss them. However, many of these were requests for confirmation of observations which were answered by the situation itself in time. Furthermore, questions in context which required brief answers or even non-verbal signalling cleared up many questions and often revealed attitudes and values as well.

A summary follows of interviews with the teacher and others. These are classified as taped and untaped, and as conversations and planned conferences. Spontaneous, brief exchanges are not included.
<table>
<thead>
<tr>
<th>Date</th>
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Figure 2. Interviews with Teacher (T), Student Teacher (ST), university and school district visitors (V) by Researcher Spring, 1979 - Spring, 1980

In considering this summary, it is realized that the lines drawn between these categories are arbitrary, and that communication between the teacher, student teacher, and researcher took place in a variety of social situations, and in different degrees of removal from action. The summary does make clear the not surprising preponderance of instances of conversation. These presumably yielded information which would only be available through informal interaction as a participant observer.

Children were interviewed in a variety of ways. Already mentioned were unplanned, brief questioning exchanges which the researcher used.
to check her understanding of an event in progress. Children also
offered to show or tell the researcher something, but the record does
not reveal whether the researcher may have encouraged this, for
example, by position or facial expression. Although neither the
researcher's in-context questions nor the children's sharing could
be counted as interviews, they were sources of information, to be
compared with other information from other sources.

In addition to questions by the researcher and offerings by chil-
dren in the context of situation, there was an attempt to elicit chil-
dren's views in more systematic ways. The following methods were used:
1) interviews about children's own writing; 2) "dishtub" interviews;
3) photo interviews; and 4) "What is your favorite thing to do" inter-
views. These are now described.

Children read their own writing to the researcher, who usually
audiotaped their reading and the discussion that followed. The
general intention of these interviews was to discover what children's
view of writing was. Specifically, what was their view of purpose
in writing (How did you happen to write this? How did you get the
idea for this writing?); their view of audience (Who will read your
writing? What will your teacher say about your writing?); of use or
disposition of writing (What will happen to this writing? What will
this writing be for?); and their view of the process of writing (How
did you know what to say? how to spell? Did anyone help you while
you were writing? Did you change anything after you finished?); and
finally, their attitude toward the product (What's your favorite part?
What do you like about it?).
This is not to imply that each of these questions was used every
time, but that this framework was in the researcher's mind, and ques-
tions were asked as appropriate and feasible. There is a record of
thirty-three instances of fifteen different children reading and talk-
ing about their writing with the researcher. (In addition, audio-
recordings were made of children reading to each other and to the
teacher.)

Dishtub interviews (5/24/79; 5/27/79) consisted of sitting with a
child who agreed to show and tell the researcher what was in his or
her "dishtub" (plastic dishpans which were used for each child's own
supplies and possessions in lieu of individual desks). Notes were
made and incorporated into the record. The purpose was to get to know
individual children's styles and interests, and to discover their
attitudes toward their work, including their writing. During the
spring of 1979, seven first graders and one second grader were asked
to participate in dishtub interviews. (At that time, there was a plan
to choose a small group of first graders as subjects for case studies.
This was later discarded, as the focus of attention shifted to the
teacher's decisions and actions in shaping the context, and to the
range of children's experience, as a group and as individuals, within
that context.) The following year, dishtub interviews were combined
with questions about what children liked to do in their classroom, and
served also to retrieve writing for copying by the researcher.

Photo interviews held during the second year of participant
observation, were somewhat more formal, since they were held out of
the classroom and involved presenting children with a stimulus to
respond to. The purpose was to discover children's implicit categories
by which they interpreted their classroom, specifically, their names and rules for using places, things, and time; their view of what was normal activity and what were normal social arrangements; the place of writing in their room; and the importance to them of past, shared experiences. Photographs taken during the preceding year's field work were shown to seven of that year's second graders, who would have experienced their subject matter. A total of 62 pictures was divided into sets of from 7 to 13 pictures, each set designed to reveal children's categories within a certain area. These are given below, together with abstract versions of the eliciting questions, as planned ahead of time:

1. **names of places, furnishings** (photographs of rug, puppet theater, art area, reading corner, display table, teacher's desk, teacher's and children's file, dishtubs, book stand) What is this place in the room? What goes on here? What is this place used for? Is it always used like this? Does this always go on here?

2. **names of time segments** (photographs of early morning arrival, rug times, work time, recess, reading conference time, clean-up) When does this happen? When is this happening? Is this the only time it happens?

3. **teacher and child/children** (photographs of teacher with one or several children, with the whole class) What are the teacher and child/children doing? What do you think the teacher is saying/doing?

4. **activities and participant structures in worktime:** decision making by children as to what to do, when, with whom, and how (photographs of child working alone, children working in pairs and groups, writing, reading, construction, math, planning) What is going on in this picture? How did the children know what to do? when to do it? how to do it? which children to work with - or to work alone?

5. **writing** (photographs of children writing alone, with others, of their books and writing displayed on the walls, of them reading each others' writing) Why are these children writing? Why did they write? Who will read (see, hear) their writing? How did they know what to write about, where to write, how to spell/make letters, how much to write?
6. **shared experiences** as remembered by second graders (photographs of their first grade activities, connected with theme studies, things children made, children with things, doing things). Do you remember this? What was it about? What did you do? (Will children mention writing?)

The seven second graders were asked to go one at a time to an empty classroom with the researcher. Each did two (or three) sets of photographs, one (or two) of their own choice, and set 5, writing. They also spread out the pictures and chose the order in which to talk about them. The researcher read the number into the tape recorder, and then proceeded with questions and conversation. A critique of these questions was written during the analysis, and describes methods used:

Children were told what each group of photos was about - were asked to think about several large questions as they talked about the pictures. This must have been confusing - too much to keep in mind - too abstract. Perhaps because it was too much, and because I was not strange to them, they went ahead and said what they wanted. (Summer, 1980)

These interviews were tape recorded and transcribed, and later analyzed to discover what each child found of immediate interest as well as to compile their responses to the researcher's specific questions. Their contributions to the findings will be discussed below. It can be said here, however, that this procedure was useful although not in the way planned. Photographs seemed to lead easily to conversation, but children talked about what they saw that interested them, regardless of the eliciting question used. For instance, when they saw photographs of children, they would usually name them and their activity. In numbers of cases, children were not accurate as to the facts, but their interpretation could be assumed to reveal their expectations of what was usual or likely to be the case.
Because of the difficulty in eliciting children's ideas about the researcher's topics, and because the time away from class was too long both for researcher and child, the length was reduced and questions standardized. Eight areas of questions illustrated by only 14 photographs were designed to elicit the same ideas in a shorter period of time. This short form was tried only once (5/21/80). Thereafter, photograph interviews were discontinued as it was judged important to be in the classroom during the final weeks of observation. This revision is mentioned as an example of continued adaptation of methods to the needs of the situation as the researcher came to understand them.

Asking "What do you like to do in this room?" was the final attempt at systematic interviewing of children. This approach was tried out during the last days of participant observation (5/23/80, 5/27/80). Ten children, six first, and four second graders, were interviewed in the classroom itself, behind the puppet stage. As they finished, they sent a friend to be next. Both these measures were adopted to save time, and to avoid having to leave the classroom.

The purposes of these interviews were first to see if writing would be spontaneously mentioned as among the things children liked to do in their classroom. In three cases, this question was combined with dishtub interviews, and the researcher's quest for materials to photocopy, in five cases with questioning about the specific farm project the child had chosen, and in six cases, with children's reading their "thought ramblings," or writing they had just completed about their visit to Little People's Farm.
These ten interviews were helpful in providing needed information in the final days of participant observation. In analyzing the results of these interviews, several cautions were kept in mind. The distinction between volunteered and elicited statements was made in tallying children's answers. The main question of the researcher - What do you like to do in your room? - had to be exemplified for children. These examples, and the activity in which the child was involved at the time, undoubtedly influenced responses. It is also possible that some may have felt they ought to like certain school subjects. However, the effect of this might not be expected to be great, given the broad definition of school for these children, their familiarity with the interviewer by this time, and their lack of special association of writing with her.

In spite of these methodological weaknesses, the openness of these interviews may have allowed children to express preferences in their own language, which might reveal the categories the researcher sought. Results will be explored below.

Interviewing of other adults constituted a final category of interviewing. Some opportunities occurred by chance, as in the cases of the children's special art teacher (who was also a member of the researcher's university class on field methodology), met in the teacher's lounge; a university supervisor visiting the student teacher, and the coordinator of the Informal Alternative Classrooms, visiting the teacher. Others were arranged - the researcher's major advisor, and her graduate student colleague. The perceptions of these other adults were of interest to the researcher for ways in which they agreed with or
differed from her own; these were entered in the participant observation record.

**Audiotaping of small group and whole class events.** The principal technical aid to materials gathering was, even more than the camera, a small, cassette tape recorder with built-in microphone. Even though it was used beyond its intended purposes, audiotaped material comprised a valuable portion of the data, and complemented participant observation notes, photographs, and collected writings. Its uses in interviewing have been discussed already, a technically satisfying use. Classroom events were also recorded, with variable success.

Whole class sessions led by the teacher during which she presented ideas and guided discussion were easily recorded and transcribed, although the children's part often failed to be audible. Whole class discussions (as opposed to presentations) following children's observations and during which they shared their writing were less successful, but enough was audible to indicate their special possibilities as valuable research data, revealing patterns of interaction between teacher and children.

Small groups, with and without the teacher, were also difficult to transcribe, though easier than the less concentrated whole group discussion. Problems of multiple, overlapping, and inaudible voices characterized both whole and small group discussions. However, when these small group tapes could be correlated with participant observation notes, photographs, and collected writings, a full record of a child's activity in its context could be reconstructed. There was enough success in doing so to suggest that with an improved recording system, an even fuller reconstruction could be obtained.
Through audiotaping of classroom events (as opposed to interviewing), a natural situation was able to be recorded without the intrusiveness of questioning. Occasionally, however, the recorder itself seemed to become a focus of attention, even though all were familiar with it. This seemed especially true when the recorder was left in the midst of a small group of children working on their own, and even appeared in transcriptions. Children seemed to decide to "defeat" the recorder by saying nothing or tailoring their talk for the machine:

George: O.K. Let's get to work ... What should I write?
Sean: This thing is taping everything we say.
George: What should I say? ... Hi! What are you doing?
I'm George. I'm the shortest one in our class.
(5/16/80)

or

Mary: (after singing "Sergeant Pepper") Oh my gosh, oh my gosh. She isn't going to _____. Oh, just act normal. Oh, she couldn't hear us. (5/21/80)

Such incidents were few, and as can be seen, were informative in their own right.

Audiotaping, unlike notetaking, preserved paralinguistic features such as intonation, from which information about both personal relationships and relationships to content could be inferred. Since a visual record was not available (i.e., a videotape record), focus was on language and paralanguage as revealing these relationships.

Twelve tapes were made and professionally transcribed. These transcriptions were later reviewed, amended and expanded as more was heard by the researcher than had been intelligible to the transcriber, who lacked the context of situation. Of these twelve, about thirty percent (as measured by the numbers of pages transcribed) was used to record whole and small group sessions.
Collection of other materials: newsletters. This category for miscellaneous kinds of materials is filled by the weekly class newsletter. The newsletter was written, produced, and carried home every Friday. It constituted a valuable resource for the researcher through all its phases. The planning of articles to include, and the negotiated decision of which children would take responsibility for which articles could be analyzed for the teacher's interaction with individuals, and her attitude toward their common recent experiences. Children's collaboration on articles could also be observed, as could the teacher's response to finished articles which she reviewed with their authors. Many of these occasions were taped. Children's drafts were turned over to the researcher after the teacher edited and typed a dittomaster for the newsletter. Finally, the collection of newsletters provided a record of the events in the life of the classroom over a two year period, through which could be traced the growth and waning of major theme studies, and the many lesser threads of interests which appeared and disappeared.

The newsletter situation provided children with the demand to write for an audience beyond their immediate time and place, but one of closest degree of intimacy in personal relationships—their parents. Newsletter planning and writing also brought about a review of children's experiences with each other and with subject matter, in a unified manner, and may be presumed to have helped them organize, understand, and remember that experience and its connections with other ideas and events. These possibilities will be explored below.
Analysis of Materials

The process of analyzing materials overlapped with their collection, continued during their organization, cataloging, interpretation, and reporting. A narrative account will now be given of this process.

Analysis during participant observation. Participant observation notes provided a major opportunity for analysis. As revealed in these notes, the search for order went on at several levels at once. There was the primary task of understanding how things were done in this room, that is, the implicit rules followed by teacher and children. This involved identification of repeated events and the expected behavior associated with them:

(How do children use materials, find them, clean up after themselves?) (4/12/79)

At the same time, questions were asked and statements made about more general principles, underlying the organization of events:

Math boys talked over strategies they used to get answer to 8+5: I did all those 5 (fingers) and these 3.

(Does collaboration lead to or encourage explicitness?) (4/19/79)

These interpretive notes occur through the field work period, and though they increased in volume with time, they became more definite in their tone, as behavior and events were classified:

Topics for thought ramblings: brine shrimp, plants, chicks, butterflies, guinea pig
(Note all of these topics are alive and move, even the plants) (5/12/80)

as interpretations proposed:
(GB uses paralinguistic markers of affection, verbal statements concerning content, ideas.) (5/12/80)

and themes identified:

(Theme: fuzzy distinction between work and play, between recess and worktime. Visitor might not be able to tell whether it was recess or worktime on looking in. Same activities chosen as in worktime.) (5/23/80)

In retrospect, these notes as incorporated in the participant observation record served to help the researcher process her experiences, that is, to cope with the multiplicity of detail encountered in a new setting, to become familiar (participating as a native) with the ways of the classroom, but also to make these ways explicit (as an outside observer). Notes made by the researcher of her own process reveal her experience of these two roles:

I feel (in my bones) that the kind of thinking in the field that I did was this synthetic kind - putting together and comparing information from bits and pieces of observation. And that I was going back and forth between participant and observer, between starting from these scraps (collected unsystematically) and from my bias. I guess I like the primitive quality of this experience - feel it uses what I can do. (5/81)

Further, these notes provided an arena for proposing relationships between these details of everyday life and larger theories of learning, language learning, and curriculum. It was as if expressive language for drafting ideas (Britton, 1970) could be used in a risk-free dialogue with the self.

The analytical portion of the participant observation record also aided in the later assignment of items to categories. Generalizations and themes written into this record often matched these categories, and made decisions easier. This assignment process is described below.
Analysis through reporting at end of first field work year.

Periodic interim reports, and an end-of-quarter progress report, written for a field methods course taken concurrently with the first spring of observation, required abstraction from the participant observation record, and resulted in a crystallization of interpretation that was never fundamentally changed. Reports were written on entry, setting, the researcher's role, "scenes" of the classroom (after Frake, 1964), and projected plans for the research, which included a new statement of the problem. Two interpretive organizations of material were presented to the class ("Content Areas Studied, Related Writing, and Other Modes," and "Instances which support or do not support the theme: Active Personal Involvement in the Social Life of the Class," 5/29/79). A list of themes was made as part of this quarter's work. These analytical efforts prepared for the following year's field work, contributed to the structuring of the study, and undoubtedly helped the project survive the ensuing three-quarter hiatus.

Analysis: An outline, following the second field work year. An outline of the dissertation was drafted the second year of participant observation, including projected findings. The precise source of the outline is unknowable, but it is probably derived from the interplay between immersion in empirical detail of the classroom experience and the ongoing reflection, writing, and interpretation. Thus, both the experience and the researcher's background contributed to the outline.

Analysis: Organizing and cataloging material. Participant observation notes and transcripts were prepared for photocopying and cataloging. Pages were numbered along the right hand margins, (with page numbers circled, in the case of transcripts). All material
representing comment rather than observation was bracketed (including those comments typed in red which would not otherwise have shown up when copied). Tapes were played and transcriptions edited. Taping occasions were entered into the participant observation record.

Photographs were reviewed, their numbers and dating checked, and these numbers keyed into the notes. Four copies were then made of these notes and the transcriptions.

Once materials were copied, they were available for building what Lofland (1971, p. 119) calls mundane and analytic files. Mundane files brought together similar types of material for easy reference. These mundane files contained the following materials:

- a file for the transcript of each tape
- a useful catalog of the contents of each tape, identifying parts of each under the headings researcher and child, researcher and teacher, teacher and child, teacher and class, and small group
- a file of photographs and their negatives, one for each film
- excerpts from transcripts on these subjects: observations; Newsletter writing; children reading, talking about their writing; small groups without their teacher; teacher leading whole class; teacher interviews; trips outside of classroom; writing displays
- a catalog of files, both mundane and analytical

Analysis grew out of cataloging. Most of these mundane files served as a starting point for analysis, and notes were made after these files were examined, summarizing and interpreting what was going on in the tape:

George and Daniel - negotiating their joint chicken project. Commenting on book they are looking at. George trying to win D's support for his plan. D very positive about his own ideas.
(Small groups without teacher file, transcript pages 102, 103, 104)
Similarly, a summary of each child's activities over a three-week farm theme study constituted a catalog of information abstracted from many sources, and enabled but was not itself an analysis. Another type of cataloging also brought together evidence from different parts of the record—children's writing, photographs, tapes, notes—to compile a historical record of the details of single representation.

**Analytic files: categorizing the materials.** The real work of analysis, however, was carried out when four copies of participant observation notes and transcripts were made, and then cut apart and placed in categories or files (Lofland, 1971), sixty-two in all. Categories were derived from the outline of the dissertation, and used for cross-filing observations. Small paper bags were labeled and attached to bulletin boards in an arrangement reflecting the outline. There were two major headings which contrasted the teacher's long range structuring of the context with her structuring through immediate verbal interaction. Under each heading there was a further division between structuring which affected children's social relationships and that which affected children's relationships to content. The next level of the outline was used to classify the teacher's decisions relative to physical and intangible resources affecting social relationships, and the teacher's content (or subject matter) decisions affecting children's experiences, and their chance to talk, reflect on, and represent them. This level became the level of "themes". Below the theme level appeared the specific categories, as written on the paper bags. An abbreviated outline shows the above relationships:
I. Teacher's long-range structuring of the context

A. Children's social relationships as affected by structuring of

1. Space
2. Time
3. Social activities
4. Valuing of children's work
5. Children's choices and responsibilities

B. Children's relationship to content as affected by structuring of

1. Experiences
2. Talk and reflection
3. Representation of experience

The category labels on the paper bags can be illustrated by this set, which all appeared under "structuring of social activities":

- intimacy, small groups
- required interaction
- peer teaching, peer directing, leadership
- intimacy - physical closeness, teacher/children, children/children
- intonation, role, co/learner
- intimacy - teacher's intonational patterns, choice of words
- intimacy - teacher's role flexibility, teacher as co-learner, co-participant, children as teacher, teacher as mother, banker, speller
- teacher leads, decides what will be done, when, how, with whom
- rules, accountability

Each of the 158 pages of participant observation notes was read with this organization in mind, and the pages cut apart into strips and filed in the appropriate bag or bags. Since four copies had been made, an incident or event could be filed in from one to four places. Notes and marks were often made on these strips to indicate why the particular category decision had been made.

The last, housekeeping step in the categorizing of this material, was the transferring of strips into tabbed notebooks, under the same headings as were on the paper bags. Some twelve spiral notebooks were
used, each given to materials relating to a theme or themes. For example, one notebook entitled "Children's Choices" contained strips gathered under the categories

- what to do, which to choose
- where to work
- when to work
- how to work - access to materials, knowledge of techniques,
  right to use own language
- whether to work quietly or to talk, possibility of interaction
  with whom to work

Once in these notebooks, the categorized materials could be reviewed more conveniently during the analysis and reporting phases.

Inadequacies of this outline appeared once coding began, and yet for the most part the outline remained as it was, since the sorting process was underway. Categories were found to overlap each other in different ways, some being of a higher level of generality than others. New categories were added, but old ones never dropped. More fundamentally, the division between those actions which affect social relationships and those which affect content had to be disregarded when it was realized that every action had both an interpersonal and an ideational effect, to use Halliday's (1975) terms. It was not until materials pertaining to the theme of space were being analyzed that this became clear. Thus the major headings reflected an organization that changed and evolved. And yet the categories within the outline continued to be used. They were the building blocks of any outline, having been drawn from field observation, rather than directly from theory. It was their relationship to each other which constituted the overall goal of analysis.

Inadequacies of the coding process itself were also evident. Principally, the assignment to categories was a subjective process, as
there was no mechanistic means for making decisions. Every choice represented a classification made by human interpretation. Some required more abstraction than others. The category "a family like way of living - teacher/child closeness" could easily be exemplified by the following item:

Reading conference time: all are settled. Polly is reading aloud in her conference, behind the puppet stage with her teacher. (1/22/80)

but more inference is required to assign items to the category "dynamic, concrete experience":

3 boys, 1 girl at seeds, watering pots, looking, talking "See how my broccoli plants are sprouting." (4/18/79)

Decisions about those items already analyzed within the notes were of course made more easily. This note contains the category within it:

Cleo: "I can't find 'horse'. (in the dictionary) - asks Mary for help. (peer help example) (5/19/80)

The researcher was also conscious of the possibility that the assigning of data to categories might have been arbitrarily influenced by the existence of four photocopies of each page of notes and transcriptions. Was there a tendency to look for four categories for every piece of data? Had there been five copies, would a place have been found for a fifth? In fact, there was a considerable stack of "left-over" copies, so that not every piece of data had been assigned.

However, the problem of assignment of data to categories in a principled way remained. Each page of data was scanned both to divide it into pieces of data, and to assign these pieces to categories. Categories were not mutually exclusive, and a piece of data could fit in several places. An example will illustrate: Two boys were at the
scales weighing their shared, incubating egg, before entering its weight on a chart, according to the agreed-upon class procedure. Notes state:


This incident is entered as an example of **concrete, dynamic experience**, of **required interaction**, of **children operating on and transforming sense data**, and of **explicitness through talk**, all names of categories as written on the paper bags. Each category characterized the incident. In addition, this incident could also have been assigned to **child carries out own intentions or those taken on from teacher, working in small groups, written language in understood physical, social context**, and others. Since the goal of this study was to propose relationships rather than to identify discrete variables, the lack of mutually exclusive categories was not surprising. Any one incident could embody many themes simultaneously (as any piece of language embodies interpersonal and ideational dimensions).

Finally, there might be concern that cutting up the record of observation destroyed the very context one was trying to preserve. The original record was, of course, kept intact, and could be and was referred to as needed. Analysis of a chronological record could be considered as a temporary but necessary means toward a new understanding of underlying structure.

**Other analytic files** were developed in addition to this major file which was intended to reflect the categories of the context as structured by the teacher and experienced by the children. Several of these other files contained attempts at discourse analysis of
classroom lessons, whole group and small group, with and without the teacher. Still others contained results and interpretation of photograph interviews, and interviews about what children liked to do in their classroom. Photographs were also used to confirm the observer's judgments about typical ways of working in this room. Originally taken for the general purpose of documenting classroom life, they were, in fact, reviewed for evidence of specific patterns, such as being close together, being near the teacher, and choosing to work in groups or to work alone. Since these photographs had not been taken in order to substantiate these particular patterns, it was decided they could be reviewed and the results tallied. In the case of decisions of closeness of children to each other and to their teacher, two other judges were asked to perform the same sorting as the observer had.

**Summary: analysis of materials.** To state it most generally, the method used in analyzing materials, regardless of their nature, was that of classification. Categories for classification were based on perceived recurrences of events in the classroom, starting from the details of the setting itself, with the theoretical frames which had been of initial influence, and deliberately set aside. The comparison of classified materials was usually qualitative, although when feasible and useful, some counting was done (as in the analysis of photographs referred to above).

Once themes and categories were proposed, substantiating as well as negative evidence was sought. This began during materials collection, and continued more intensively throughout analysis and reporting. Documentation which would support these themes was gathered from all
types of collected materials - interviews, writings, taped lessons, notes, photographs. The integration of these materials as they related to the same event or point was accomplished by the same process of classification, with decisions made by the researcher. Listing, and tallying were more abstract types of classification within a qualitative approach.

Children's collected writing was treated in the same way as other kinds of materials. No qualitative or quantitative linguistic analysis was made. In this study, the connections between text and context, rather than the text itself was of interest.

Interpretation and Reporting of Findings

The same overlapping of phases characterized the interpretation and reporting of findings. Indeed, no neat lines could be drawn. For instance, during the gathering of materials, interim reports were written, which later became part of the final report. Not only did interpreting and reporting begin before collecting was over, but analysis continued after reporting had begun. The rigors and necessities of writing forced further and finer analysis of materials, as generalizations were formulated. Lofland (1971, p. 129) refers to the "shuffling of the written text itself".

The analysis of materials during the interpretation and reporting phase was accomplished by a variety of methods. The predominant method was one of content analysis, which brought themes and generalizations into relationship with each other, and exemplified them. These themes and generalizations had been worked out over the course of the research process, and were a product of the interaction between the researcher's predisposition, expectations, and observations.
Interspersed with this generalized description were other, more objective methods. These were used when they seemed suited to the material, and fell into three types.

The first, sampling, was used to show variation within patterns of morning schedules (p. 241). That is, a sample of the first twelve mornings was used to show the pattern which exemplified that of all mornings observed.

The second method could be called comprehensive or exhaustive, as all relevant instances available in the materials were searched and categorized. All photographs were categorized as showing closeness or distance of children and children, and of children and their teacher (p. 188). All concrete experiences over time were categorized into types (pp. 210-211). All mention of theme studies in newsletters over two springs were surveyed (p. 282) in order to identify repetition and variation from one spring to the next. Each farm project was categorized according to the number of days it took to complete (p. 245).

The third type of more systematic analysis made informal use of established schemes, most notably Britton's function categories of expressive, transactional, and poetic language, and Halliday's seven functions of language (pp. 388, 424, 427). An original functions scheme was applied to the functions of teacher's language during an observation (p. 530). Cohesion analysis was not used, though its influence in the content analysis may be seen.

These methods of analysis, as devised and adapted in the process of interpretation and reporting, were used to explore possible methods for future study, as well as to describe the materials. Like the
interpretive framework proposed in this report, they are intended to be suggestive rather than definitive.

The recording of this exploratory research process was also a goal, along with the recording of the substance of the study, as issues of methodology were of interest in their own right. This is in agreement with the words of Merton (in Glaser, 1969, p. 217), quoted in Chapter 2, which call for detailed accounts of the development of qualitative analyses, in order to enable generalization about their method. This is given as justification for the discussion of this researcher's experience.

In spite of the overlap of collection, analysis, interpretation, and reporting, then, the final stages of this research study were devoted to writing. As is shown by Figure 1, p. 138, it accounts for a substantial part of the total. The report may well represent writer-based writing (Flower, 1979), the necessary preparation for a future reader-based version. This writer-based writing served as a means and a medium for discovering relationships which were worked on further in an attempt to clarify them for both writer and reader.
CHAPTER IV
THE TEACHER'S SHAPING OF THE CONTEXT

The goal of this study was to describe the social context of one first and second grade informal classroom, and the spoken and written language produced within it. This context was shaped by the teacher's long-range and immediate decisions and actions, which thereby influenced the nature of this language.

According to the theoretical framework developed by Halliday, social context is the context of situation within which language is used, or the "relevant environment of the text" (Halliday, 1975, p. 125). Each particular context of situation is characterized by its own semiotic structure, or set of meanings. The characteristic meanings of the situation determine the features of the language produced within it. Thus the social system and the linguistic system are linked; meanings of the situation activate linguistic meanings and their realization through spoken and written text.

This linking is accomplished by the concepts of field, tenor, and mode of discourse, which can be used to interpret the meanings of contexts of situations. Field is the nature of activity, what participants are actually doing, the total event, including the speaker's or writer's purposive activity. Tenor is the set of role relationships among participants, who they are and how they relate to one another. Mode is the function of language in the event, whether spoken or written, whether central or ancillary to the event - the rhetorical channel chosen (Halliday, 1974, pp. 49-54; 1975, pp. 129-131).
Field, tenor, and mode thus describe relevant features of the situation. If these are known, the features of the text produced can be predicted, both the meanings and their realization in sound or print. Texts characterized by certain features are known as registers. "The register is the set of meanings, the configuration of semantic patterns, that are typically drawn upon under the specified conditions, along with the words and structures that are used in the realization of these meanings" (Halliday & Hasan, 1976, p. 23).

Halliday's theory will form a framework for looking at this classroom. A major goal will be to understand the meaning structure of its context, as interpreted by dimensions of field, tenor, and mode. Halliday hypothesizes that the context determines the meaning structure and the forms of the language typically used within it. This hypothesis will be considered when analyzing the connections between the context and children's talk and writing.

The framework for analysis also derives from studies of child language, as reviewed above in Chapter 2. These raise the possibility that the processes and conditions for learning to talk and write in school may be analogous to learning to speak at home. If that is so, language used in early school years may be inseparably interwoven with and embedded in children's experiences with the people and things of their classroom, just as babies' language is embedded in and emerges from their prelinguistic interaction with people and objects in meaningful situations. In particular, growth of writing, like speaking, may depend on the scaffolding role of the adult in direct interaction and in shaping the context for children's learning.
Findings will be presented in two chapters, using these analytical frameworks. This chapter, Chapter 4, will describe the teacher's shaping of the context. Chapter 5, children's experience in the context, will examine the connection between the meaning structure of the context and the language these meanings produced.

Chapter 4 will be divided into two sections: 1) a description of this classroom setting in terms of the teacher's use of space, materials and time, and 2) an analysis of the teacher's shaping of content, interpersonal relationships, and language use within this setting, or in other words, her shaping of the field, tenor, and mode of discourse which characterized the "contexts of situation" in this classroom, including writing situations.

A Description of the Setting: The Use of Space, Materials and Time

The teacher used resources of space, materials, and time to create a physical environment. This environment affected children's experience with the subject matter of the world (field), their relationships to each other (tenor), and the use they saw for and made of language and other symbolic means of representation (mode). While the physical environment of space, materials, and time did not create a curriculum or constitute children's experience, it did influence the nature of both. Therefore, the teacher's use of these raw materials will be described as options she chose with consequences for the dimensions of field, tenor, and mode.

Documentation of the way space, materials, and time were used will be given as gathered during participant observation over 41 mornings (and 4 afternoons). The viewpoint will be that of a newcomer to this classroom, trying to observe patterns which its members took for granted.
The starting place of this description, therefore, will be with the phenomena of appearances, with sense data, rather than with the teacher's planning and purposes. Notes, photographs, and audiotapes will be drawn on to describe the teacher's use of these resources.

Preceding each description of the use of space, materials, and time, generalizations in the form of themes will be presented. These themes will relate the physical environment of space, materials, and time to the nature of children's experiences with people, things, and language in this classroom, that is, with the contextual features associated with field, tenor, and mode.

Shaping and Furnishing of Space: Provision of Materials

Description of the classroom setting. Before analyzing the teacher's use of space and materials, and before proposing themes that characterize this use, the classroom setting as a whole will be described. Children's experience was centered in but not confined to their home classroom. Scheduled art, music, gym, library, assemblies and lunch took them to other parts of their building. Their own activities were carried out on the school grounds in places of significance to them: trees, observed from season to season, a flagpole whose changing shadow was measured over the morning, the spot of lawn outside their first floor classroom where sundials were improvised, a schoolyard on which an acre could be measured off, and just beyond, in a classmate's backyard, their own vegetable garden. This class also went further afield, by foot to the nearby public library, by car or bus to a conservatory, a farm, and other places of interest in the city or county.
The classroom itself, however, was their home base, where most of their time was spent. Stripped of its paraphernalia, it was almost a cube, with a door and chalkboard on the east wall, a bank of lockers and a sink, cabinet and counter on the south wall, the counter continuing around the west wall to a curtained window, and another chalkboard on the north wall.

This cube was broken up into smaller areas, some more, some less specialized. An art center was located in the sink corner, with a round work table, shelves and bins of supplies, and a workbench. In the opposite corner was the reading center, marked off by assorted bookshelves and furnished with soft chairs, a stool and a rug. Between these was the math and science center, with a low, wide table next to the window, together with storage shelves and display screens, and several hanging plants above.

Across the room, just to the right of the door upon entering, the tall file cabinet and the teacher's desk stood against the wall. Next came a table for small group use under a sign "Writing." Above the board was the manuscript alphabet.

Near the classroom door was the display table, so called for its changing collection of objects and books on various themes. Usually several desks and a screen were adjacent to the table in one position or another.

Against the north wall was a row of some five children's desks, and at right angles to this row, two pairs of desks facing each other and separated by a display screen. Their exact placement changed from time to time.
Figure 3. Floor plan of Mrs. Bridges' first and second grade informal classroom. Spring, 1979.
A wooden puppet stage which was moved from north to east wall the second year of observation was called the drama center. It could accommodate two children sitting side by side looking out, often using its ledge as a writing surface.

An oval braided rug, large enough for the whole class to sit upon at one time, dominated the center of the room. The rug functioned in many ways, but in terms of design, it unified the room and its various areas. The rug was the empty space around which areas revolved - art, science and math, reading, desks in rows and pairs, puppet theater, small group table, teacher's desk and file, display table, desks in pairs, and back to art. Some of these areas were named by hanging signs, and referred to by name. Others, such as the desks in pairs lacked terms of reference, lacked stability, and lacked association with specific activities.

These working areas were marked off by various kinds of furnishings. In addition to screens, shelves, and desks, orange crates functioned to divide space. These were used to hold children's dishtubs of personal materials. Each crate held three dishtubs; two crates together became the storage center for a group of six children. These dishtub centers were placed throughout the room, where they doubled as supports for items such as cages, files, and bookcases.

In this classroom, functions were met by unconventional as well as conventional forms of furnishings. In addition to standard issue chairs, seating was provided by hassocks, two upholstered chairs, one section of a sectional sofa, a large telephone wire spool with padding, the rug, and the floor. Desks, a book in the lap, the puppet theater ledge, the spool-stool, the rug and the floor all served as tables.
In addition to steel shelving and standard bookcases, books were held by wooden crates and were also displayed flat on a two-side triangular stand. The chalk tray ledge also was used for book collections of current interest.

Within these areas, created by the placement of furniture, there were many materials. For the most part, materials were accessible to children, being stored in clearly organized ways, which made it easy for children to find, use, and replace them. The art center and its many labeled bins was the most striking example of this. Books too were organized according to kind and level of difficulty, coded by colored tape to guide children, and placed in topically relevant grouping near the objects in the room to which they pertained, for instance, books on chickens near the incubator.

Two additional features should be noted. One, children's work was on display everywhere — on the walls themselves at various levels, on bulletin boards, on cardboard or net hanging from the ceiling, clothespinned to pieces of rickrack, attached to corridor walls, on library shelves, and resting on flat surfaces around the room.

The second feature was almost as evident; the classroom housed several kinds of animals, some more transient than others. Patches the guinea pig was a permanent resident, as Cottonball the rat had been the previous year. Brine shrimp, chicks and butterflies stayed for a matter of weeks only, lingering briefly after their development was complete. Others — a lamb, a goat, and an occasional kitten, visited for an afternoon.

An adult coming in to the classroom might have been struck with the smallness of scale and intensiveness of use. Not only was the
furniture appropriately child-size, but its placement was close to­
gether, and enclosed areas were relatively small, particularly those
areas at child height or below. A better overall look was available
at upper levels, but even from this height, there were areas diffi­
cult to oversee. A visitor would also note the similarity to a home
setting conveyed not only by the breaking up of space into these small
differentiated areas, but also by their furnishing with plants and
living things, with small groupings of books and objects, with rugs,
pillows, curtains and chairs whose textures softened the usual glass,
metal, tile, and wood of a classroom.

To summarize, this classroom space had been shaped into small,
specialized areas by means of a variety of conventional and improvised
furnishings. Materials appropriate to each were organized so that chil­
dren could use them independently. Space was given to plants and ani­
mals, and to children’s displayed work. The overall effect was one of
much fitted into small spaces, but fitted in according to a plan.

Four themes for space and materials. These four themes (Figure 4)
summarize generalizations based upon the several types of data gathered
during participant observation. They go beyond physical description to
propose relationships between the use of space and materials and the
experience children had in this classroom. Examples will be given in
order to illustrate these themes and relationships. There will be no
attempt to substantiate them in a quantitative sense (cf. Glaser’s
distinction between that research whose purpose is to generate ideas
and that which is designed to test generalizations. When the goal is
the generation of theory, he believes that substantiation through
1. A family-like way of living, and intimate, rather than distant relationships with people were encouraged by this particular use of space.

2. This use and provisioning of space allowed and promoted an experience-based curriculum, in which children selected, acted on, and interpreted their environment.

3. The organization of space and materials was clear and understandable, enabling independent use by the children.

4. The nature of space and furnishings was adaptable, allowing flexible use by teacher and children.

Figure 4. Four themes for shaping, furnishing, and provisioning of space.

Theme 1: A family-like way of living, with intimate, rather than distant relationships with people was encouraged by this particular use of space, especially by its division into small, specialized but flexible areas, the inclusion of domestic as well as standard furnishings, and the dispersal of materials to areas where they were accessible to children. The floor plan, Figure 3 on page 182, shows groupings of furniture which created these areas, leaving connecting, central areas clear.

The following ways of living in this classroom were like those of a family, and were encouraged by these arrangements: a) being close together, b) working in small groups, c) talking to each other, d) choosing one's own environment for working, e) moving about the room, f) choosing from a variety of activities, and g) making many decisions independently. Each way of living will be discussed in turn.
a. **Being close together** did in fact occur as a pervasive pattern. Closeness in this case meant not just physical proximity, but closeness as a result of choice. Children chose to be near others often, regardless of whether they were interacting with others, or merely side-by-side, involved in their own pursuits. Furthermore, although closeness is often observed in any school in informal situations such as storytime, it was characteristic of this classroom on almost any occasion.

Photographs originally taken for a variety of other purposes confirm this generalization. All photographs were reviewed to see if children were or were not close together, and if they were or were not close to their teacher. Two outside judges were asked to perform this same sorting with substantial agreement among the three sets of judgments. Results of this sorting appear below in Tables 1 and 2, and strikingly show closeness among children and the closeness of teacher to children, except when she was writing their suggestions on the board. Children were grouped closely in all parts of the room—around tables, on sofa chairs, on the central rug, behind the puppet theater, and their teacher was close to them, often on their level as she met them in small groups or one by one.

A photographic survey of the class on one day illustrated this typical, taken-for-granted way of working, a closeness which the physical arrangement of the room allowed. Children had selected an object to observe and write about, and had settled with friends in parts of the room with their writing tablets, to look, touch, act on, and talk about the object of their observations. For example, five boys were seated around the display table which that day held toy farm
### TABLE 1

NUMBERS OF PHOTOGRAPHS SHOWING CLOSENESS AND DISTANCE OF CHILDREN ACCORDING TO THREE JUDGES

<table>
<thead>
<tr>
<th>Judge</th>
<th>Child/Child Closeness</th>
<th>Child/Child Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judge 1</td>
<td>87</td>
<td>0</td>
</tr>
<tr>
<td>Judge 2</td>
<td>87</td>
<td>0</td>
</tr>
<tr>
<td>Judge 3</td>
<td>83</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: 87 photographs of children

### TABLE 2

NUMBERS OF PHOTOGRAPHS SHOWING CLOSENESS AND DISTANCE OF CHILDREN AND TEACHER ACCORDING TO THREE JUDGES

<table>
<thead>
<tr>
<th>Judge</th>
<th>Child/Teacher Closeness</th>
<th>Child/Teacher Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judge 1</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Judge 2</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>Judge 3</td>
<td>20</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: 22 photographs of children with their teacher
implements and farm animals. Photographs show them handling these and talking with each other, elbows on their tablets. Nearby, on the oval rug, the teacher and a few children were grouped around a terrarium, intent on feeding mealworms to the chameleon and the toad. A little later, six children were seated at a table near the board, writing up these observations, while continuing to observe a meal worm with the aid of the eraser end of a pencil and a ruler. Still later, a girl sat at the same table absorbed in her mealworm's progress across the palm of her hand. She was close by others but miles away inside her own experience.

Observations were also made this day of brine shrimp which pairs of children were growing in shared beakers. Five children sat side by side at desks under the other chalkboard, with tablet and beaker, leaning toward each other's work. Near the window, an area had been given over to brine shrimp study, and two children were each adding water to their own beakers. They were close by, but working alone, another example of side-by-side closeness without interaction. "Rick alone with brine shrimp" say the notes of the day. Finally, at the table under the window, two girls were measuring their seedlings, stretching up a pea vine to show how much it had grown. (5/20/80)

Whether it was a round or oblong table, or a row of five desks, or a special interest center for growing plants or animals, the physical setting had some relationship to the distribution of children in this classroom on this day. At the very least, it prohibited large numbers from gathering together in any one place (except for the rug area, which was large enough to accommodate the whole class), but brought
small numbers who could fit in small areas physically close together, and promoted their interaction.

If the teacher joined any of these groups, she too was physically close to others. When she gave the toad a mealworm, she was on her hands and knees next to children on the rug. Photos from other days show her in the reading center, at the board table, and especially on the rug, with children always gathered closely around. Her proximity to children as well as children's proximity to each other was enabled by these spatial arrangements.

b. Working in small groups was another family-like way of living encouraged by this teacher's division of space into small, differentiated areas. Both photographs and notes document the frequent forming of small groups either at the request of the teacher, or spontaneously by children. Photos examined above for evidence of closeness were also reviewed for evidence of small groups. Group is defined here as consisting of two or more children who are physically close, whether interacting or not, and whether they were close by choice or by request. Table 3 reports the results of this review. Of a total of 90 photos of children with and without their teacher, 73 illustrated the existence of small groups. These were of both kinds: groups which were called by the teacher to an area for teacher-led activity, and groups which children formed by choosing their own working places.

This sorting of photos shows that both the teacher and children did use areas of this classroom for meeting in small groups. Patterns of use by teacher and children were different, however, as the teacher met groups mainly on the rug, in the reading center, and at the board table, while children worked in their groups throughout the room.
Table 3

Number of photographs showing use of small areas by small groups of two or more children with and without the teacher

<table>
<thead>
<tr>
<th>Areas</th>
<th>Size of groups called by teacher</th>
<th>Size of groups formed children</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of Children</td>
<td>2 3 4 5 6 7+</td>
<td>2 3 4 5 6 7+</td>
<td></td>
</tr>
<tr>
<td>Rug</td>
<td>1 3 3 1 1</td>
<td>8 1 1</td>
<td>19</td>
</tr>
<tr>
<td>Reading Center</td>
<td>1</td>
<td>6 1 1</td>
<td>9</td>
</tr>
<tr>
<td>Board Table</td>
<td>2 2 3 1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Art Table</td>
<td>3 3 1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Display Table</td>
<td>1 1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Window Table</td>
<td>2 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Desks</td>
<td>11 2</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Board</td>
<td>1 1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Floor</td>
<td>2 1</td>
<td>3</td>
<td></td>
</tr>
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<td>Totals</td>
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<td>42 11 7 2 2 0</td>
<td>74</td>
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</table>

Source: 90 photographs of children with and without their teacher.
Many photos show children in pairs and groups of three working together or next to each other at desks arranged in groups of twos and threes.

A sampling of notes supplements data from photos and shows that children and teacher used small areas in the room for group work of various kinds. An entry for November 14, 1979, comments generally: "About 9:30. Children in small groups at desks, on floor, in art corner. Looked much like last year..."

Certain areas in the room were repeatedly mentioned in the record as small group meeting places - the rug area, the art table, and the display table in particular. The **rug area** was often used for groups by both teacher and children, as noted in this first participant observation entry: "Worktime until 10:45. Small groups with teacher on rug. Others in pairs, alone" (4/12/79). From time to time, the teacher called math and spelling groups to meet with her on the rug, where she sat on a stool or on the rug itself with them. **Ad hoc** groups were called there too, such as the group of four children she was helping to prepare for the school bicycle rodeo (5/16/80). The class garden was planned on the rug, with children taking turns writing on a large sheet ruled off to represent rows of a garden (4/26/79). Children, too, gathered in small groups on the rug. For instance, one group was observed looking at *The Three Little Pigs* while one child read (11/14/79). Two boys on their stomachs were working on multiplication math papers (4/19/79), and another three were looking at the farm drawing one had done (5/9/79).

The **reading center** was also used for groups as well as for individual reading. The observer's notes describe a spelling group held there (5/13/80). On another occasion, the teacher and a few children
sat together looking over one boy's scrapbook made after a trip to Chicago (5/28/80). On another occasion, five boys were in the reading center, all listening with enjoyment to one boy read, some occupied with coloring at the same time, others sitting close to the reader (5/3/79). During a rainy lunch recess, the reading center became an arena for dramatic improvisation as children played out a popular television serial (5/23/80).

The table by the chalkboard could hold from six to eight children, and was often used for instruction as well as for children's own groups. Handwriting was taught there, with the teacher demonstrating, using the board, and children working on practice sheets (4/26/79). Children on their own wrote articles for the weekly newsletter at the board table, did math there, drew, observed and wrote up observations. They also interacted, using language which ranged away from their immediate activity. During cursive writing practice, for example, children asked each other math questions - "What's 18 X 30?" - with speculations as to the answer (4/19/79).

The round art table was much in use by children, not only for art but for writing, math, science, and visiting. It was a place for children to be together; rarely was it used by the teacher. Children were seen working in pairs on math, having conversations about shoes (4/27/79), bugs, bees, math, and sundials (4/18/79), and writing their newsletter articles (5/16/80). They made things seemingly unrelated to any theme (popsicle stick log cabins, 5/17/80) as well as those suggested by a class study (the time theme and clock and sundial construction, 4/18/79).
The round display table, which held books, pictures, writing, and objects relating to current class studies was also used occasionally by groups of children as a working place. A photograph shows boys writing about farm implements seen on a farm trip while sitting at this table which was full of toy farm implements (5/20/80). Another photo shows one boy looking at a display of lenses, cameras, magnifying glasses and related books (11/30/79).

Similarly, other areas in the room functioned as places for two or more children to work together. The table by the window, certain parts of the chalkboard, the puppet stage, behind which two children could sit, and especially pairs of desks all were such group meeting places. Special interest centers also functioned as focal points for small groups. Such centers included eggs in the incubator, and later chicks in the brooder (5/10/79), butterflies in the eye-level transparent butterfly garden (5/10/79), and bulbs, batteries and wires on two desks (1/17/80).

Therefore, children did in fact work and play in small groups. These furnishings which bounded space and defined areas (the rug, various tables, partitioned-off spaces) and interest centers which drew children (the chicks, the toad, the butterflies) encouraged formation of these groups.

c. Talking to each other is a third family-like way of living which is associated with the first two, being close and working in small groups. Children who are close together in small groups have opportunities to talk together, much as family members talk without formal permission. The desire to talk may also lead to the formation of small groups. This informal talk is in contrast to traditional
classrooms, which often prohibit talking, and require hand-raising. Audiotapes and notes reflect the varied nature of talk in this classroom. While there was teacher-led whole class discussion, which tended to be more formal, there were also many instances of talk with and without the teacher in small group situations.

There was room for conversation within a dictation exercise. This small group spelling lesson took place at a time when there were newly hatched chicks in the room:

Teacher: The little chick's cries could be heard all over the room. Cries.

Child: See, there they go!

Teacher: They stick their heads up and they look out.

Child: Mrs. Bridges, Mrs. Bridges, you should see the light, you know, how that's shaped like, shaped like this. They are curious because they are trying to look up in there and see what's in there (5/12/80, p. 84 Transcript).

Children's talk in small groups without the teacher sometimes related to class studies or work underway. For example, two girls reread a chart on which they had earlier recorded the weight of their incubating egg. "Mine weighs 51" said one (4/19/79, p. 9). A group of boys, collaborating on a newsletter article, talked over questions of content, of spelling, even of ownership rights to a pencil. They used math to divide up the ideas or "things" as they called them, among them:

Sean: We've got 11 or 12 articles. Not 12 articles but 12 things.

George: If each of us makes five, that would be fifteen articles.

Sean: Each of us has to write two - six - we'll do, we'll each do two (5/16/80, p. 94 Transcript).

Much small group talk, however, was not so related to children's work. The return of a classmate with a cast on her arm led a group working on cursive writing to a discussion of what it would be like to
break one's arm, and to wrist-flapping and wrist-holding experiments (5/9/79). On another occasion children played with the question "What's your favorite place?" by offering nonsense answers. This conversation among friends was remembered by Deborah when asked to look at a photograph of it a year later:

Observer: Do you have conversations during worktime?
Deborah: Uh-huh. We were fooling around. We were saying our favorite country was - the hospital - places like that (5/1/80, p. 59 Transcript).

Thus, informal talk with and without the teacher was characteristic of children in small groups. This talk concerned classroom life, and included but was not limited to work-related topics.

d. Choosing one's own environment for working is yet another family-like characteristic of classroom life, which is encouraged by the provision of small, differentiated areas. Children worked in groups in different parts of the room, as is documented above by Table 3. They also worked alone, either near or apart from others. A range of environments, physical and social, was available to these children.

There is evidence that children chose their own working places, whether alone or with others, from what they said:

Monique is looking at a photo of the rack of plastic dishtubs which hold children's belongings.
Observer: You don't have a deks, do you?
Monique: We can work at any of desk. (sic)
Observer: Do you always work at the same desk?
Monique: No.
Observer: How do you decide what desk you are going to work at?
Monique: If they are empty (5/1/80, p. 52, Transcript).

In an interview, the teacher talked about how parts of the room were to be used, and in sketching the outer limits of proscription,
showed what a wide area of choice within these limits was left for children to find their own environment:

Observer: ... You know they have a choice of where they want to work. Is that right?

Teacher: Our restrictions — you see, they aren't allowed to do certain things at certain centers. The biggest problem is I'll get kids doing things at the reading center and I like to keep that primarily closed for reading.

Observer: Quiet reading, what about ...

Teacher: Or if they want to sit and just write a thought or something, I don't object to that but going over there and getting out the blocks and stuff, that bothers me.

Observer: Yes, some great big violation.

Teacher: Yes, that should be out on the rug or something. And my other thing that I get really upset about is the children that go back in the art center to do writing projects and then they come to me and say, so and so got paint on my paper. I say well, that's because paint belongs in the art center and you belong at another table.

Observer: But sometimes ...

Teacher: So those are my two biggest areas of restriction — would be reading and art centers. The other centers are a lot more flexible (5/1/80, pp. 69-70 Transcript).

Later, in the same interview, the teacher is very explicit about the choice of place children have:

Observer: I have a picture of Sean barricaded behind a little block cubbyhole. I didn't know whether that was his own initiative or —

Teacher: His own, his own. I don't really segregate kids like that anymore (5/1/80, p. 72 Transcript).

Observation as well as interview documents children's choice of working environment. Sean was seen constructing his own block cubbyhole, referred to in the interview above. Space used in a childlike way was
also evidence that children had taken the initiative. For example, Ewan arrayed farm implements around him on the rug (5/9/79), and Betsy made a cozy workplace sitting on a large pink pig (1/17/80). Further, it can be inferred that children themselves have chosen where to work when the record shows them changing place, as it does in this worktime example when three boys were in the seed center, drawing, and two girls came by to look at the plants:

Three boys leave, led by Sean. "We don't want this place too crowded." (12/23/80)

In choosing their environments for working, children had the basic option of working alone. Sean in the block cubbyhole is one example, and Betsy on the pink pig another. A substantial number of photos (35 of the original set of 89 of children without their teacher) shows children who have chosen a solitary working environment, including those physically close but psychologically involved in their own activity.

Instances of working alone might seem to weaken the case for the sub-themes of closeness, small groups, and opportunities to talk, illustrated above. A child alone on a chair and lost in a book, even though physically close to others, is not talking or even interacting, and is not a participating member of the group. This child, however, may be aware of and draw meaning from nearness to others. The family-like use of space which made possible closeness and interaction, evidently did not force them. It is also family-like to have a choice to be alone.

A partial accounting of where children were after settling for one particular reading conference time shows mixture of the solitary
and the social: (Asterisks are added to mark children who are alone).

8:40 Reading conference time: all are settled. Polly is reading aloud in her conference, behind the puppet stage with her teacher. Betsy, Deborah at art table. B: Benji; Deborah: Charlotte's Web.

Salli and ? at electricity center: S reading music book of "It's a Grand Old Flag", boy (Evan?) reading a geography book or atlas.

Sean in between Steve (Star Wars) and John on couch.

*Monique (Frederick) on comfortable chair.

Deb (Bear's Almanac), Cleo (City Days, City Ways) side by side in reading corner.

*Ruth Ann on stool.

*Rick on [another] stool (Two Pesos for Cataline): concentration.

George on floor next to couch, Steve. Later moves to desk by board, reads Kangaroo Stew.

*Tika alone behind teacher.

(John and Sean are noisy, others are shushing them.)

Ted and Don, side by side, Henry Huggins books. ? reading Keats.

*Mary alone, then goes to conference, has been reading Wednesday Witch.

Three at window table reading Scott Foresman level books and Amelia Bedelia. Sam, Eric, ?. Eric first has looked at Wump World.

*? on rug alone reading abridged Dr. Doolittle. (1/22/80).

One child's explanation of how he decided whether to work alone or with others suggests that both personal preference and availability...
may influence children's actual choices: The question "Do you work alone or work with other people or both?" brings Daniel's answer:

Daniel: I do both.

Observer: Which do you like to do?
Daniel: Alone.
Observer: Do you? How do you decide to work alone or with other people?
Daniel: I decide like if I find places where I am alone I work there. Today I didn't.
(5/21/80, p. 234 Transcript)

Children did find places in many parts of the room to be alone. They used these places for a variety of activities: reading and writing, making things, experimenting and observing. Their favorite places were also the favorites of groups, that is, the rug area and the desks (as in Table 3, p. 191).

e. Moving about the classroom was characteristic behavior of these children, as is moving about the home characteristic of members of a family. An impression written after the first morning of observation conveys one kind of motion seen in this room:

Sounds: quiet conversation, singing.

Motion: motion stable, with motion in areas, but not across room, except for a few (children), moving across (4/12/79).

Different events were marked by different kinds of motion. Reading conference time was fairly stable, with some individuals occasionally changing books or places quietly. In contrast, dramatic play during a rainy day recess was characterized by loudness and vigorous activity by many. For these and other routine events there were characteristic ways of moving, appropriate to that situation. Even the most constrained
setting, the morning meeting on the rug, was not without its unstable edges, its changing orientation of individual children as they faced now one way, now another.

The physical arrangement of things in space was one factor which encouraged these various patterns of moving about the room. The organization of space into small, specialized areas meant that children had to circulate to find materials and equipment they needed in their dishtubs and at various centers. Since there were no individual desks, children had to move about to gather what they needed. They had to move to carry out activities which could not be carried out at desks (such as weighing the incubating eggs). They also moved to communicate with friends, either as part of their work or for their own, social reasons. Finally, children moved to find their own environment for work, with or without friends.

Examples of children moving freely and in a homelike manner can be found in the record. However, moving from one area to another became such an accepted, unremarkable way of living to the observer that it was rarely the focus of notes. They do mention in passing that children did move about the room: (words connoting motion are underlined)

During reading conference time: Two or so leave for library (4/18/79).

During a worktime, at the art table: Jed comes around to show his disappearing dime magic trick (4/19/79).

Also during a certain worktime: Sean joins floor group by door, doing math facts (4/26/79). Boy (Ken) came and greeted me (4/26/79).

Deborah going around: "Did you think of a name for your chick?" She records their answers or suggestions (4/26/79).
Don and Ewan drawing with magic markers and crayons side by side ... Boys go off to get reference books (4/26/79).

On another day: Deborah (making) a magic marker picture - a butterfly? Gets up to get a crayon to use on lower part of wing (5/3/79).


Deborah comes over (to the reading center), looks at rats. Deborah leaves with Cathy, Cynthia (5/3/79).

These and other entries like them show that children moved about the room in the course of their school day, as they got supplies and books, talked with other children and adults, and joined groups. The physical setting alone did not cause this moving, but its specialized small areas gave children reasons to seek what was of interest to them in various parts of the room.

f. Choosing from a variety of activities is the next family-like way of living enabled by this use of space. As shown in Figure 3, page 182, the room contained small areas which housed both special and continuing interest and work centers. Not only was space broken up into small areas, but these areas were developed differently, so that for instance, children could observe emerging butterflies in one area, and find materials to represent them and write about them in others.

All classrooms, of course, use space in specialized ways; the space used for the reading circle is different from desk space, lockers function differently from teachers' cupboards, and so on. This classroom, however, was divided into more and smaller areas than is
characteristic of most classrooms, and its provisioning and furnishing created more opportunities for varied activities.

This is a homelike feature of spatial organization. In a home, possibilities exist for varied activities to do with living itself, and for recreation and education. Family members can be active or quiet, can work with their hands, or conversely, can read or write. This is in contrast to an admittedly stereotypical classroom with its narrow focus on reading, writing, and arithmetic to the exclusion of oral language, art, construction, observation, and manipulation of materials (to name a few of the available possibilities). While children's varied use of space could have been influenced by many factors, it was at least enabled by this particular shaping and provisioning of space.

Almost any worktime could furnish examples of children involved throughout the room in a variety of activities. This partial accounting of where children worked and what they were doing on a certain morning was typical. Many early notes were organized according to place in the room, whereas later notes focused on children and their activities, with or without mention of place. Perhaps by then children's distribution around the room (like their moving about) had become taken-for-granted by the observer. These early notes show children involved in a variety of activities throughout the room:

- Worktime in progress, recess already over. Children working at various projects throughout the room.
- Where were the children, and what were they doing?
- on the oval rug: two boys on their stomachs working on multiplication papers. Nat and?
Boy and girl on edge of rug, she giving him words he hadn't got copied from the board before the teacher had had to erase them in order to have space to work with her small handwriting group. The girl volunteered to help him, went to get her own spelling book to use. (Words were "short i" words).

Math boys talked over strategies they used to get answer to $8 + 5$. "I did all these 5 (fingers) and these 3."

eggs: one or two were weighing eggs. (There did not seem to be the traffic that there was here yesterday.)


desks behind collage display: Katie was illustrating her popcorn story. Another girl there.

desks in front of collage display: Daryl is working on handwriting. Jed sharing construction paper, string, tape magic trick or puzzle he is making.

in puppet theater: Cathy is finishing popcorn story. Sticks her head out of the opening to call to someone to come smell her popcorn.

desk next to egg center: boy working with clock paper, and with a toy clock at hand - to be used to work out answers, presumably.

board by teacher's desk: Six children working on cursive writing.

small group: Teacher demonstrating, explaining. The children are left to practice together. Their talk ranges to math problems posed by children to each other: What's $18 \times 30$? And speculations as to answer.

floor by door: 2 boys on stomachs - Nat and ? (Same as had been on rug). Nat making snake drawing, using reference book but not copying picture literally. Friend goes to handwriting group to tell them something about the snake picture he is making.
teacher's desk: G. is checking Katie's story with her.

desks behind time display: one girl, doing regrouping paper. Ruth Ann working on popcorn story, and interacting with group behind her at art table.

art table: Katie finishes popcorn decorations for her story. Has made a cellophane kettle out of which popcorn is popping.
2 boys drawing from same picture in Popcorn Book, which is open between them.
Geoffrey: "Hannah knows the secret about you and Katie." (said with intent to tease and intrigue, though with good humor).
Betsy working on popcorn picture.

Yesterday's projects being finished: Jessica's "Chinese clock" with dragons for hands is being given finishing touches.
Seed story of Caroline's is finished, cutout, and mounted on construction paper, for display on bulletin board. (Teacher later wondered about story because it was copied verbatim from book - not typical for Caroline (4/19/79).

Notes made over both years of observation, confirm this pattern.
Children did a variety of activities throughout the room. This was especially evident during worktime. At other times, as when all observed and wrote observations, there was less variety of activity though children were still scattered in small areas of the room.

g. Making many decisions independently is a final family-like way of living to be discussed. In a family, members decide for themselves where they will be, and what they will do, within the limits of family custom and their maturity. This classroom was characterized by similar freedom within limits to decide, freedom enabled by the physical setting, and limits established both by the teacher's authority and by the group's planning (to be discussed below). Small areas created by the arrangement of furnishings were harder to oversee than an open arrangement would have been. Many children were
simultaneously doing different things in different places. These places were set up so that children had access to materials. In this kind of room, it would have been impossible, even if desired, for the teacher to make detailed decisions for each child, no matter how vigilant or energetic she was.

Examples given above (a through f) for other family-like ways of living also illustrate the kinds of decisions children made. Children chose what they would observe when writing observations. They decided where they would work in the room and with whom, if anyone (above, p. 187). They formed small groups (more often than the teacher formed them) (Table 3, p. 191). Groups usually decided where they would gather, often decided with whom and when to work, and how to carry out their projects, even if deciding less often whether to do it or what to do.

Children could decide whether to talk with each other or not (above, p. 194). There were some situations in which talking was more appropriate than in others – worktime as compared to storytime on the rug, for instance – but for this classroom, talk was the norm.

Children chose their own environment for work, either alone or with others (above, p. 196). They were free to move about the classroom, again as appropriate to the situation (above, p. 200). Moving, like talking, was the norm. Finally, they decided which activity to carry out in which area of the room (above, p. 202), using the opportunities provided by specialized development of space, though not bound by rigid patterns of use. (See below for a discussion of flexibility.)
Summary: First Theme for Space and Materials

Throughout the discussion of this first theme, the emphasis has been on the family-like way of living allowed by the teacher's use of these resources. By choosing and placing furnishings so that small, differentiated areas were created, she encouraged the closeness of members of the class, including the teacher. Working in small groups, especially in pairs, talking together, finding one's own working place, moving about for various purposes, choosing from many different activities, and making many decisions for oneself - these ways of living were the assumed, unnoticed, and taken-for-granted ways of acting in this classroom.

Theme 2: The provision of concrete, dynamic, and accessible materials in small areas allowed and promoted an experience-based curriculum in which children had opportunities to act on, process, and represent their experience. This second theme focuses on children's relationship to the content of the curriculum, in contrast to the first theme which focused on children's relationship to people. This theme explores possible connections between the teacher's shaping and provisioning of space and the children's relationship to content. Children related to content, both through the experiences she provided and through the opportunities she gave to process and represent them.

Several features of things-in-space, usually unnoticed and assumed, did influence children's relationship to content. First and foremost was the provisioning of the classroom. There were things to observe, touch, manipulate, draw, talk, and write about. These ranged from objects such as rocks, shells, models of dinosaurs and farm implements to such living creatures as brine shrimp, caterpillars,
incubating eggs, a mother rat and her babies, and a pet guinea pig. These objects and creatures allowed the possibility of immediate, sensory experiences for children. In addition, the element of growth and change which characterized most of them contributed a dynamic, suspenseful quality to experiences. Eggs hatched, caterpillars metamorphosed, crystals grew and shadows lengthened.

Second, these objects and creatures were accessible to children, since they were placed in small areas throughout the room. Children could gaze eye-level into the butterfly garden. They could hold chicks and other animals. Batteries, wires, and bulbs were out for them to connect. Rocks could be weighed using the balance, plants measured with a ruler. Even books, usually considered a source of secondary or vicarious experience, were placed about the room both close to the thing they pertained to, and close to children themselves. They seemed to take on a concrete significance in themselves as "written objects" (Britton, 1970a, p. 164), rather than remaining neutral channels of symbolic content.

Not only were concrete and dynamic experiences directly available, but various materials to use in representing these experiences were also provided for. Children could choose from many art, construction, and writing supplies in order to carry out their projects, by going to various work centers which were always a part of this environment.

Thus, children were able to relate directly and personally to the content of the curriculum, because of the nature of their experiences, and the opportunity to represent them in a variety of media. This direct, personal, almost intimate relationship to content was enabled by the teacher's decision to provide these kinds of materials, and to
disperse them throughout the room. Evidence will be given of the close­ness and accessibility of direct experiences first, and then will be followed with a discussion of accessibility of materials used in representation.

A survey of notes and photographs, supplemented by newsletters sent home each week, yields the following list of concrete experiences available in different parts of the classroom, as a result of the teacher's shaping and provisioning of space. Omitted are concrete experiences which occurred outside the classroom or which were pro­vided occasionally by visitors, such as a mother-directed cooking experience. Books are included as concrete experiences, available in various parts of the room. Child-made books are not specifically included, because this analysis centers on what the teacher provided, and because children's writing was too pervasive to document. It was true, however, that child-made writing, originally a representation of experience, became part of the experience itself, available to the class, along with other objects. Therefore, children made a direct (and of course, the teacher an indirect) contribution to their environ­ment, just as they had, for example, when bringing in their toy farm animals to share.
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<th>Concrete Experiences</th>
<th>Physical Science</th>
<th>Books</th>
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</tbody>
</table>
Certain photographs convey the intimacy of children's interaction with the things of their experience more powerfully than this list could. One, already mentioned, shows George, hands in pocket, his face a few inches and a thin sheet of plastic away from the butterflies in the butterfly garden, possibly wondering which was his, as others were heard to do (5/23/80). Tina, oblivious of others at the board table, gave sustained attention to the mealworm crawling across the palm of her hand (5/20/80). Jessica held a newly hatched chick in her hands, her expression a mixture of delight and amusement, her soft song "chick, chick, chick" caught by the tape recorder (5/17/79, Transcript, p. 1). On another occasion, six children and their teacher were gathered on the rug around the terrarium, all eyes on the bit of food she was giving to the toad (5/20/80).

In each case, the quality of the experience available to children would seem to be deep rather than superficial. Their concentration and their lack of self-consciousness, suggest a satisfaction that is simultaneously and inseparably intellectual and emotional. Such satisfying experiences (to speculate further) would seem to provide a rich source of meaning for future linguistic and non-linguistic representation. Space as here arranged did not automatically bring about this quality, but it did bring children and bits of their world close together, enabling an active, often dynamic relationship.

Although these experiences were definitely the children's, the teacher did influence them. Her influence was felt first through her decision to provide such experiences. She also structured children's interaction to varying degrees, so that their experiences while still intimate and direct, were guided. An example of a highly structured
experience was the plan for partners to be responsible for turning and weighing a certain incubating egg on a certain date, and to record its weight. Experiences with crystals (5/23/79) and with lenses (11/30/79) were guided through worksheets. Less structured were such opportunities as sketching one's electrical circuit on a group chart labeled "Try My Experiment" (1/17/80). These less structured opportunities contrast to unstructured, unscheduled experiences such as holding chicks and gazing at butterflies, although both kinds of experiences were optional.

Whether more or less structured, the teacher's influence was felt at a point before rather than during children's experience. They were able to interact directly if sometimes in predetermined ways, with these things and animals. Their experience was still sensory, active, and they were usually deeply rather than superficially involved.

These opportunities for deep rather than superficial experience, whether structured or not, gave children a means of processing this experience. That is, the provision of concrete and accessible materials allowed and promoted revisiting and re-experiencing whatever was of interest, along with talking about it and reflecting on it. In this way, new sensations, new ideas, new vocabulary were tried out before children were called on to represent this experience.

Turning from experience and processing experience to representation, there is abundant evidence that materials for making and doing, that is for representing experience, were available for children and that they did use them. Photos show children at work on many different projects, in many parts of the room. They found materials in the appropriate center, and then often took them to the working place of
their choice. The organization of these accessible materials will be discussed below in connection with the third theme. The point to be made here is that a variety of materials was directly available to children so that their representations could be personal, as their experiences had been. Since both children and materials were dispersed in space, it was logical that children themselves decide how to represent their experience, or in their own words, "what to make," what projects to do, and how to do them.

However, the teacher did influence these decisions, just as she had influenced the kinds of experiences available. Not only was she responsible for providing accessible materials throughout the room, she often introduced new materials and taught new techniques, thereby building up the children's vocabulary of representation (which they could draw on later, independently). For example, the class had been talking about islands in connection with a book being read by the teacher. Today she told them they would each make their own island, inventing features such as its topography, language, people, and flag.

The observer's notes comment:

(In giving directions: no detailed discussion of materials children could use, or techniques).
[Teacher] did say: "You can make the map flat; or instead, make it stand up. Use your what? (waits) Yes, imagination." 1/22/80

Yet after recess, the teacher influenced their choice of materials:

... teacher brings in large piece of cardboard which she cuts to order for people who want it for their land. 1/22/80

Later, she agreed with the observer:

Observer: I can remember when you were doing the island project you brought in this great big piece of cardboard, on purpose to create a sense of excitement I think, about that ...
Teacher: And getting them to use it - sure. (Transcript, p. 72)

A record of actual materials used in making islands showed that while four or five used this cardboard, there was a range of other materials chosen by children:

Record of 17 children's choice media, way of making imaginary lands:

4 at art center: paint on paper, making water color or poster paint picture (Polly, Betsy, Deborah)

4 at window table: magic markers (fine) on cardboard, drawing islands

2 at front board, drawing on construction paper and using crayon (Cleo and Ruth Ann)

2 drawing on manilla paper, cut a little smaller but in same shape as cardboard. Ted was one.

2 on gray construction paper, magic marker. Steve uses cardboard, 3-D too. John the other one.

1 Sandy, cardboard cut out in shape

2 at art center: Polly, Deborah have now begun to make stand-up figures on paper, using masking tape.

(Note similarity of children's choices to their nearby friends - in fact, identity). 1/22/80

The teacher herself explicitly stated that she encouraged use of a wide variety of materials and techniques:

Observer: ... another thing that I wonder whether you would agree with is that most of the time the children have choice as to how they carry off their projects - as to what materials they use, or do you, or wouldn't you be able to generalize...

Teacher: I think that sometimes choice of materials, I think sometimes they forget what's available. And I have to remind them that hey, you can use watercolors or chalk or work with art or with writing. You can use your thought rambling tablet, or you can use a piece of paper. I do, I have to remind them. (Transcript, p. 71)
In another interview, the teacher explained that she was more successful in teaching a "concept" (i.e., a technique) to a group than to a child she might have thought ready. She taught the whole class techniques especially in the fall, when for instance, all children made insect surveys and learned how to graph results. She explained that children who didn't understand

... can ask me but they can also talk to other children who do understand (5/28/80, Transcript, p. 152).

This applied to other techniques such as making salt and flour maps, or making puppets. Toward the end of the year, children made suggestions for various farm projects, drawing on techniques learned earlier that year, or in the case of second graders, learned the previous year:

Then Miss B. [the student teacher] elicits ideas for farm work. What could we make? Children contribute ideas.

Caroline: could display thought ramblings with picture girl: make 3-D animals and barn
Miss B: What materials could you use? (paper, boxes) I'll try to get some.
Ted: mobile?
Nat: put a tractor on it?
Jessica: puppets
Alice: diorama
Daryl: collage (5/9/79)

Betsy's volunteered comment about being taught how to make a book conveys a feeling of security and independence in having this skill.

Observer: ... Are other people writing Chinese books now? Is that what I see in the room? It seems to me that lots of people are writing books now.

Betsy: Chinese books. Mrs. Bridges is the one that taught me how to make a book like this and she taught me about the wallpaper and the staples - how easy it is to make a book. (5/3/79, Transcript, p. 2)
Notwithstanding this kind of specific teacher influence and direction, it was basically characteristic of children to expect to be responsible for choosing and getting their materials, and for devising ways of using them and solving problems of representation, both for projects which could be considered required, and for those initiated by children themselves. Ruth Ann, who had made a roller movie for her farm project, had to invent a way to attach the movie to the rollers without losing the picture. Notes say:

Ruth Ann's writing on roller movie is based on her retelling (of The Little Red Hen). She (is) attaching a part to be attached to the rollers (5/20/80).

Mary needed paper for her farm project "An Information Book About Animals". While she was struggling to get out and then to replace a large pack of paper from the desk where it is stored, her teacher continued to work on her own project, but did step in at the last:

M. gets out large pack of paper from desk where Daniel works, next to GB. She picks out paper from her book, then replaces papers. GB concentrates on painting she is doing, but gives Mary help when M is having trouble replacing paper (5/19/80).

Trudy has made an illustration of The Funny Little Woman as her Caldecott project. Her choice of materials is her own:

Trudy shares Caldecott picture...Funny Little Woman. She used pipe cleaners for shoes, uncooked spaghetti for hair ornaments. Has been working all morning at it (5/19/80).

Steve has made a drawing of the skeleton of a horse, black on white paper, for his farm project... He followed it with another rendition of the same subject, this time a gray plasticene skeleton on black paper, more abstract than the sketch:
Steve pasting on his plasticene horse display, onto black paper (5/21/80).

In these cases, children were fulfilling what were requirements of a class study – the farm study, the Caldecott project, and so on. However, in many cases, children used materials for projects which they had devised on their own:

- Nat – gets pens from art center, is illustrating writing about alligators (4/26/79).
- Katie and Alice are enjoying making tiny notes to be put in tiny boxes they have made, which somehow fit into a pocket inside a Fun Book folder each has made. They giggle, hide what they've written, look at me as if encouraging me to ask to read it. I do not ask (5/17/79).

The line between these two kinds of representation, required and voluntary, was often blurred, and the subject matter of classroom studies showed up in voluntary projects. Children took entire responsibility for these voluntary projects, including working through difficulties. Cynthia's voluntary writing and handwork project, shared one morning, clearly derived from the class study of chicks:

- Cynthia shares writing on envelope she has made to hold egg which has sewing inside which she has made also. She reads her writing (4/27/79).

- Mary, drawing from the same study, has written a chick story at home, and has brought it to school, where she was struggling to replace a lost page, working out her own, not always efficient method:

- Sitting beside Mary, who is rewriting a chick story which she wrote at home, because she has lost a page. It is punched and tied together
with string. She couldn't remember what was on the page, so I suggested she reread story from beginning. "I'm going to repeat the page. Just as if I hadn't lost the page." (i.e., if only I hadn't lost the page). "I made this at home last night." "Why?" "Because I didn't have anything to play with ..." Struggles to complete the missing page, and finally does. I had the feeling she felt it was a chore. Yet she wanted to recall and transcribe it. "Now I can copy this." She copies last page in book into new book. Returns to copying after her spelling. "I could add another page and then make two copies." (Her original idea was to make one complete copy by copying whole book over, plus missing page). Gets her spare book of paper from locker, takes out a piece of paper, and takes old book apart. (5/4/79)

Summary: Second theme for space and materials. This second theme has claimed that the teacher's shaping and provisioning of space enabled an experience-based curriculum. Because objects and creatures of interest had been provided, and were immediately accessible to children through their environment, they were able to have direct, sensory experiences. They were also able to re-experience them, thinking, talking, reflecting, and thus processing before representing them. Because a range of materials to use in representing these experiences had been placed in various centers where children could draw on them, they were enabled to interpret and represent their experience in a personal way. Thus children had an area of genuine freedom and responsibility for their own learning. However, the teacher influenced the process of experiencing and representing through her basic plan for the use of the resources of space, her subsequent introduction of new experiences and new materials, and her guidance through structuring experiences and teaching children techniques. Her control, thus, was at a point upstream of children's activity, and was exerted through
control of the environment. Children's interaction with this environment was direct, and their experiences genuinely their own.

Theme 3: The organization of space and materials was clear and understandable, enabling independent use by children. Materials for experiencing processing, and representing experience were not only accessible, they were clearly organized so that children could use them independently. The contrast is with a classroom in which things may be accessible, rather than in the teacher's closet, but are simply "out," in no evident order, with no indication of their function or their relationship to other things.

As materials were clearly organized, so also was space divided into areas which had clear identities and clearly suggested functions, by virtue of their provisioning, furnishing, and their labeling. This is in contrast to a possible division of space into small but undifferentiated areas, all with an equivalent function, like evenly spaced desks in rows, or evenly spaced groups of tables or desks.

In this room, certain areas were unmistakably distinct from each other. The art, reading center, the math and science areas, and the display table will now be described, as well as other, smaller places, centers, and organizational devices. The art center featured a shelf of thirty-five different bins, containing highly specific materials such as artificial leaves and flowers, beans and peas, buttons, corks, cotton, all in alphabetical order. It also housed deep shelves for sheets of paper, an easel, a workbench, and other sets of labeled bins. The sink with pencil sharpener, paper towel holder, and cleaning supplies, formed one side of the art center. In the middle of the area was a round table which accommodated about six children. Over all
hung a sign ART. Other features such as the objects on the table or the children's work pinned on the wall changed, but the basic components remained constant.

The reading center, an area slightly smaller than the art center, was different in obvious ways. Instead of hard, washable surfaces, there were an upholstered sofa section and loose pillows, a padded chair and matching rocker, each big enough to hold two at a time. A padded stool and a hassock belonged in or near this area. In the second year of observation, a rug was added. These furnishings, together with hanging plants and a curtained window just behind the sofa created a domestic atmosphere.

Various kinds of shelving held books and magazines. A slanted unit for flat display of books stood near the entrance to the area and usually held a special group of books - by one author, or of one genre, for instance. An encyclopedia formed part of the reading center's boundaries. Two crates on top of a two-shelf unit held the main collection, which was marked with colored tape according to level of difficulty. A sign "Reading" hung from the ceiling.

The reading center was not the exclusive place for books. These were placed throughout the room in conjunction with relevant materials. The tray of the chalkboard near the incubator held From Egg to Chick and others. The shell display on the display table included several shell books. What made the reading center distinct was its concentrated collection of books and its homelike furnishings arranged in such a way that it was walled off by chairbacks, shelves, dishtub holders, and even cages, with entrance through a "narrrows".
A third distinct area filled the space between the art and reading centers, and was generally used for math and science projects. Its main focus was the large, low window facing south, and the table which stood under it. Adjacent to the table were other shelves which housed materials to be used for math and science, for example, a metric balance with weights, a pot of rulers, flashcards, a metal shelf with labeled bins. During the seed and plant study, there were plastic dishes and flower pots, a supply of flower seed packets, a tray of dirt, and watering pots. A smaller table at right angles held beakers of brine shrimp, one for every pair of partners, and supplies needed to care for them. Above these beakers were various teacher and child-written texts: a collection of pertinent vocabulary words, questions to guide observation written by the teacher or student teacher, and children's own experiments, with their recorded comments. Above these hung several pieces of writing and sketches by children, all pertaining to brine shrimp. This window area, with its good light, its supplies, its extra shelves and table tops, its plain, easily cleaned surfaces, had a functional identity, even though it was not as defined a space as the art and reading center. However, it was set apart from the rest of the room by shelving units and racks which held dishtubs. Further separation was achieved by cages, the terrarium, the butterfly garden, and the like which often were placed on top of these shelves.

A fourth area in the room which had a distinct identity was the display table, which was usually in a state of change, as collections were added to, or as old collections were removed and new ones started. There was usually some labeling which identified the theme under study.
Sometimes children's art and writing was suspended over it, sometimes tacked to a 2-paneled screen which formed a background for the display. The objects and books assembled were often handled, an extreme example of this being the toy farm implements, which engaged a small group of boys who chose to "observe" actively, and to do their writing at the display table itself.

The identities of other areas in the room were less obvious, and yet examination of their furnishing and labeling shows specification to a fine level of detail. (These structural identities do not always correspond with the actual function of the areas, a point to be developed in the last theme for space, below.) An example of a less obvious but still specified area is the board table, officially named by the overhead sign WRITING. Boxes near it held paper and children's own spelling dictionaries, files held selections of each child's writing, and charts of manuscript writing were displayed on and above the chalkboard. The location of this area under the board and near the teacher's desk made it a logical place for small group work with and without the teacher.

Smaller than areas and interest centers such as butterfly gardens were organizational devices such as charts, physical evidence of systems used to regulate the common life of the class. These too were clearly structured, and were operated by children independently. One example was the set of labeled math folders, one for each child, in the teacher's file but accessible to them. Another were the sets of paper caddies or holders, where each math group's weekly dittos were placed. During the week, children went to their group's caddie for their new math papers, and placed finished papers in their folders in
the file cabinet. Still another system enabled by clear structure was the "in and out" magnet board in use the first year of the study. Children leaving the room moved their named magnet to the "out" side of the board, and replaced it on returning.

Another extremely clear system was the attendance and lunch count board. Upon arriving, children moved their own tag from the whole set of children to the set "buying lunch," "buying milk," or "needs nothing." The structure of this conveyed the distributive principle of mathematics in a functional context, as well as allowing independent use by children.

Other parts of the room such as the rug, the small groups of desks, the board, and the floor were not explicitly intended for particular functions, but served many. These were the neutral areas whose uses were matters of custom rather than designation. The puppet stage, officially called the drama center, was also in this group, in spite of its specific name.

Summary: Third theme for space and materials. A child in this classroom was presented with a clearly organized environment in which key areas looked different from each other, housed different materials, and suggested different activities. Theoretically, this clearly structured environment could help children to infer this structure, to see how parts of each area related to the whole, and how areas fit into domains of human activity such as Writing, Art, Science, Reading. The domain of writing, in turn involved the subsets of handwriting (the charts), spelling (the booklets), and materials (paper supply). The concept of art as a domain was elaborated by the provision of numerous but clearly classified materials. Books were not just all of
a kind, or even "easy" and "hard," but fell into categories associated
and presented with themes: chick books, space books, witch books,
informational books on weather, and so on. Brine shrimp, seedings,
and caterpillars each were cared for in a certain way. Each had its
own set of vocabulary, each its own characteristics, and yet out of
these distinctions could be drawn generalizations about characteris-
tics of all organisms.

The possibility which is being suggested here is that through a
clear structuring of the environment, children were not only able to
act independently (as this theme states), but were also helped to
generalize, compare and contrast, in short, to develop schemes of
classification. The teacher's choice and organization of things in
areas made relationships easier to abstract. Subordination was made
evident by the physical position of parts in relation to the whole.
The elaboration of art materials within the art domain is an example.
Relations of comparison and contrast were physically displayed in
centers which housed growing animals or changing things. For instance,
in spite of formal differences between various plants and animals, they
all did grow and change, and required some care to promote their develop-
ment. More will be said of this in connection with the teacher's
structuring of the curriculum. Here, the intention is to suggest that
the teacher's clear organization of space and materials not only made
independent use by children possible, but also may have helped them
organize their knowledge and thus contributed to their cognitive develop-
ment (a suggestion which admittedly goes beyond this theme as stated,
but could follow from it).
Theme 4: The nature of space and furnishings was adaptable, allowing flexible use by teacher and children. The emphasis of this theme is on flexible uses, in contrast to the clarity of organization stressed in theme three above. Though the environment was clearly prepared, children and teacher did not always use it in conventional and predictable ways. First, areas were used in a variety of ways that went beyond their intended purpose. Second, furnishings were adaptable, and allowed changes in room arrangement as well as flexibility in use.

Evidence that areas were used in a variety of ways beyond their intended purpose has already been given in the discussion of the first theme, a family-like way of living. Small groups were shown to have met throughout the classroom, both at centers designed for the activity they were engaged in, and at almost any center, regardless of its explicit purpose (pp. 187-194). Examples were given of conversation at the writing table, writing in the reading center, reading on the rug, math at the art table, active work at the display table, and so on. The teacher confirmed the wide area of choice allowed children in choosing their own environment, which produced this flexible pattern of use. Limits on flexible use were implicit but evidently understood, and were applied only to blatantly inappropriate use, such as painting on the rug, or building with blocks in the reading center (pp. 196-200). Similarly, children who chose to work alone read, wrote, did math, made things, and experimented with things in a variety of places. For instance, children were photographed reading alone on the rug, in the reading center, standing in the middle of the floor, and leaning up against the teacher's file.
To check the observation that areas were used for a broader range of functions than they seemed designed for, notes were reviewed for mention of the uses of the art center, chosen for this analysis because of its specialized nature. Each different kind of use of the art center mentioned on a page was counted once, with the following results. Thirty separate uses for art projects were counted in contrast to fifteen for other kinds of work. These other uses included writing, math, science, reading conferences, reading, conversation, and Valentine addressing. Although art projects predominated, at the very least it can be said that the art center was used for more than art activities.

What was true for specialized areas was even more characteristic of areas with more neutral identities. The rug, the pairs and threes of desks, even the board and the puppet stage, took on many functions as needed.

Of these, the rug area was given widest use. It had its special role as whole class gathering place for sharing, planning, singing, hearing stories, and so on. Beyond this, photos show it being used in these many other ways: for groups meeting for spelling, math, and science observations; and for individuals and pairs who read, wrote, did math, played games, assembled dinosaur bones, planned gardens, made lists together of what they would want to know about China, made crayon pictures, worked with papier maché, mounted paintings, looked through wallpaper books for covers for their own books, and played with blocks, cubes, and farm implements.

Furnishings were adaptable, and allowed changes in room arrangement and use. Pieces of furniture could be used in different ways,
and most could be moved in order to change the shape of space they defined.

The furniture itself was a mixture of institutional desks, chairs, files, bookcases, tables, and shelving, and of less conventional or improvised pieces. Already mentioned are the soft furnishings of the reading center, the large rug in the central area of the room, the painted crates which held children's individual plastic dishtubs, a slanted book display stand, a puppet stage, various other shelves which held bins of materials, and screening of pegboard or bulletin board material.

This furniture constituted a resource for teacher and children to use in flexible ways. First, pieces themselves were versatile. The puppet stage could be a writing desk, a reading conference site, or a device on which to hang books children had written about China. A large spool, padded on top, furnished seating but also served as a table for the teacher when she was meeting a spelling group on the rug. Crates which held three dishtubs also supported a crate of books on top, a cage, or files. A reading center padded chair could hold two children as well as one, or could be used as a kneeling support.

Not only did the same item perform several functions, but the same function was served by several items. The seating function of a chair was met by a sofa, rocker, a padded spool, a hassock, by the rug and the floor, as well as by regulation chairs. The function of a table was met by the puppet theater ledge, the spool stool, a book in a lap, and again the rug and the floor, as well as by regulation tables and desks. Books were housed in wooden crates, displayed on the slanted stand, placed in the chalk tray, as well as kept on
standard shelving. Screening was accomplished by chart stands, hanging displays, by child-constructed cardboard brick walls, by chair backs, shelves, cages, crates, as well as by bulletin board and peg board material.

Many of these pieces were movable and thus allowed modification of the shape of small areas. Smaller items such as cages and chairs were more freely moved while larger, heavier items were more stable. Over the two year span of observing, the most major change noted was the puppet stage's move from the west to the north board (11/14/79). In retrospect, photos can be used to document some barely noticed changes. In the reading center, the encyclopedia and sofa moved from outside to inside walls, while various positions were recorded for the chairs. The screen behind the display table in spring, 1979, was replaced by a counting frame used as divider a year later. Two pairs of desks which faced each other though separated by a screen maintained this configuration but changed orientation from north-south in May, 1979, to diagonal in November, 1979, and then to east-west in May, 1980. Sometimes a table appeared under the window, sometimes there seemed to be desks there. Likewise there was a table under the west chalkboard in June of 1979, but there were also desks in May, 1979, November, 1979 and May, 1980.

A major change had been made by teacher and children together just before observation began, according to the teacher's report. But day to day, there were minor changes which represented gradual, often inconspicuous adjustments to changing needs. As notes for April 19, 1979 state:
The setting had been changed in one way: a bookcase near the seed center had been moved to expose a bulletin board, where children's stories were in the process of being displayed by the children themselves, the teacher later told me. (4/19/79)

Most entries of "new things in the room" pertain to new books, displays, projects underway:

New in room: rocks and minerals on display table, with related books, pictures, charts of difference between three kinds of rocks. Samples of rocks and minerals, rock collections brought in from home. Plant area gone, except for a few tomatoes still in pots. Farm animals, cardboard farm set on the plant table instead. (5/17/79)

It is likely that in order to accommodate these themes with their activities and their displays, furniture was moved around from time to time, as it had been in the case of the popcorn story display.

Summary: Fourth theme for space. It could be said with certainty that the teacher and the children did in fact use space and materials flexibly. Areas, furnishings, and materials which had been organized into clear centers were at the same time adaptable to individual or changing needs. Furniture was movable and varied, allowing for a range of use and position. Basic working places even within specialized areas were neutral, and therefore not limited as to use. For example, the art table in the art center could be used for writing and math, the table under the window provided another writing space, and the seating in the reading center could hold talking and writing as well as reading children. In addition, neutral areas such as the rug, deks, and the puppet stage had many uses. The possibility of flexibility was therefore as much a characteristic of this use and provisioning of space as was the clear presentation of structure.
Summary of four themes for space and materials. These four themes have been elaborated in order to suggest a connection between the way space and materials were used and the kind of life lived in this classroom. The kind of life in this room determined the meanings shared by its members, and these meanings in turn gave rise to certain uses of language (and other kinds of symbolic and communicative behavior). Behind both language use and classroom life were the teacher's long-range and immediate decisions which shaped the use of resources, in this case, of space and materials.

The point of view has been that the teacher's use of these resources did not determine, but allowed certain ways of living. In this room of small areas and differentiated, clearly organized materials, children could relate to people in a homelike way, and they could relate to things of the environment directly, actively, and concretely. Areas and other parts of the room were clearly organized so that children could understand their purpose and use materials on their own. Yet their use of the room was not constrained to any set pattern of use of place, furniture, or materials. They were able to adapt places and things to the needs of their own activities.

Obviously, factors other than the use of space and materials influenced the nature of life in this classroom. The uses of other resources also had their effect, in coordination with the use of space and materials. The next of these to be considered is the teacher's use of the resources of time, to be followed by discussion of the relationship of these more physical dimensions to the nature of the curriculum (field), to roles and relationships (tenor), and to the
functions of language and other modes of representation experienced by children (mode).

Shaping of Time

Description of events. Before analyzing the teacher's use of time, and before proposing themes that characterize its use, the ordinary, recurring events in this classroom will be described. As with space, so in shaping time, the teacher worked within the givens of the organization of the school. Thus arrival and going home times were set, as were times when the class had to dovetail its activities with others in the building, such as scheduled lunch, gym, and art periods. Within the remaining hours, it was the teacher who decided how to use time.

After the first few weeks of observation, patterns of recurrent events were evident. These usual morning events were, in the usual order of occurrence, arrival, rugtime, worktime, recess, clean-up, and lunchtime. Other events which were incorporated in rugtime and worktime were reading conferences, newsletter planning and writing, writing evaluations, writing thought ramblings, and observing and writing observations.

These events were distinguishable from each other by changes in people's positions, location, and orientation (Florio & Shultz, 1979), by changes in their roles, their activity patterns including their language, and in the materials they used (Frake's roles, routines, setting, and paraphernalia, 1964). Thus a typical day began with children's gradual arrival, as they chatted by the lockers, took their own attendance, and gathered on the rug, while the teacher tended to a
variety of matters, and the child in charge of lunch count tallied and recorded the totals.

Soon all were gathered and the teacher began. Children's previously scattered distribution and mixed orientation had been replaced by their concentration in the rug area as they oriented themselves to their teacher, in a relaxed rather than rigidly uniform fashion. Their own activity subsided as the teacher's activity increased. Their role in this event as listeners, rather than as initiators was emphasized. Her position and actions now underlined her role as leader and teacher of a group rather than as informal interactor with small groups and individuals. The paralinguistic characteristics of her language marked off this change in scene, as her voice became louder, pitch higher, and enunciation more exaggerated.

The substance of this early morning time on the rug varied with the needs of the day. On Fridays, part of the time was always used to plan together the content of the newsletter the children wrote for their parents each week. Other morning rug time activities were diverse: stories were read, new authors discussed, informational books introduced, relevant vocabulary developed, filmstrips or movies shown, songs learned and sung, math folders handed back, items and books from home relating to current interests shared by children, and original writings read. Instructions were given for such activities as weighing the incubating eggs (4/18/79). Children were sometimes asked to suggest possible projects to make in connection with their study underway (5/9/79). Planning time on the rug was an opportunity for whole group teaching of concepts and vocabulary, as well as of study
skills. For example, when planning imaginary islands each child was to make, the idea and the term "symbol" was used and discussed (1/22/80). When proposing children hunt for a "mystery" waterfall, the teacher asked them to name places to look, such as atlases, thus building toward skills in using reference materials (1/17/80).

Such a list of rugtime activities is quite miscellaneous, and shows that this period of time lasting from 30 to 45 minutes was used to reach the children as a whole group for a variety of purposes. In general, however, time on the rug seemed to have had two major functions. First, it was used to give new experiences, new content, and new skills, that is, to build a common background on which children could draw later. For example, after having been read a group of witch stories over several rugtimes, children had the background to make up their own witch-versions of familiar tales (11/14/79).

Second, time was used to plan and direct specific activities which children would carry out on their own in the worktime to follow. When time on the rug was reduced to its essential, invariant feature, it was this latter directing function which remained. So on a day when children were scheduled to go to the library, there was just time for a minimal rugtime - for a song, passing back some papers, and announcing reading conferences for the twenty minutes before library time (1/22/80).

Following this opening session on the rug, the teacher was apt to say, "All right, let's get to work," and children moved to begin to carry out their plans for this independent "worktime" period. Like time on the rug, worktime had its own character which distinguished it: its physical arrangement of people, their roles and activities, and the
materials they used. Again there was a change in children's and teacher's position. The rugtime orientation to the teacher dissolved as children moved in different directions, gathering materials from their dishtubs, arranging to work with others, and finding their working places. Their role was no longer passive or merely responsive. They began with the work they chose (or agreed to and accepted), and they decided how it would be carried out. The teacher's activity pattern changed too, from leading a whole group to meeting small groups and individuals, or working by herself. In these smaller scale interactions her speech became more conversational. Her position in the room changed from one of prominence to one of inconspicuousness. Upon entering during worktime, one might well wonder where the teacher was.

Worktime was the most important event of the morning, in terms of its length and content. It provided opportunity for children to carry out activities in every part of the curriculum — social studies, spelling, reading, writing (though not always so labeled). It gave children a variety of situations, as they worked independently, or in small groups, with or without their teacher. In worktime, plans made during time on the rug were carried out. Each child was responsible for making some decisions. The range of choice varied from time to time, but might have included deciding what to do first, how to do it, where to work, and with whom. Children had in some cases the choice as to whether to do a project ("an option"), or which of a group of suggested projects to choose. Projects carried out in the midst of a study gave children the greatest range of decisions to make.
contrast, math and spelling activities were teacher-structured, and children needed only choose within worktimes when to do this work.

Worktime was also used by children for unplanned, unscheduled, and possibly unobserved experiences. They used this time to "make things" at the art center after their own design, to read library and child-written books, and to clean their dishtubs (for example). Children were observed sorting the teacher's supply of stickers which she gave out for math folders each week (1/24/80), counting the number of pencils in their dishtubs (4/26/79), counting out sticks of bubble gum for later distribution to celebrate the birth of a baby brother (1/17/80), inventing a baby food jar popcorn "machine" of seeds which danced when the flexible lid was pressed (5/19/80), gazing at the brine shrimp (5/20/80), and butterflies (5/23/80). One boy stood immobile for five minutes in the middle of the floor, holding his Valentine box in his hand and looking about (2/14/80).

Variations in the placement of worktime were frequent. Other events, also familiar, were embedded within, preceded or followed worktime. These other events were "reading conferences," "newsletter" and "evaluation" writing, writing "thought ramblings," and doing and writing up "observations." Worktime was also displaced by scheduled times in other parts of the school, such as art or gym, by less regular assemblies or visits to other classes, and by trips away from school. There was also the daily recess time, from 9:50 to 10:05, which interrupted an ongoing worktime in a minor way only.

In any case, even if worktime was displaced, it was rare that there was no worktime. In addition, it was always preceded by a time
on the rug, during which the essential feature of rugtime, i.e., planning the worktime, was carried out. However, the length of that planning time varied, and other events sometimes came between rug and worktime.

Those other regular events which displaced worktime each had their own characteristic set of features, as did worktime and time on the rug. "Reading conferences" was a period when children each got their own book or books to read, found a place in the reading center or elsewhere in their room, in the hall, or in the library, settled down alone or with another one or two friends, and read. Meanwhile, the teacher called individual children for side-by-side conferences about the child's chosen reading material. They talked together about the story, its author and its illustrations. The child read a selection, and while he read, the teacher made notes on her cumulative record of the child's reading. The teacher may sometimes have given direct help on such matters as word analysis in the context of the story. The whole session usually lasted less than five minutes, when another child was called.

During reading conference time, children were dispersed throughout the room, as they were in worktime. In contrast to worktime, however, they were more sedentary and less mobile, though they did get up to change places, partners, or books. They interacted less than in worktime, though they did sometimes read and talk together about their books. The teacher chose a place for conferences which varied from time to time - behind the puppet stage, at the art table, on a child's chair - but it was always somewhat private. She sat close beside rather than across from the child. In this role she interacted with
one child at a time, in what seemed to be a conversational rather than examining or even didactic manner.

Another regular event which modified the worktime routine was the planning and writing of the weekly "newsletter." This newsletter event consisted of several parts: planning, writing, and sharing by the children. (The teacher consolidated their articles, and typed them on dittos, so that children had a newsletter to carry home each Friday afternoon.)

Time on the rug was used for planning the newsletter by reviewing the past week's happenings. Children suggested and the teacher elicited important aspects of each topic, which she recorded on the board, where they served as a writing guide to children. Some children volunteered, and others were asked to write each article.

Children left the rug to find materials and to choose working space for newsletter writing. These pairs, sometimes three's, worked together deciding who would write what, writing their own part, reading their writing or their partner's, and asking and giving spelling help. When finished, each child sought out the teacher and together they read the article just written. She commented on both style and substance, suiting her response to the child. (See below for a fuller discussion of the nature of the teacher's response to children's written work.)

Newsletter writing tapered off into a worktime as children finished their articles. The end of the writing time looked like worktime, with children in small groups throughout the room, engaged in a variety of activities, as the teacher worked with individuals or small groups, or tended to other matters.
During newsletter writing, those children who had not been assigned articles wrote their "evaluations" instead, in which they looked back and commented on the things they had done in the past week. These evaluations were written alone, rather than with partners, though children often wrote and conferred side-by-side. Evaluations, like newsletter articles, were shared with the teacher when done.

A third kind of event which took the place of worktime was called "observations". Like newsletters, observations consisted of several parts. First, there were brief directions at rugtime. Then children dispersed to choose the object of their observation— for instance an animal or plant in the classroom. The next period of time was given to observing the chosen object, usually within a small group or with a partner. Children observing were oriented to the object of their observation. They were close to it, touching and holding it at times. They talked about it with their friends and their teacher. When they decided to write, they got their stenographer's or "thought rambling" tablet from their dishtubs (if they hadn't already done so). This writing period emerged from the period of active observation. After this intermingled observing and writing, children were called to the rug to share their observations by talking about them or by reading what they had written, if they chose to.

Related to writing observations were thought ramblings, written in connection with an experience. This experience might have been removed in time and space, as in the case of writing done back in the classroom after a trip. Or such writing might accompany a project, drawing on a child's inner experience of creating the project. For example, children wrote about their imaginary islands they were
inventing and constructing (1/24/80). These "thought ramblings" were started by all at the same time. Again, like evaluations, children wrote their own, but could choose to be near others while writing. They shared their finished thought ramblings with their teacher.

Worktime, with or without the events of observations, thought ramblings, newsletter and evaluation writing, reading conferences, or other events, ended at 11:10 with "clean-up" announced by the teacher, or sometimes by a child. This daily event was carried out by children but with support. One aid used in the first year of observation was a job wheel which divided work of clean-up among children, each of whom had a clothespin clipped to one spoke. The other, organizationally simpler aid was the announcement by the teacher of the "magic number," which varied in magnitude with the amount there was to clean up. Each child had then to carry out X number of moves, self-chosen, to straighten the room.

Clean-up merged quickly into lunch time, as children left to go home, and a line of "lunch stayers" (in fact, most of the children) was dismissed to the cafeteria.

The following figure illustrates these patterns of events and their characteristics of variable length and position as described above. The figure shows that worktime is the major event, though beginning at different times and lasting different amounts of time. Recess occurs within it, rather than functioning as a boundary of changing activities. Reading conferences occurred at different times of the morning, and not every morning. Rugtime and clean-up time began and ended the morning with some consistency, though rugtime was high variable in length and content.
Figure 5. Twelve morning schedules showing repetition with variation. 

Source: Participant observation notes.

Key:
- Arrival of Observer
- Worktime
- Reading Conference
- Thought Ramblings
- 5th & 6th Grade Spelling Buddies
- Newsletters
To summarize this description of the teacher's use of time, it can be said that the children's day was composed of familiar, recurring events, each with its own characteristic features of language and behavior. These events varied somewhat in their position during the day, in their length, in their content, and in their occurrence during the week. In spite of these variations, children recognized them and participated appropriately.

**Four themes for time.** These four themes (Figure 6) summarize generalizations based upon several types of data gathered during participant observation. They go beyond physical description to propose relationships between the use of time and the experience children had in the classroom. Examples will be given in order to illustrate these themes and relationships. As in the case of themes for space, the goal will be to illustrate these themes rather than to substantiate them.

1. A family-like way of living, in which individuals set their own rhythms and mode of activity, was allowed by provision of large amounts of time.

2. The provision of large amounts of time allowed and promoted an experience-based curriculum, in which children had time to act on, process, and represent their experience.

3. The characteristic features of various events were clear, enabling independent, appropriate participation by children.

4. Clearly-structured events were carried out flexibly, with variation in position in the day, in duration, in content and form, and with flexible transitions between events, allowing flexibility in children's behavior.

**Figure 6.** Four themes for the shaping of time.
Theme 1: A family-like way of living, in which individuals set their own rhythms and mode of activity, was allowed by provision of large amounts of time. The characteristics of this use of time will be further described, and then followed by a discussion of their consequences and implications.

Division into a few large segments of time, rather than into many, finely scheduled small periods was typical of mornings in this classroom. This characterization fits all the major events of the morning - reading conference time, writing newsletters, observations, evaluations, and thought ramblings, and worktime. This last event, worktime, will be discussed at greater length below, after a review of time given to other events.

Variable but large amounts of time were given to rug times, to reading conference times, and to writing newsletter articles, observations, evaluations, and thought ramblings. The observer's judgment was that children were given enough time to "settle in" and concentrate on the particular activity. Notes refer to a reading conference time which had lasted for thirty-five minutes: "(Reading time: long enough for reading practice and concentration)" (4/27/79). Notes were also made during a thought rambling time when all children were asked to write about the islands they had invented and were constructing. Writing had begun at 8:40 and was sustained until recess at 9:50. The observer commented at 9:26:

Children still writing; soft talking. Everyone in a place. (Time is allowed for getting started, settled, involved ... ) (1/24/80)
These more uniform activities often merged into worktime, which was the longest, most varied, and for children, the most self-directed event of the morning. Therefore, the following comments and examples about this first theme will apply to the worktime event.

Worktime, the major morning event, and its interests, activities, and projects, could extend beyond into the afternoon, the next day, or even the next week. Thus there was an indeterminate, open-ended quality to time as available for much of children’s work. This applied particularly to projects which children were undertaking as a way of representing their experience. Individual histories document the attention and effort given over a series of days to one project. For instance, most children spent one day on each of their farm projects, many spent two days, seven spent three days, four spent four days, and one took eleven days, when the papier mache and paint was finally dry.
Figure 7. Number of days spent on each farm project by children.
In contrast to the interdeterminate length of projects by which children represented their experience, individual math papers were to be finished within a week. Children were thus given a more definite, predictable limit than for project work, and yet they could choose, within the week, when to do their math.

The teacher's flexible attitude toward time, and her responsiveness to children's interests was revealed by her comment about the farm study then underway: (emphasis added)

... the week of the farm visit children should really get involved in the project and then let it carry over for that week after. If the interest died, then we would let it die and start something new. But they haven't really let it die. And some of the projects they are working on like Ted's bull, you just can't stop it. (Transcript, p. 105, 5/22/80).

The consequences of providing large amounts of worktime were first to place responsibility on children for deciding how they would use their time. They regulated their own rhythm and mode of activities as they had in their preschool years in family and neighborhood. They made many detailed choices which, like those involving use of space and materials, would have been beyond the teacher's ability to supervise, had she wanted to.

Another indirect consequence of the provision of large amounts of time was the varied activity which took place simultaneously throughout the room. Children did the same things at different rates, and they chose different things to do. Thus, transitions were staggered and individual, rather than uniform, and things did not have to happen together within small time segments. Their choices led to independent, varied activity within worktime. They chose what to do, when, and for how long, including when to represent their experiences. Children were
seen modifying their own program, in terms of activity level, interaction with others, persistence of interest, and playful or serious quality of engagement with experience.

Children alternated active and sedentary occupations, as their concentration gave way to dreaming. First grader Betsy was seen to rest momentarily on her side on the rug before getting up to continue her survey (5/3/79). Sean, in the midst of his reading stood his book up, looked at it dreamily, then put it down and resumed reading (4/27/79). George's concentration lasted ten minutes as he stood absorbed in a book about rocks, reading it audibly to himself (5/27/80).

Within worktime, solitude was possible, as documented by many photographs: Tika, in a patch of sun on the edge of the rug, reading a child-made book (11/30/79); Don, cross-legged in an upholstered reading center chair, engaged in a book (5/79); and Sean, behind his barricade of cardboard blocks, working out his math paper (11/30/79). Notes record Steve studying the shell display (5/3/79), and Mary working with concentration on her writing (11/30/79).

Sociability was also recorded: while Mary wrote alone, Sean discussed his writing with others (11/30/79). Children talked together about immediate school activities. These girls, near the egg incubating center, were comparing their own egg weights with those on the posted chart: "Mine weighs 51" (4/19/79). Other talk ranged away from the present:

After recess, Sean and Evan talking about death of pet rat: "I don't know why Cottonball died." Discussion of rat heaven, of heaven above, devils below (11/14/79).
During these long worktimes, projects were sometimes put aside for later attention, or even abandoned, and others taken up. Notes describe Mary as she "starts on math, gets up and down a bit. Next time I look she is writing her witch story. At 10:50 she is back at math papers, with several pages of her story done" (11/14/79). When talking about the uses of her dishtub, another first grader said "Sometimes you keep your surveys. When you're not all done with them," implying that projects were put aside and later resumed (Transcript, p. 57, 5/1/80).

The opposite was also true: children sustained attention over a long period of time, becoming deeply involved in one specific experience. Ruth Ann was lost in dramatic play with toy dinosaurs, as she created a drama, taking all roles herself (Transcript, pp. 160-161, 5/28/80). Sean weighed and recorded weights of mineral samples with great persistence, over two days (5/28/80, 5/29/80). Daniel worked steadily for several days on his information booklet about the rooster, reading, writing, discussing, and illustrating it (5/19/80-5/21/80). A group of boys struggled to assemble a styrofoam dinosaur over a week (5/29/80-6/4/80).

Many times, this quality of involvement was evident in play, frequently observed during these long worktime segments. There was a wide range of behavior which could be considered play. There were games with rules - commercial (1/17.80), a teacher-made (1/22/80), or made by children (Dan and Ewan's tadpole-to-frog game, which they invited the student teacher to play with them, 5/31/79). Objects, words, and ideas were also played with, in a passing, though still involved way. Two girls held bivalve shells to their faces like mouths (5/4/79). A group was seriously observing its adopted tree, when one boy discovered a few
white spots on it, and announced dramatically that their tree was being attacked by white spots, as all rushed to see with great interest (11/20/79). In a quiet corner, a small group played with ideas and language telling each other "your brain is green" (11/30/79). On another occasion, jokes swept the room, which seemed to show play with the conversational rule which requires an answer to a summons:

I found a skunk's tail.  
So I did.  
My dog wouldn't eat it.  
So I did.  
(5/17/79)

Physical play was also observed, as the four-boy train chugged around the rug, making quiet train sounds (5/3/79), and as children manipulated the toy farm implements on the rug (5/23/80).

Play was also built into the curriculum, as children were encouraged by the availability of space and materials as well as time, to manipulate and create objects related to their class studies, but were not required to be objectively accurate. Fanciful clocks (4/18/79) and miniature books (5/17/79) were made, rocks were dunked in colored water "to make them more beautiful" (5/29/80), and houses fashioned for pet rocks (5/17/79).

The daily provision of large expanses of time allowed children to regulate their own rhythms - rest and activity, concentration and dreaming, solitude and sociability, sustained and postponed interests, objective, analytical thinking and play. It could not be said that these expanses of time caused this self-regulation. Other conditions were needed too: the nature of space and materials, and of children's relationships to content (field), other people (tenor), and the channels of communication and representation open to them (mode) were also
significant. However, if time had been divided into small, timetabled periods rather than into large, indeterminate segments, this self-regulation would not have been possible.

**Summary: First theme for time.** The daily provision of large amounts of time allowed self-regulation, and accommodated individual differences. Children's varying needs for rest and change were met by keeping whole the areas of time within which events took place. In this way, children experienced a family-like use of time, in which, within family custom and parental authority, individuals suited their own activity patterns to their needs.

**Theme 2: The provision of large amounts of time allowed and promoted an experience-based curriculum, in which children had time to act on, process, and represent their experience.** The characteristics of this use of time will be further described, and then be followed by a discussion of their consequences and implications.

Within the recurring events in this classroom, there was time for children to select and act on their experience, according to their own interests, to organize and reflect on this experience through play, talk, writing, and to represent its meaning to themselves. These three phases - experiencing, processing, and representing meaning - were stages along a continuum, rather than self-contained steps, and furthermore overlapped with each other. Experiences were repeated and varied in representational stages. Children continued to experience their environment while talking, writing, and representing it. Processing this experience continued beyond representational phases, as new ideas and experiences were related to old projects and studies. Representation of experience, while associated with formal "projects," could be said
to occur informally within the experience itself, as children talked about, measured, recorded and sketched the bit of environment with which they were engaged.

This general characterization of the nature of the curriculum allowed by this teacher's use of large time segments will now be illustrated. Children's experience and their chance to process and represent these experiences will be discussed in turn, in relationship to the shaping of time in this classroom.

Experiences were often concrete and direct in that children interacted in a sensory, tangible way with their environment. The teacher having structured a situation for this interaction, had "stepped aside", so that children's actions and reactions were their own. In small groups or as individuals, they turned and weighed eggs (4/18/79), tested rocks (5/17/79) and soils (5/28/80), measured shadows (4/18/79) and plants (5/12/80), counted the number of times a ball could bounce in a minute (1/28/80), compared the eating habits of chameleons to toads (5/20/80), and chose and handled books throughout the room, including those written by classmates. Just as the organization of space into small areas encouraged small group experiences, so the organization of time into large, often indeterminate segments made it possible for each child to have his or her own experience. This would have been impossible or very difficult to bring about in short, scheduled subject matter periods.

Children's experiences were often dynamic since there was time enough for phenomena to grow and change over mornings, days, and even weeks. If content experiences had been confined to small, defined time periods, and if theme studies had been planned to begin and end on
definite dates, these dynamic, growing, changing experiences might not have conveniently fit.

Many of the concrete experiences noted above were also dynamic. Examples from life sciences were evident: eggs hatched into chicks (5/4/79), brine shrimp (5/12/80), and praying mantises (5/9/79); larvae become chrysalises and butterflies (5/12/80), and the rat had babies (1/22/80). Experiences also came from the physical sciences: salts dissolved (11/22/80), shadows lengthened and shifted over time and day (4/18/79), and batteries and wires were connected and bulbs made to light up (1/17/80).

Many classrooms, of course, contain plants, animals, and "things of science" which are available for observation and handling over long periods of time. The quality of time in this classroom was distinctive from many others, in the judgment of this observer. It was not just that there was ample time, but that the attitude toward time promoted children's active participation in these dynamic experiences. It was as if children were allowed to focus on the dynamic experiences for their own sake, guided by rhythms of the changing experiences themselves as well as by their own patterns of attention and interest. They did not, however, seem driven by a desire to complete experiences and meet deadlines, but rather concentrated on their present interests.

For example, children observed, talked about and eventually wrote about various plants and animals over forty minutes. The observer's notes characterize this as a "mixture of doing, talking, writing (and also) a mixture of solitary and group activity" (5/20/80). One group observed and wrote about the chameleon, toad, and mealworm. These children had time to develop several lines of thinking and to use
language for a range of purposes - to describe the event, and to relate to each other.

What began as observation of these larger animals ended with careful, patient study of the mealworms themselves, and speculation about what mealworms turned into. The suspenseful, concrete, dynamic nature of the experience (field), its social nature, with both children and teacher participating (tenor), and unconstrained, direct avenues of expression open to children (mode), combined to sustain this experience. Without the provision of this relatively long observation time (with its flexible transition to actual writing), these intellectual benefits of thinking, talking, and writing might not have had a chance to develop. (More will be said of these particular kinds of language use in Chapter 5 below).

Processing of these concrete and dynamic experiences was allowed by these long expanses of time. That is, not only did children have time to experience their environment, but they were given opportunity through talk, writing, play, and re-experiencing to organize and reflect on this experience, and to relate old to new. It was impossible to separate the experience itself from its processing by each child. However, the teacher's actions could be more clearly categorized so that for each theme study the class undertook, there were characteristic activities, planned, led, or promoted by the teacher, which could be said to help children in processing or organizing their experience. These (to be described more fully below) would include charts of pertinent vocabulary, taxonomic, grid-style charts of the characteristics of members of the sets under study (for example, witches (11/14/79), farm animal families (5/9/79), a chart of planets (2/14/80). Less
analytical were the group charts which children were invited to add to (Try My (electricity) Experiment, 1/17/80, Brine Shrimp Observations, 5/12/80, and "What do you want to know about China?" 5/23/79). These encouraged writing, and the abstracting that writing requires, at a point close to experience, during what is here called the processing phase.

The teacher also gave regular assistance to children in organizing their experience through the weekly planning of the newsletter. They recalled as a group and she recorded what the major events of the week had been, and compared what was new about them against what their audience, the parents, already knew. These teacher-led activities are briefly mentioned here in connection with time, which was needed for the processing of experience as well as for experience itself.

Children gave evidence of spontaneously and voluntarily processing their experience. They often did this through talk. Daniel was heard to paraphrase his written rooster report to George (5/20/80). Ted, after watching the teacher retell The Very Hungry Caterpillar (E. Carle, 1969), with figures she had painted, seemed to discover an analogy. The record states: "After the story, Ted commented to no-one in particular that the little caterpillar, the small, beginning figure of the story was like the seed in The Little Red Hen story (5/23/80). Similarly, two children while watching a newly hatched chick stretch itself to full height, arrived at this generalization: "Any chick can be tall. They can stand up" (5/9/79).

Writing also functioned to process and organize experience, as selection and abstraction was made necessary in order to phrase written signs, labels, stories, and scrapbooks. Some of this writing was
required (thought ramblings), some voluntary (Laura's scrapbook discovered through a dishtub interview, 4/26/79, pp. 6-8, transcript, 5/23/79), some individual (popcorn stories after hearing The Popcorn Dragon (J. Thayer, 1953; 4/26/79), and some cooperative (newsletters and group charts).

In addition, children processed experience through play. They handled materials and made things, not so much as ends in themselves, but as part of the process of recreating, recombining, and transforming experience. Rick and Roger's improvised drama "The Farmer and the Giant Chick" evolved over three days. They used construction paper, plasticene, seeds, and other materials, as they made new use of old themes from several class studies: weather, chicks, seeds, and farms (5/19/80; 5/21/80). Children, therefore, processed their experience through many modes — talk, writing, art, construction and drama.

The teacher provided for this to take place both through activities structured by children themselves and through her own structures.

The intention here has been to characterize the variety of these processing activities, or in order to suggest that they did require them, often of an unpredictable nature, and that in fact, time in this classroom was shaped so that they could occur, as an essential part of an experience-based curriculum.

Representation of experience, the third aspect of an experiential curriculum, was also allowed by the division of time into large segments. However, it was somewhat arbitrary to decide where for each child, processing and organizing experience ended and representation began. Probably children's "farm projects" produced over a period of
from one to four days (see Figure 7, p. 245) could be considered representations of their experiences within the farm theme. Yet, for many children, processing and organization of experience continued during representation. Two days after the farm trip, Sean played with the toy farm implements, then painted a picture of a barn with a conveyer belt taking up bales of hay, and finally returned to the implements. This could be said to be a mixture of processing experience and representing it (5/10/79).

Representation thus required time, not only for continued processing of experience but also for the creation of a representational product. In this classroom children were given responsibility for planning their own "projects" their name for representation), and for solving their own technical problems, to be sure, drawing on earlier training the teacher had provided. Under the leadership of the teacher, children suggested different farm projects which could be made (5/9/79, 5/15/80). Children chose from among these suggestions, so that activities underway were diverse in duration as well as in nature. Painted stuffed animals, roller movies, pictures, stories and reports, barn constructions, and dramas were examples of this diversity. Their different lengths of duration were accommodated by succeeding worktimes.

Children planned their own projects and solved their problems working alone or enlisting help. Along the way, methods had to be improvised, mistakes amended, and, occasionally, projects abandoned. Mary and Tika were taped as they planned their roller movie. They explained to the observer that they each wrote the same number of scenes, doing the extra one together "because it wouldn't be fair," "it wouldn't come out even" otherwise. Then they explained: "We're
making a plan for pictures because we don’t want to mess up on the pictures” (Transcript, pp. 231, 232, 5/21/80). Betsy and Deborah started an aerial view of a field with tractor, painting in each plant (5/19/80). This last proved to be too ambitious for them. Their coalition fell apart and the project was put aside for other, separate activities. However, Ted is an example of a child who solved challenging problems involved in making a rather large papier mache calf which could stand up. He worked over numbers of days, with help from others occasionally, and then contributed advice to the teacher who was helping another child. The teacher told the observer about this incident, in which Ted volunteers help:

Teacher: We were bending wires on Friday and putting in a leg (on another child’s papier mache animal). We tried the legs. "Oh, Ted, this will never work. Oh, it is going to be too weak. What can we do?" (Ted) "Oh, I know how to help you. I have an idea." (Transcript, p. 219, 5/20/80)

Another reason why representation took time was that the same experiences were often represented in many modes. Pictures were drawn, constructions made, stories written, dramas improvised, all working with material from the same experience. Stories were written, then illustrated, or art projects were made, then described. Hannah made a large cut-out, two-sided and stuffed horse, then wrote and copied over her story about it (5/10/79). On the other hand, Nat wrote an "alagator" story first, then illustrated it with colored pens. Representation did not always involve writing. After the farm experience, Paul sketched the skeleton of a horse, using an encyclopedia as resource. This black on white sketch was followed the next day by a gray plasticene bas-relief on black of the same subject (5/21/80).
After a shell study, children talked about what they could do at the sea shore, and then pantomimed digging, feeding gulls, bouncing a ball (5/4/79), but with no writing.

Representing experience was, in sum, a lengthy process, perhaps because it was in the hands of the children, who were allowed to plan and carry out their own work. It was also different in quality from the first two phases of this experience-based curriculum. The first two - the experience the teacher provided and the ways she helped children organize their thinking about them - tended to be clearly structured. Children's representations on the other hand, did not always clearly represent their meaning. Their representations diverged from the teacher's clear structure, and from each others', as did their interests, language, and other abilities, and the personal meaning attached to their experience.

Summary: Second theme for time. Daily provisions of large amounts of time allowed an experience-based curriculum, and its three phases, each of which required this use of time. Time was needed for social and individual experiences with a concrete, dynamic environment. Time was needed to talk and think about these experiences. Finally, time was needed to represent their meaning.

Theme 3: The characteristic features of various events were clear, enabling independent, appropriate participation by children. The repeated morning events of this classroom have been described above (pp. 232-242). To review, they were, in their usual order, arrival, rugtime, worktime, recess, clean-up, and lunchtime. Other events incorporated in rugtime and worktime were reading conferences, newsletters, evaluations, thought ramblings, and observations.
To call these uses of time "events" is intended to imply that they are repeated happenings with their own features. The analytical framework for describing events as developed by Frake was used to describe and contrast the etic features of these events, that is, their characteristic interactions, acts, objects, and places (Frake, 1964, p. 112). "Places" have been here extended to include location, position, and orientation of participants in the room (Florio & Shultz, 1979). These events were described as seen by an outsider, according to their external characteristics, rather than in Frake's emic categories of "roles," "routines," "paraphernalia," and "setting," which comprise "scenes" as participants understand these events, (after the etic/emic contrast between observable surface structure and internal meaning, Pike, 1954).

**Clarity and distinctiveness of events.** This analysis of interactions, acts, places, and objects will be applied to the description of events above (pp. 232-242) in order to show them as contrasting clusters of features. That is, each event was characterized by a combination of features which marked it apart from other events. In theory, the clear contrast between events would enable children to identify them, and the behavior appropriate to them. Scanning a list of the characteristic features of two selected morning events (Figure 8) shows that each event is different, even though many features occur in more than one event. Interactions, acts, objects, and places of events will now be compared and contrasted in turn for these shared and unshared features.
<table>
<thead>
<tr>
<th>FEATURES</th>
<th>EVENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTERACTIONS</strong> or &quot;ROLES&quot;</td>
<td>Teacher actively leading, using more formal language.</td>
</tr>
<tr>
<td></td>
<td>Children passively listening, contributing.</td>
</tr>
<tr>
<td></td>
<td>Teacher alone or with small groups and individuals; using informal language.</td>
</tr>
<tr>
<td></td>
<td>Children active, undertaking work, making a range of choices.</td>
</tr>
<tr>
<td>**ACTS or &quot;ROUTINES&quot;</td>
<td>Teacher providing experiences (books, films, objects, vocabulary in context).</td>
</tr>
<tr>
<td></td>
<td>Teacher organizing experience (charts, outlines, lists).</td>
</tr>
<tr>
<td></td>
<td>Teacher directing worktime returning children's papers.</td>
</tr>
<tr>
<td></td>
<td>Teacher's routines are diverse.</td>
</tr>
<tr>
<td></td>
<td>Children's are diverse, and integrated within a range of content and process areas.</td>
</tr>
<tr>
<td><strong>PLACES</strong> or &quot;SETTINGS&quot;</td>
<td>Children on rug together, with teacher in front.</td>
</tr>
<tr>
<td></td>
<td>Orientation toward teacher with variation in details of position, orientation, stability.</td>
</tr>
<tr>
<td></td>
<td>Teacher is inconspicuous.</td>
</tr>
<tr>
<td></td>
<td>There is both motion and stability.</td>
</tr>
<tr>
<td><strong>OBJECTS</strong> or &quot;PARAPHERNALIA&quot;</td>
<td>Materials from teacher and from children are shown, handled, and discussed.</td>
</tr>
<tr>
<td></td>
<td>Paper, pencils, dittoes.</td>
</tr>
<tr>
<td></td>
<td>Objects to be experienced.</td>
</tr>
<tr>
<td></td>
<td>Objects to use in representing experience.</td>
</tr>
</tbody>
</table>

Figure 8. Features of Two Contrasting Morning Events
Children's interactions in rugtime provided the greatest contrast to the other five events, especially in terms of the choices they made. During rugtime, children were passive and responsive, that is, they engaged in active listening, contributed toward plans and ideas, but usually did not initiate activities or solve problems. In comparison to rugtime, children were more active during worktime, newsletter, observation, and thought rambling times. Yet these other events were not identical, as the nature and extent of children's choices varied from event to event. During reading conference time, their choices included which books to read, where to read, and with whom, but not whether to read. During observation time, children could choose what to observe, with whom, where, when to start writing, and how to go about observing, but again, not whether to observe. Once newsletter assignments were made, choices were limited to choice of where to work, and how to divide up responsibility for jointly produced articles. Thought ramblings seemed most constrained, as children wrote alone on a set topic, using set materials - their thought rambling tablets - though they still found their own working places and set their own pace within an extended writing event.

The teacher's interaction over these six events was a mirror image of children's. Her greatest activity and most explicit exercise of authority was during rugtime, when children were least actively responsible. Yet, like children in the five other events, her interactions varied from event to event. Most defined was her interaction during reading conference time, as individual children read to her. Her participation with the children in observing and sharing observations was specific to this event. During newsletter writing, thought rambling
writing, and worktime, she interacted in different ways as she met with individuals and small groups, or tended to other matters. She was inconspicuous; it could be speculated that the nature of her interaction was not a marker for the distinctive character of these events.

Acts - what went on in each event - were distinctive, even if the interaction of participants was not always so. Each event was characterized by a different set of activities. What the teacher and children did and said was distinctive. Rugtime was unmistakable as the teacher actively provided experience (through literature, informational books, films, objects, discussion). She also helped children organize their experience (through listing, chart-making, planning of projects and of newsletters). She gave directions for independent activities to follow, and handed back children's papers. Her rugtime voice was distinctive, differing in paralinguistic and linguistic qualities from her more conversational voice.

What went on in reading conference time was unmistakable too - children reading alone, with friends, or with the teacher. Similarly the acts involved in newsletter writing, from its preparatory planning phase through distribution to take home, were unique. Observations and thought ramblings had similarities in that they were both based on experiences, and were recorded in the thought rambling stenographic tablets. Observations were close to and mixed with experience, while thought ramblings were somewhat removed in time from experience, and carried out in a more solitary fashion. Worktime, the most complex and extended event, was composed of many acts. Many subject areas were involved, and many language and learning processes used. Worktime's
integrated nature makes it difficult to label. The unifying generalization could be that among all events, it contained the greatest diversity of acts, possibly as a result of the scope of children's choices. As children completed the more constrained activities such as observations, newsletters, and thought ramblings, they naturally moved into a worktime period, making their choices of what to do, where, with whom, how, and when.

When looking at objects or materials characteristic of each event, there were contrasts to be noted. The teacher selected materials to be a focus of attention during rugtime— for example, a certain book or collection of books (5/21/80), a rock collection (5/27/80), songs to learn (5/23/80), a map to study (1/17/80). During worktime, however, the entire universe of classroom objects could in theory become a focus of attention.

Distinctive objects were associated with the other four events: books for reading conference time, thought rambling tablets for observations and thought ramblings, and the teacher's outline on the board for newsletter writing. Given their concrete nature, it could be speculated that they were key means by which children recognized these contexts of events, and by which their behavior was supported. (This however, is an inference as to the emic meaning of these objects to the participants, that is, as to their significance as paraphernalia).

Finally, physical place in each event can be compared (place here extended to include the physical characteristics of location, position and orientation of body, and stability in the room). Rugtime was strikingly different because of the configuration of its participants: children were on the rug, loosely oriented to a teacher who was in a
position set apart. This configuration disappeared when worktime and other events took place. The children became dispersed in location, diverse in orientation, and the teacher inconspicuous. Relative stability was replaced by moving about the room. However, in spite of these similarities, each of these four events had its own look. For example, during reading there was less motion than during worktime, and orientation was toward books rather than toward plants and animals, as during observations.

Variability along with the clarity and distinctiveness emphasized above was also a characteristic of these events. Events with their repeated characteristic features varied in detail of actual occurrence (just as every historical event is unique). Events as planned by the teacher varied in both content and form, as did children's behavior in these events. Ruptime, for example, varied in content as it was used for many different kinds of experiences. It varied in form as for instance, on occasion, children faced the east instead of north wall. Reading conference time also varied in form, as it was held at different times of the day, and as the teacher met children in different parts of the room. The substance of the newsletter varied with the past week's doings, and the form with the exact mode of choosing writers.

Worktime, particularly, was variable in content as a consequence of the daily choices made by each child, and of the experiences the teacher had made available - planting seeds one time, weighing eggs on another, and assembling and recording battery, wire, and bulb circuits yet another time. Children's activity depended upon what
they chose to do, how they carried it out, in what order, where, with what materials, and with what friends, if any.

Further, worktime could occur anytime of the day, as long as some planning time preceded it (though planning need not come immediately before). Its length varied too, depending on teacher judgment of the group's needs, and upon externally scheduled events. It could be hypothesized that when other, more centrally organized, single-purpose events such as "thought ramblings" were not present, worktime occurred naturally, and expanded to fill the space. It was the least constrained event for children, since they were in control of their own activity and rhythm, without need for required coordination with others in time and space. They evidently understood its invariant features, which characterized it across differences. The invariant features of worktime could be summarized as the children's self-directedness (interaction), their diverse activities (their acts), their dispersed location and diverse orientation (places), and varied materials used for experiences and representations (objects). These invariant features were evidently perceived through variations, as children were secure in recognizing and acting in these classroom events.

Proposed interpretation of featural comparison of events. Thus, for each recurrent event, there were sets of features which children intuitively recognized in spite of variation, and used to guide their behavior. This interpretation, while not empirically verifiable by these data, is proposed on the basis of both observation and theoretical considerations. It is proposed (after Frake, 1964) that these events with their distinctive clusters of features constituted "scenes"
in that they corresponded to categories that had meaning for children and teachers. Similarly, the interactions described were seen as appropriate "roles" for teacher and children; acts carried out became anticipated "routines"; objects customarily associated with roles and routines became "paraphernalia" with their own symbolic value; and finally, places became "settings" to which participants related physically in their position and orientation (Frake, 1964, p. 112).

(Henceforth, the word "event" will be used with this connotation of "scene").

It is proposed that looking at time as composed of events is different from seeing the day as a one-dimensional line of time, measured off into segments, with self-contained transitions. Events could instead be visualized as circles, each with its central pulling focus, and a day of events as a sequence of overlapping circles, pools of activities around a focus, activities which changed as the focus changed. These familiar events followed each other with a high but not absolute degree of predictability. Variations in sequence and duration of events were perceived as variations, around a dominant pattern of typical order and length, and most importantly, individual characteristics. In Malinowski's terms (1923), each event was a distinctive "context of situation," with its own distinctive features of appropriate language and behavior. Children's recognition was not tied to the clock, but to the cluster of features that clearly distinguished one event from another, independently of the variable features such as position, duration, content, and form.

What evidence was there that children and the teacher saw time as composed of familiar, recurrent events with distinctive clusters of
features? Did such a construct have any psychological validity for the participants? It was not reasonable to expect the children or teacher to verbalize the highly abstract construct suggested here. In their daily life, and when being interviewed by the observer, children talked about who had done what, naming their friends and the projects or activities which they had engaged in. The existence of "scenes" in their minds, that is, of familiar recurring events each with its own cluster of distinctive features could not, therefore, be inferred from what people said, but rather only from what they did.

Children's behavior was here taken as evidence for the reality of events as "scenes." Children did in fact behave in appropriate ways within these events, in spite of variation from one occurrence to the next. Even though, for example, reading conference time occurred in the afternoon rather than in the morning, children showed by their actions they understood the appropriate roles, routines, paraphernalia, and setting for this event. Gatherings on the rug could in practice happen within as well as at the beginning of a morning, and when they did, children sat down, faced the teacher and listened as she (or a child) led.

Not only did children behave appropriately, but they did so with a minimum of direction from the teacher. Their independence in participating in these events could imply that they were able to abstract the salient features of the event - to recognize familiar "scenes," and therefore to know what the appropriate roles, routines, settings, and paraphernalia were. Observation confirmed that children were not dependent upon the teacher for detailed directions at every
step of the way, nor did they depend upon the exact repetition of a daily schedule.

Names of events may have functioned to help children recognize familiar patterns, and to act within them appropriately. These patterns were called up by "reading conferences," "worktime," "observations," as well as by smaller events within the larger, such as "Math folders," "lunch count," and "spelling." Children could put appropriate behavior into effect with a minimum of direction.

Children's ability to recognize invariant events in their variant forms would seem to be another example of the inferential nature of human learning. Upon sampling the features of the event, children recognized and predicted the nature of the event and of their own role. Such a learning process was no doubt facilitated by the high degree of redundancy in every aspect of the curriculum, in both content and form. Especially significant may have been the redundancy that second graders experienced. After a year in this classroom they already had knowledge of appropriate behavior, and could act as direct teachers or as models for the younger group.

**Summary: Third theme for time.** It could be said that children who learned through this process of inference a repertoire of events would be able to participate independently within them. They would be able to hypothesize their own rules of appropriate behavior because of the clarity of focus and distinctiveness of such events. Their teacher's structuring of time into familiar but varying events enabled them to act on their own within the events, responding to variety while being secure in stability.
Theme 4: Clearly-structured events were carried out flexibly, with variation in position in the day, in duration, in content and form, and with flexible transitions between events, allowing flexibility in children's behavior. Variation in events has been discussed above, in connection with a discussion of their invariant features. Variation in position and duration of repeated events was characteristic of worktime (Figure 5, p. 241). Variation in form and content of events (pp. 264-265) could be further illustrated by showing that the form (or how events were structured) varied as did the content (or what the subject matter was). For example, the form of spelling groups changed as they were sometimes held in the reading center, sometimes on the rug. The content of lessons changed as actual words and illustrative sentences changed from one time to the next. Worktime varied in content as different themes were studied at different points in the school year. It varied in form or structure of children's activity. Sometimes children contributed optionally and in their own way [to the group island mural (1/17/80)] and sometimes they followed a more detailed guide [as when experimenting with and recording "mystery powder" reactions (5/23/79)].

Theme 4 proposes that these variations are accepted by participants as falling within a predictable pattern of events. This flexibility in events did not seem to disrupt the overall sense of redundancy, familiarity, and order, which dominated.

Variation appeared between as well as within events, in the form of flexible transitions. Flexible transitions were seen in the areas of overlap between events, as suggested by the metaphor in Theme 3 of events as pools of activity around a central focus, overlapping with
preceding and following events, each with its focus (p. 270). At every point in the day, as events succeeded events, transitions took place with a lack of uniformity. It was as if individuals adjusted their behavior to the next event in response to their own tempo, rather than in conformity to an external requirement of uniformity. This raggedness is not intended to imply slowness. On the contrary, the time it took for changing from one event to the next was not long in absolute terms. Transitions were flexible, but relatively rapid. Examples will now be given of flexible transitions throughout the morning: to the rug upon arrival; to worktime, reading conference time, thought rambling, evaluation, and newsletter writing times; to recess; back to the rug for sharing of work; and to clean-up and lunch.

From arrival to the rug, and from rug to worktime. The day began with a gradual but not prolonged gathering on the rug. From the rug to worktime, or to reading conferences, thought ramblings, observations, evaluation and newsletter writing, again there was a gradual getting settled. Many entries were made by the participant-observer, which documented the gradualness of transitions to new activities, for example, to reading conference times from the library:

9:30. Children return from library. Smooth transition to reading, as gradually they find places, friends to read with or beside. Some read alone on stools, in chairs. (Again an indication of homelike, familiar quality, where transitions to activities are staggered, not lockstep). (11/20/79)

Transitions to sharing of observations:

Children continue to draw (Sam) or to write (Ted) while others are reading [their observations]. (11/20/79)
Transitions to writing thought ramblings about their islands, after planning them on the rug:

Children's choices [of writing material]: booklet, paper, thought rambling tablet. Some slower to start than others. (1/24/80)

An early generalization was born out by subsequent observation:

(Natural transitions another theme. Reading is undertaken gradually, as children finish with something, then get started reading. Not that they drag their feet. It's just that there is no crisp boundary. John is still writing article after teacher has announced reading conferences.) (4/27/79)

Transitions to recess. The main events of the morning - rugtime, worktime, reading conference times, observations, newsletter, evaluation and thought rambling times - were interrupted daily by recess, a fifteen minute period spent indoors or out, depending on the weather, from 9:50 to 10:05. No bells rang, but children noted the time and responded accordingly. Children sometimes voluntarily switched the lights as a signal to the others (4/27/79). On outside days, children left the room when ready with varying degrees of eagerness and haste, some lingering to continue what they were working on, or to converse with the teacher and others (as they did when talking about the newly introduced theme of rocks with their teacher (5/27/80). That children were not "living" for the recess bell was exemplified by this excerpt from the notes:

9:45. Outdoor recess. Salli says: "Oh, recess!", surprised as she looks up from her math. Some children leave gradually for recess. Most appear to be staying. (2/14/80)

Upon returning, they hung up their coats in the lockers, and resumed what they were doing directly. The recess event was thus carried out by children; the teacher's role was one of general oversight, with
occasional encouragement to laggards she may have felt needed to be outdoors. Sometimes children did in fact leave for outside recess; other times were noted when children seemed to have the choice of whether to stay in or go out.

On rainy days, worktime was apt to merge into recess with little to mark the change except the clock. Games, blocks, and ching chang ropes were brought out, dramas organized and played out, but many of the worktime activities underway continued. One rainy Friday, after restroom trips, three children began a drama, four resumed their farm projects, four played with model farm implements on the floor, one kept on with his math, one when invited to join the drama said, "O.K., but I'm doing my work first," her work being her newsletter article. She and her partner did, in fact, continue writing their articles (5/23/80).

Rainy day times after lunch were spent in the classroom also, and had the same quality as a morning indoor recess, although the activity was more vigorous and the noise level higher. Dramatic play spilled out of the reading center as people were taken off to a "jail" across the room with gusto. Small groups built with cubes and blocks. Farm implement play led to construction of cardboard block garages. One child drew, two played hangman at the chalk board. One child sat in the midst of this activity writing what he called "An Informational Book about the Booty (body)" (5/23/80).

Though these examples were drawn from only two rainy recesses, and do not account for every child, they do illustrate the lack of sharp distinction between the activities of worktime and recess, or more fundamentally, the lack of difference between work and play. They
also illustrate the flexibility in timing of recess as well as in the use of that time.

**Transitions from worktime back to the rug.** When it was time to gather for a whole group sharing - of thought ramblings, observations, or books the children had written - the same kind of unevenness could be seen. There was elasticity in the movement of the group, as individual children were slow to join a new gathering, continuing with their present occupations. During the sharing of island stories, for example, a girl stayed at the window table finishing hers, then got up to staple it into its cover, and joined the others (1/24/80). On another occasion, three children continued to work on their chameleon observations as others read theirs in a group (5/12/80). Another observation sharing time was noted by a university visitor to begin before everyone had gathered (5/28/80). After a session when some children had been writing and sharing books on China, two children were seen to be working on their "China books" as the class was listening to the student teacher read a story on another subject (5/23/79).

**Quick transitions.** On the other hand, when transitions had consequences for corporate life in room or school, they were made quickly. For instance, children left on time for lunch, library, and art. Small groups which were called for spelling, math, and handwriting during worktime came quickly though inconspicuously. Individuals went immediately to the teacher for their reading conferences. Going home at the end of the afternoon, in contrast, resembled arrival and recess times, in its gradualness and lack of uniformity. The impression was that when it was important, transitions could be rapid, and hence variation in children's behavior reduced but not eliminated. It was
as if speed of transition was the goal rather than uniformity of behavior for its own sake.

**Interpretation of the flexibility theme.** It was observed that time, though shaped into clearly differentiated events filling large areas, was used flexibly. This was similar to the flexible use of space, within a clearly structured material environment.

Flexible beginnings and endings of events, and flexible activity within events, have been described. These contrast with the clarity of the focus of each event. It could be hypothesized that children's unevenness in conformity to boundaries of group activities (no doubt minimized by preservation of large extents of time), was evidence of their social and cognitive approximation of an idealized sociolinguistic behavior. The flexible use of time within and between events as planned for by the teacher, allowed for and accepted children's approximations, and overlooked any raggedness in children's matching the rhythm of the group. This acceptance of children's individual rhythms could have been analogous to the acceptance by parents of preschoolers' approximations, both in speech and in behavior. Parents do not expect fully formed sentences from a two year old, nor are they surprised when young children speak out in church or smile warmly at a stranger in the supermarket. So this flexible use of time was able to absorb lack of precision as children were still learning to fit their rhythms to the rhythm of the group.

Finally, a shaping of time which focused on the events, and on the ongoing interests of the moment instead of on children's success or failure to coordinate with events, precluded attention being paid to individual approximations. These were taken for granted, rather than
being featured positively or negatively. Children who easily fit in to the general scheme were not given notice for their success. Children’s fitting or not fitting into the schedule seemed to be a neutral feature. This lack of focus on the nature of children’s approximations could be viewed as analogous to parental focus on correctness of content rather than form of children’s early language (Cazden, 1969).

Summary: Fourth theme for time. This theme emphasizes the flexibility with which clearly-structured events were carried out. Flexibility was seen in the variations between repeated events, and in transitions between events. Flexibility, like provisions of large amounts of time, allowed children to follow their own rhythms and to develop their experiences, within varying events whose invariant features were familiar, allowing independent, self-regulating participation.

Summary of four themes for time. These four themes have been elaborated in order to suggest a connection between the way time was used and the kind of life lived in this classroom. The kind of life in this room determined the meanings shared by its members, and these meanings in turn gave rise to certain uses of language (and other kinds of symbolic and communicative behavior). Behind both language use and classroom life were the teacher's long-range and immediate decisions which shaped the use of resources, in this case, of time.

The point of view has been that the teacher's use of these resources did not determine, but allowed certain ways of living. The shaping of mornings (and days) into clearly structured, distinctive events, occupying large amounts of time, had consequences for this life. These events were long enough so that children were able to set their
own rhythms and modes of activity, and to meet their own needs in a family-like manner. The length of events allowed an experience-based curriculum since it provided time for experiencing, for processing experience, and for representing it. Events were also distinctive as well as long. The distinctiveness of their patterns enabled children to infer their invariant characteristics and to act independently and appropriately within familiar, repeated contexts. The flexibility within and between events again allowed a family-like self-pacing, as children participated in these understood group events according to their own inner rhythms.

Summary of Themes for Space and Materials, and for Time

The teacher's shaping of the physical resources of space and materials, and of time, has been described and analyzed, and four themes for each have been formulated. These will be summarized together.

First, a family-like way of living was encouraged by the use of small but specialized areas, domestic as well as institutional furnishings, accessible materials, and large time segments. Within this framework children could regulate their own use of space, materials, and time, including whether to interact with others.

The second theme for space and materials, and for time, stated that provisions of concrete, dynamic, and accessible materials, and provision of large amounts of time allowed and promoted an experience-based curriculum. Direct sensory experiences could be processed, socially and individually, through talking and reflecting, and could be represented in varied, personal ways.
The third theme emphasized the clear, understandable organization of these resources of space, materials and time, which enabled children to participate in activities independently. Areas of the room and events of the day and week, though varied in detail, were distinct and familiar enough so that children could act appropriately and independently.

The fourth theme, in contrast to the clarity of the third, emphasized the flexibility which characterized the actual use of space, materials, and time. Clearly-organized space and materials were also adaptable in nature, and were used flexibly. Clearly-organized events were varied in position, duration, content and form, and were separated by flexible transitions. This flexibility and variation did not, however, disrupt the overall clarity of order.

These themes were derived from observation and interpretation of physical patterns which characterized the setting of this study. The physical resources of space, materials, and time constituted the totality of what the teacher had to work with. Through their patterning, she expressed her philosophy concerning content or subject matter (field), interpersonal relationships (tenor), and language and other means of communication and representation (mode). The nature of field, tenor, and mode in this classroom determined the kind of life and meanings its members shared, and the kind of language (and other symbolic and communicative means) used. Or, in simpler terms, the nature of the context was assumed to determine the language used within it.

The first section of this chapter has therefore described the physical setting in terms of the teacher's use of space and materials, and of time. In this second section, the teacher's shaping of content,
interpersonal relationships, and language use will be analyzed in terms of field, tenor, and mode. The goal will be to characterize the "contexts of situation" within which language, especially writing, occurred.

An Analysis of the Context: Field, Tenor, and Mode

Definitions

As discussed above, the terms field, tenor, and mode were used by Halliday, McIntosh, and Strevens (1964), and by Halliday (1974, 1975), to describe dimensions of the context, knowledge of which would allow prediction of language used within it. Halliday defines these terms as follows:

- **field of discourse**: the nature of the activity, and subject matter
- **mode of discourse**: the channel, and the part played by language in the total event
- **tenor of discourse**: the role relationships among the participants (1974, p. 54).

The terms field, tenor, and mode, as used in this study, maintain these connotations, but have been given classroom or curricular meanings or emphases. **Field** as used in this analysis stands for the ways in which children experience content or subject matter, that is, the ways in which they encounter the world. **Tenor** includes role relationships, but takes in the general shaping of interpersonal relationships in the classroom. **Mode** is extended to include non-linguistic as well as linguistic communicative and representational means.

These three dimensions were seen by Halliday to be interdependent. They operate together to determine the kind of language used: "... in order to predict the interesting and important features of the language that is used we need to characterize the situation in terms of all
three variables in interaction with each other" (1974, p. 52, emphasis added). In this study, examples of this interdependence will be given. For instance, if the field of discourse is concretely present, the mode of language can be understood even if implicit or context-bound. This informal, implicit mode, however, is possible only if acceptable or permitted by the tenor of interpersonal relationships.

The rest of the chapter will characterize each dimension of the context of this classroom beginning with field, the teacher's shaping of content as experienced by children, following with tenor of interpersonal relationships, and concluding with the modes of communication and representation available. Evidence for interdependent connections between these three will also be given.

Each dimension will be characterized in terms of a distinction drawn from several sources, between the familiar and the new. This distinction appears as a central theme in Rosen & Rosen (1973), Donaldson (1978), and Bernstein (1971). In their view, effective schools provide links to familiar ways of learning and living, and foster shared experience as a basis for a family-like community. At the same time, they extend children's experience beyond the familiar, and introduce them to new ideas, greater social diversity, and more formal, abstract, language and thought.

The same distinction is made in studies of child language development (Bruner, 1977; Cazden, 1979; Scollon & Scollon, 1979; Shugar, 1978; and Wells, 1979, et al.). The adult shares the young child's experience, and so is able to predict the child's incompletely expressed meaning. Building on this meaning, the adult accepts and confirms the familiar by filling out the child's topic with a comment. The child's
meaning is thus scaffolded by providing the needed form. Pressure toward new meanings and new forms is felt as the supporting scaffold is changed, encouraging the child to use new linguistic means.

This distinction between familiar and new will be used as a framework for examining the teacher's shaping of the context. Each dimension of the context will be analyzed in terms of what the teacher did to confirm the familiar, and what she did to connect the familiar to the new. To restate the assumptions underlying this analysis; the teacher's shaping of field, tenor and mode and her balancing of the familiar and the new, created a context which was characterized by certain meanings shared by the members. These meanings, in turn, gave rise to certain language uses. The first dimension, that of field of discourse, will now be discussed.

**Field of Discourse: The Shaping of Children's Experience with Content**

**Familiar aspects of the field of discourse.** In this classroom, content was usually familiar to children, and was experienced in familiar ways. It was characterized as follows:

1. Here and now content was typical of this classroom.
2. Redundancy, repetition, and interrelatedness of topics, ideas, themes, and studies were also typical.
3. Integration of content across disciplinary boundaries was another familiar characteristic of the field of discourse.
4. Content was encountered actively and purposefully.

1. Here and now content was typical of this classroom. Concretely present materials were available to be experienced physically, at a sensory level, as has been described above in the second themes for space, materials, and time (pp. 207-220; 250-258). Table 3 (above, p. 191)
lists concrete experiences available in small areas of the classroom, within the categories of animals, plants, physical sciences and books - for example, butterflies, sprouting seeds, batteries and bulbs, and small book collections accessible for handling throughout the room.

2. Redundancy, repetition, and interrelatedness of topics, ideas, themes, and studies were also typical. This increased the familiarity of content. Many identical or similar experiences were available over the two years children spent with this teacher. presumably giving them many chances to abstract generalizations common to all. Not only was content redundant, so also were ways of studying it predictable. Redundancy characterized a) the events and routines which occurred from one year to the next, b) theme studies as they succeeded each other within a year, and c) experiences within theme studies.

a. From one year to the next, there was redundancy in theme studies, both in content and method. Second graders were exposed for two years to many of the same ideas, experiences, and activities. First graders, new to this content, could learn from second graders.

A survey of theme studies as recorded in the participant observation notes and weekly newsletters during April and May of two school years shows the redundancy of themes and repetition of experiences from year to year (Table 5). This is not to imply that there was an exact repetition of the curriculum each year. Some studies occurred only once (for example, the China study), while others repeated in variant forms (for example, the "farm projects").
<table>
<thead>
<tr>
<th>Topics of newsletter articles over two months</th>
<th>1979</th>
<th>1980</th>
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<tbody>
<tr>
<td>Seeds</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Plants</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Garden</td>
<td>x</td>
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<tr>
<td>Chick eggs and chicks</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Caterpillars and butterflies</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Praying mantises</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Farm: animals, farm trip, farm projects</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Visiting animals: rat, boa, dog in 1979</td>
<td>x</td>
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</tr>
<tr>
<td>garter snake, chameleon, lamb, kid, tadpoles in</td>
<td></td>
<td></td>
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<tr>
<td>1980</td>
<td></td>
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</tr>
<tr>
<td>Rocks, with fossils, dinosaurs in 1980</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Crystals</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Time (in January and February, 1980)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Shells</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Weather</td>
<td>x</td>
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<tr>
<td>Brine Shrimp</td>
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<td>x</td>
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<tr>
<td>Caldecott projects</td>
<td>x</td>
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</tr>
</tbody>
</table>

Source: Newsletters for April and May, 1979 and 1980
The teacher explained her intention to vary the emphases within the curriculum from one year to the next, so that, for instance, in the first year of this study, animals were stressed, and in the second, physical sciences—magnets, electricity, and space (1/22/80). She seemed to think of children's curricular experiences as encompassing two years, noting that having children over this time made a difference: "I basically know what I've done with these children" (Transcript, 5/28/80).

Other comments also revealed the teacher's sense of history and continuity from year to year, into which she was incorporating these new children. For example, the student teacher had introduced roller movies as a way of representing experience, and Mary was sharing hers with Mrs. Bridges. She commented enthusiastically, adding, "It is hard to believe that we could be in Mrs. Bridges' room for two years and never done a roller movie. We used to do them all the time" (Transcript, 5/23/80). When a boy shared his large, cut-out stuffed paper horse, she remarked, "That is the neatest horse I have ever had in my room, in eleven years of teaching. It's the biggest one too" (5/23/80).

b. In addition to redundancy from year to year, there was redundancy from theme to theme within a year, both in manner of study and in content. Thus, for every new theme studied there were certain standard approaches which children could expect. Children's books were always accessible, placed near the center of an activity, on the chalk tray, and/or on the display table. Children and teacher collaborated in creating a display of theme-related materials on this table, contributing objects, books, drawings, writings, and charts. For each theme
there was a listing of vocabulary, usually on a paper cut in a shape related to the theme; thus, chrysalis, pupa, and larva were written on a butterfly-shaped paper.

Similarly, content was related from theme to theme. The student teacher articulated this relationship in explaining that the time theme then under study would continue as a strand in the seed and egg themes to come (4/18/79). Continuity and redundancy was also noted (though never voluntarily articulated by the teacher) in the series of overlapping experiences and theme studies which were related to birth and growth. Within a few months, there were many such events: baby rats were born, chicks hatched, brine shrimp eggs developed into brine shrimp, praying mantises appeared out of a papery nest, larvae metamorphosed into chrysalises and then into butterflies, a baby brother visited, and a trip was taken to the farm where growing animals were seen (from 1/15/80 to 5/14/80). The provision of these multiple examples of birth, growth, and development, (which children had space, materials, and time to experience), gave them opportunity to compare and contrast. They could infer general patterns common to all - for instance, the fact that all organisms pass through stages, from immaturity to maturity - and they could infer differences in these patterns - for instance, that some organisms metamorphose, while others grow without changing form.

Looking from a more general vantage point, themes of plant growth could be related to these animal growth themes, and even more generally, biological growth to inanimate phenomena such as crystal growth.

There was no evidence that these generalizations were drawn, nor that they were formally articulated. The intention is rather to
suggest the possibility that multiple experiences with redundant content would make it easier for children to abstract their own (albeit tacit) generalizations.

c. Experiences within a theme study were also redundant, so that the same content was available through related but different experiences. The implications could be that some children were reached better through certain kinds of experiences than others, and that all children benefitted from being given several opportunities to internalize ideas underlying a body of content.

For example, initial experiences within the rock and mineral theme included examining and talking about collections of rock and mineral samples, comparing their color, hardness, texture, and so on. The student teacher then read Everybody Needs a Rock (by Byrd Baylor, illustrated by Peter Parnall, New York: Scribner, 1974), and children followed by exploring their own school environment and starting their collections. Then they organized their rocks, weighed them using a balance, and tested them. Samples, collections, objects made of rocks, together with pictures, charts, and books were gathered on the display table. Rock and mineral books were there as well as on the bookstand. Children's original books were clothespinned to rickrack above the display; Polly's "Rocks and More Rocks" was there. Some children made homes for their rock friends, showing that imaginative as well as objective, scientific representations were allowed.

Thus, the content ideas inherent in the rock and minerals theme were redundantly available to children through these varied experiences and representational possibilities. They learned through looking, touching, and talking as samples were passed around and held, felt,
and discussed with friends. Their experience was social as they contributed to the display table, and individual as their own, varied representations were accepted (5/17/79).

The island theme furnishes another example of redundancy of experiences within the content of the theme. One morning, (1/17/80), the teacher made a sketch map of three islands, on which children could record places and happenings from the book she was reading to them (Elmer and the Dragon by Ruth Stiles Gannett, New York: Random House, 1950). She helped them organize their memories of the book by listing, in three categories, "Things which would help us identify Wild Island," and the other two islands. She drew out both ideas and language from them, using terms in context such as scale. She told them they could each decide which features needed to be added to this group map, and could make them in the right scale.

Several days later (1/22/80) the teacher and children reviewed who had made what on this group map, and looked at a second map the teacher had put up to be used to "keep up with the story." She used this opportunity to develop the words coastline and symbol.

Each child had also begun to invent his or her own, imaginary island, including its name, its flag, its language, its rules, and its people, their food, games, and habits. Children were invited to suggest symbols which could stand for tree, house, mountain, church, and so on. Their island invention and construction proceeded in several media. Two days later, they watched a filmstrip of The Little Island (G. MacDonald, illustrated by L. Weisgard, Garden City, New York, Doubleday, 1946), and followed it with a discussion first of the story - what was on the island, who came to the island - and
then, after a second viewing, of more abstract, inferential questions - what was an island, where could this island be and what evidence was there about its location. After the filmstrip they wrote in their thought rambling tablet, about "the island you have created. Write about your island. Think about what you're going to have on your islands. Some are lucky. They've finished with islands..." (i.e., they will know what to write. For others, having to write may have helped them decide on these features) (1/24/80).

The island study is thus another example of redundancy within the content of a theme. The actual, initial experiences consisted of the teacher-read book Elmer and the Dragon and of the showing of the filmstrip The Little Island. However, the discussion of the islands in the story helped children to organize their thoughts about islands in general; that is, it helped them develop concepts and vocabulary for islands (and for societies on islands). Their own constructions of and their talk and writing about their own islands could be assumed to reveal their internalization of these concepts. The redundancy in these island experiences derived not only from the related experiences of hearing a story and seeing a filmstrip, but from thinking about and organizing their ideas through discussion and through use in their own projects.

Both themes make clear that initial experiences were only one source of redundancy. As important was what the teacher did to help children clarify and extend ideas through talking and writing. For instance, when the teacher helped children make a group chart of animal families, with the mother, father, and babies of each kind illustrated and named, she helped them to see new relationships in
familiar content (5/9/79; 5/12/80). A similar but more complex chart about characteristics of witches helped children sort out common features of witches in stories they had heard, i.e., as the chart stated, "the name of witch, broom, cat, spells, home, cauldron, pot, what witch was like, clothes" (11/14/79). The stories they had heard were thought about again as these characteristics were identified and recorded. Weekly newsletter planning provides a final example of the teacher's action in helping children order their experience. As children recalled what had happened over the past week, and the teacher wrote it down, their experience was reviewed, while being given an objective and ordered shape. Each item recorded on the board required that the salient facts be recalled and summarized, and that the needs of the audience be considered. What did the parents already know about their chicks? What did they need to include in their article (4/27/79)? Thus, these examples illustrate redundancy which helped children order their experience through repeated content, and through routine approaches.

A further kind of redundancy was found in the repetition of methods children used to represent their experience. When children were asked to suggest what they could make for their farm projects, they remembered other things they had made: puppet shows, as in the witch projects; information books or reports, as in their study of weather; a pinata, as they had made in December; and working with papier mache as in earlier book extensions (5/15/81). (see also pp. 213-217).

3. Integration of content across disciplinary boundaries was another familiar characteristic of the field of discourse. Children's
experience was whole; they encountered their environment through sensory, concrete experience as they had in preschool years.

When studying time, for example, children used several processes and explored several content areas. Their experiences included timing activities. "How many bounces can you do in 15 seconds?" Children asked each other such questions, and recorded and graphed the results. Time words—second, minute, hour—were listed on the board. A chart had been made of activities which could be done in 15, 30, or 60 seconds. Real and play clocks of various kinds were available for examination and manipulation. Books on time were placed together on the display table and elsewhere. Children measured each others' shadows at different times of day, and recorded this changing pattern on the playground backtop. The flagpole's shadow was similarly observed and recorded, and relative lengths estimated by pacing. Sundials were made and put into use. Decorative clocks in various styles were improvised at the art table. Children made booklets of their own daily schedules, and time lines of events in their own family history. One child showed a developing (if unarticulated) concept that units of measurement varied in size with the magnitude of that being measured. He explained to the observer that these booklets told about a day whereas the timelines showed years (4/12/79; 1/28/80).

Experiences with time, redundant and concrete, were thus also integrated, involving use of language and mathematics processes—reading, writing, estimating, measuring, and counting. They also involved the subject matter areas of social studies and science, and such concepts as historical time, life spans, and changes in ways of
measuring and recording time (to name a few). These concepts were not formulated nor labeled as belonging to social studies or science. Children's focus was on the theme of time, which, while broad enough to implicate all branches of knowledge, was concretely embodied in these integrated experiences.

4. Content was encountered actively and purposefully. The last familiar aspect to be identified follows from the first three. Content which was concretely present through many redundant, integrated experiences was encountered actively, as children pursued their own purposes. Thus the familiar, active manner of early childhood learning was expected and accepted. In early childhood, babies and preschoolers are impelled by their own purposes. Similarly, in this classroom, children's self-motivation was encouraged and built upon, and their own purposes used to generate their activity. While building on natural motivation of children, the teacher did influence these purposes by choosing experiences and activities she predicted would be consonant with their natural ways of learning.

Active learning by children, while carrying out their own (or "taken on") purposes, has been implied above in the discussion of the experience-based curriculum allowed and promoted by the provision of concrete, accessible materials and large amounts of time (pp. 207-220). Additional documentation comes from evidence that children were actively pursuing their own interests, whether self-initiated or taken on as their own from the teacher. Much of this evidence rests on inference from verbal and non-verbal signs of feelings and attitudes, as recorded in participant-observation notes or on audiotapes. Examples will now be given of each kind of purposeful activity: of a) self-initiated
activities, and of b) activities initiated by the teacher and taken on as their own by children.

a. Children initiated their own activities. They were observed to be deeply involved in projects they themselves had devised. Caroline copied the words of a book on seeds verbatim, with evident satisfaction. The teacher expressed surprise since copying was not typical of Caroline (4/18/79, 4/19/79). Mary showed the observer a story about a chick, written at home, and explained the problem she was having to replace a missing page. She was persistent in working this out, even though it meant recomposing one page, and recopying another (5/4/79). Evan sat down in the midst of rainy day recess play and wrote an "Information Book about the Booty" (i.e., body), saying, when questioned by the observer that "I might as well write it now," which he proceeded to do, with concentration (5/23/80).

b. There are also many examples of children who seemed involved in activities which the teacher had instigated. After reading her China story to the observer, Betsy was asked how she got the idea to write this book. She answered: "Most people are doing books, and we're talking about China in our room and I wanted to make a title of my book about China" (Transcript, 5/23/79). Next year, Betsy was seen at the art table, in the process of composing her island story, a requirement of each child as described above (p. 286). Notes say that she wrote steadily, subvocalizing as she wrote, paused and reread occasionally. Her friend Polly's request to see Betsy's previously finished picture "does not derail her writing; she gets out her picture and puts it hurriedly into Polly's hands..." (1/22/80). Betsy's purposes and active
involvement were so strong at that moment she was not even distracted by the possibility of admiration.

Notes also record Steve's excitement about his "land," that is, the island that each child made, or had to make. Sean was also deeply involved in his island, and talked to the observer at length, using his unfinished island construction as basis for an evolving narrative about its main character. This psychological, linguistic, as well as physical structure was Sean's own creation, which he was in the process of actively developing, although his experience had been brought about and shaped by the teacher's actions (1/24/80). He had taken on the teacher's purposes as his own.

Children's language reveals this involvement. Ken's use of I and we shows he has adopted his teacher's plan. Ken greeted the observer with the comment that "I got to get to work on my popcorn book. We're going to make a play" (4/26/79). Likewise, Mary's use of an affectionate diminutive showed that she was psychologically close to and involved with the content of a study of plants, as shaped by this teacher. Speaking of the plant she is tending, she says to the observer, "Poor little guy. He fell over" (4/27/79).

A final example shows that groups as well as individuals took on the teacher's purposes as their own. Eight children worked with the student teacher, in planning a backyard garden, using reference books and taking turns writing the names, planting depths and distances apart of vegetable seeds on rows drawn on a large sheet of paper. This plan was to be the basis of a real garden, a project of the class and of their teacher (4/26/79).
These familiar aspects of the field of discourse allowed children to experience content in familiar ways. First, content was often physically present in the setting, rather than removed in time and space, or accessible only through books. Second, many experiences, similar both in content and process, were provided over a child's two year experience in this classroom, and consequently children had many chances to abstract their meaning. Third, children encountered content as it occurred, in its natural integration rather than as organized into discrete disciplines. Language was thus used along with mathematics in broad studies involving literature, science, and social studies. Finally, children explored this content for their own purposes, or those they had taken on from the teacher. They were involved in what they were studying.

New aspects of the field of discourse. Not only did the teacher build on familiar aspects of content, she also extended each of these toward what was new. Each familiar aspect discussed above will now be reviewed for its connection to the new. For in spite of this analytical attempt to separate and contrast the familiar and the new elements of content, in practice these elements existed on a continuum. They were connected by the teacher's scaffolding action which built on what was familiar, using it as a base from which to reach toward the new. Each of the familiar characteristics was thus modified:

1. Here and now content was stretched to more removed times and places;
2. Repetition and redundancy was not exact, but rather each event was varied and slightly novel or unpredictable;
3. Integrated learning was used to lead to a recognition of more formal, abstract categories of knowledge;

4. Active, direct, sensory learning by children to explore their own purposes was supplemented by more abstract, less physical ways of learning.

Each of these novel characteristics will now be discussed, and the teacher's scaffolding actions in connecting familiarity and novelty described.

1. Here and now content was extended toward more remote times and places. When content was removed from the present, the teacher maintained connections with the familiar through some other aspect of the field, or by using a familiar tenor or mode. Examples of these connections now follow.

A story of Benjamin Franklin was read to children on his birthday, January 12th. This subject matter was obviously removed from the present context (except as concretely embodied in the book-as-object). Children were gathered on the rug, listening and participating in what was essentially a language event (rather than an active exploration of the environment accompanied by language). An examination of the transcript of the Benjamin Franklin lesson shows that the teacher made connections to abstract new content — a long ago, far away historical person — by referring back to familiar aspects of children's shared experience. She opened by asking children to remember their own recent discussion of electricity. She did not mention it, but there was an electricity area in the room, furnished with dry cells, bulbs, switches, and wires, where children had already been devising their own experiments. That morning, she had put up a blank paper for recording those
experiments in diagrams and words, headed "Try My Experiment." It could be assumed that her reference "We've been talking about how people make electricity" called up this here and now experience:

Teacher: What have we been talking about this week? Mary?
Mary: Electric ...
Teacher: Yes. We've been talking about how people make electricity. And I was thinking that probably people wonder how electricity was discovered. And I was thinking, oh! I'm going to share a story today and the story is about a very famous person...
Children: Oh, oh, oh yeah, etc. (showing recognition)
Teacher: ... a person that did an experiment with electricity. I looked at the calendar and it is January 17. I looked and it said Benjamin Franklin's birthday. So I thought isn't that a coincidence! I was going to share about him anyway... One experiment that I always thought was kind of funny - he wanted to see if he could invent something that would help him swim. His invention included a kite. He put his kite up and then he got into the water and he let the kite pull him around in the lake. The kite wasn't really pulling him around. What was?
Children: The wind.

This paraphrased introduction was given in expressive tones, varying greatly in pitch and loudness, and conveying surprise and amusement at the coincidence. Her reference to "people" in her second utterance meant the children themselves. The kite incident was not only easily visualized, but also humorous.

When the teacher discussed Franklin's actual experiment, she referred again to children's experience:

Teacher: What happens when electricity strikes a tree or a house? What does it do?
Child: Probably catches on fire.
Teacher: Yes, it catches on fire. It electrocutes it so the tree, if you would see a tree that was struck, a telephone pole or a house, it gets this glow around it.

Her use of "you" put children on the scene in their imagination. The teacher then read from the book, but broke away from the text to ask:

Teacher: Why do you suppose he chose iron? ... like a magnet?

thus referring back to the immediately preceding magnet theme and its concrete experiences.

This Benjamin Franklin story has illustrated the extension of content toward new times and places. The content was abstract, dealing not only with a person removed in time and space, but also with the scientific concept of the conduction of electric current through the air and a silk cord. The teacher mitigated its abstractness by connecting the story to herself and her own feelings about it, and to children's present and past experience and knowledge of magnets, electricity and lightning. She used personal relationships, not an essential part of the content (tenor), and allowed informal language within a more formal presentation of material (mode). She also called up children's concrete, active experiences with related content (field), thus providing redundancy (Transcript, pp. 9-10, 1/17/80). All of these connections helped children move from what was familiar to what was new.

Other examples of the teacher's introduction of more remote content will now be given. Such themes as weather, space and the solar system, and time could not be experienced as directly as could brine shrimps and seeds, for instance. The teacher related these new, more abstract themes to children's familiar experience both through her
planning and through her verbal interaction. She planned experiences which were as concrete as possible. Though children couldn't hold shadows, touch clouds, or catch time, they did make observations and measurements of temperature, rainfall, shadows, seconds and minutes. Less direct experiences through informational books, literature, films, pictures, charts and guests, augmented these primary experiences.

The teacher linked new, more abstract content to known content through what she said as well as through the experiences she provided. Many times, this referring back was conveyed by intonation rather than by words themselves. When reading *The Wump World* (Bill Peet, Boston: Houghton-Mifflin, 1970) her emphasis on flag could have referred back to the flag song children were learning that week, as well as to the flags they created for the islands they were making. Her stress on space gave this word significance, and, by hindsight, seemed to point to the forthcoming study of space and the solar system. Her talk of creatures on Wump World "like our own creations" led back to children's islands (1/24/80).

In this next example, the teacher's actual words as well as the paralinguistic qualities of her speech indicate ties to previous experiences which made new ideas understandable. The new idea that many forms of life are similar in early embryonic stages was discussed, along with the idea that in the young of many species, the head is large compared to the rest of the body. The children and the teacher had been looking at the nine-day-old incubating eggs, and reading about what they would look like inside. They remarked how big the nine-day old "fetus" in the picture was. This led to talk about development of other forms of life. Referring to the visit of a baby brother, and
the J-shape of the caterpillars as they began to spin their cocoons,

the teacher said:

**Teacher:** Isn't the eye and the brain even in the human fetus one of the first things to develop? Isn't that right? (asking the observer) If you noticed, when Polly's mother shared Mike, on a baby their head is probably one of the largest things - to the rest of the body, which changes a lot - gets long. Your legs get longer. Your head doesn't change too much. Here is one book up here that shows - I think it is in Egg to Chick. There are three fetus and they show a fish, a chick and a man, a human being, and they all look the same. These are embryos. They are similar, aren't they, in shape? They are in the J shape, aren't they? (Transcript, pp. 29-30, 4/30/80).

Here she recalled two previous experiences, and brought them to this present, new experience.

A final example of the teacher helping children connect new content with old comes from a small group who lingered behind at recess time to talk about volcanoes. Mt. St. Helen had just erupted, and there was talk about the report that some of the ash would circle the globe.

**Teacher:** But there is still some ash that is floating in the atmosphere. They said that eventually it would completely circle the globe, the world.

**Child:** Oh yeah, it is getting a ring around it.

**Teacher:** Yes. We'll have a ring around us... I know we talked about planets and what caused rings around Saturn. Remember? We were trying to figure it out (Transcript, p. 137, 5/27/80).

The planet study had taken place in February, and this was May.

2. Variation and change occurred within redundancy and repetition. In this preceding section, the emphasis has been on the teacher's scaffolding of children's understanding of new content, especially that removed from the here and now context. This next
section will reexamine the redundant, repetitive characteristics (which helped make content familiar), for novel aspects within these familiar patterns. It was shown above that content was repeated from year to year, from theme to theme, and from experience to experience within themes. When this repetition and redundancy is reviewed, however, much variation can be seen. Because repetition is never exact, each event is different, especially those natural events which are "forever new" - trees leafing out, vegetable seeds sprouting, crystals growing. There would seem to be an inherent dynamic quality to many of these experiences. These have a rhythm of development and denouement, as suspense is relieved and surprise revealed. Thus, variation and novelty was noted a) from year to year, b) from theme to theme within a year, and c) within themes. In addition, d) dynamic variety characterized four other aspects of this classroom: experiences with literature, the teacher's verbal interaction, the teacher's planning of activities, and her planning of management routines.

a. There was variation within repetition over the two year curriculum cycle. While there was substantial redundancy between the spring of 1979 and the spring of 1980 (Table 5, p. 282), the fact that there were differences should be noted. Only in 1979 did children study shells and China; only in 1980 did they study brine shrimp and weather.

b. There was also variation from theme to theme within a year, as the teacher introduced novel content and experiences. The succession of themes was marked apart by change and contrast while still being tied by threads of similarity.
One way of noting the pattern of constant change was to review initial entries in the participant-observation record on "what was new in the room," as noted from visit to visit. Changes in the room were often documented, as in these examples:

**New in room:** rocks and minerals on display table, with related books, pictures, charts of difference between three kinds of rocks. Samples of rocks and minerals, rock collections brought in from home. (5/17/79)

**Different in room:** new rug in reading corner. (11/30/79)

**Changes in the room:** new red chart where brine shrimp observations were: Little People's Farm, with vocabulary. Also, Farm Animals chart was up, with their pasted animal pictures on it. Chick observation chart was down, as chicks were leaving today. (5/16/80)

c. Within themes which were repeated from one year to the next there was also variation. The rock theme was repeated in 1980, but with greater emphasis on volcanoes, as Mt. St. Helen had just erupted. Both years, children studied the farm and took a trip to a farm set up for school children's visits. Yet each trip and what came out of it was different. Last year's second graders were gone. This year's first graders were new. Even last year's first graders who went again this year as second graders were older, and therefore different. The student teacher was different. The externals - the weather, the personnel at the farm, and the specific animals were not exactly the same. The particular personal and social meanings growing out of each visit were unique and unpredictable, even though supported by a redundancy in content and process.

Many experiences within themes were different in another sense. Not only was each a unique, historical event, it was often inherently
dynamic and changing, according to a rhythm which while predictable or familiar, was also suspenseful, and surprising in exact outcome.

Prime examples were those in the biological and physical sciences, and in mathematics. The suspenseful nature of this change could be experienced because the teacher had made available large segments of time required for change to take place (p. 251). A list of selected examples in each of these three categories follows. In each case, change produced results.

**Experiences in Biological Science**
- soaking seeds, growing plants, making a garden
- observing changes in a tree over the seasons
- watching caterpillars become chrysalises and then butterflies
- watching praying mantises emerge
- watching chick eggs hatch; observing chicks
- caring for pet guinea pig
- observing baby rats grow
- observing Alfred the goat almost eat a released butterfly
- watching mealworms be fed to the toad

**Experiences in Physical Sciences**
- candling and weighing incubating eggs
- measuring and recording shadows
- inflating an improvised plastic tape sack with a straw
- cooking spoon bread; other cooking experiences
- dissolving crystals
- testing, weighing rocks, soil
- making paper
- connecting bulbs, wires, batteries and switches
- making electric questioner
- assembling plastic dinosaur bones, (an engineering problem)
- improvising sailboats to sail in backyard pool

**Experiences in Mathematics**
- counting pencils, stickers
- timing events
- taking surveys and graphing results
- measuring playground with yard wheel

**d. Four other aspects of classroom life were characterized by dynamic variety.** These will be described as belong in this discussion.

First, children's experiences with literature were dynamic. The structure of story itself involved a development of suspense, a
prediction by the reader or listener as to outcome, and a final revelation which combined elements of satisfaction and surprise. Children had many experiences with stories. They were read to often, and read with friends or alone during reading conference time. Thus they felt the interest of change, suspense, and surprise both when encountering content of the outside world through exploration, and when living within a fictional world.

A second way in which dynamic change permeated classroom life was revealed in the teacher's verbal interaction. For example, the teacher seemed often to create suspense by encouraging children to predict. In introducing the "new author" and her books, she told children they knew the work of this person's husband, Roger Duvoisin, thereby giving them a clue, before she disclosed the author's name, Louise Fatio (5/4/79).

This same holding back of the name was noted as the teacher introduced the Benjamin Franklin story discussed above (p. 294). "I'm going to share a story today and the story is about a very famous person ..." (1/17/80).

Similarly, the teacher led the children in a discussion of the names of shells. Looking at pictures in shell books, they speculated as to how the angel wing shell, the butterfly shell, and the turkey wing shell got their names. Then she said "Let's see if we are right," and checked these guesses against the book's text (5/4/79). In this case, she was creating suspense encouraging prediction, and thereby, preparing children to understand the text she read.

During a morning rugtime, the teacher said, "We were talking about the other day about our new question for this week and the question is
what famous falls touches both Canada and United States? And I thought what kind of resource material would we have to look at to find the answer to our question." Rather than eliciting guesses as to the name of the falls, she used children's suggestions to discuss the characteristics of various resources - maps, atlases, encyclopedias, informational books ("river book"), and how to use each one. After reviewing children's suggestions, she left them with the challenge to find the falls during the worktime that followed (Transcript, pp. 13-14, 1/17/80). Here again, the teacher had used the element of suspense, secrecy, and surprise to lead to prediction of ways of answering questions.

Interpersonal relationships were interwoven with novel content (or tenor with field) by the teacher when making suggestions to children. She could be assumed to use the suspense of her question in conjunction with children's interest in other children in order to focus attention on new content or new activity. Notes from 4/26/79 say:

Caroline finishes. Teacher says Good. You'll have to go to the art center, see what Katie's making.

and later:

Teacher: Jessica, Paul has a question for you (drawing Jessica over to Paul's desk where she has been working with him.)

Suspense and social interest were mixed again during rugtime singing of farm songs, as children were waiting with obvious anticipation to see who would be picked to sing the parts of various animals, and how each would sing it (5/23/80).
Third, dynamic, varied content was available to children through the independent activities which the teacher planned. These embodied the same quality of suspense as was found in what she said. After reading them Everybody Needs a Rock (Byrd Baylor, illustrated by Peter Parnall, New York: Scribner, 1974), children were told they could find their own special rock, whose identity within their collections was to be a secret from other children (Transcript, p. 5, 5/23/79). During the China study, children were invited to locate China on the map, and then write their names on a chart under "I Found It" (5/23/79).

Sometimes what the teacher did without words created interest and suspense. The novelty of the large piece of cardboard brought into the center of the classroom and cut up for use in children's own island constructions (p. 214 above) created excitement (1/22/80).

Finally, the element of suspense was found in many small management routines. Each Friday children were excited to know which decorative sticker the teacher had put on their math folders (5/4/79; 11/30/79). Clean-up time was helped along by giving children a "magic number" of things to pick up (2/7/80), and dismissal for lunch sometimes regulated by giving children a "mystery question" to answer (11/30/79).

These examples of the teacher's use of suspense and surprise are given as a contribution to the broader theme which has just been discussed. That is, in spite of fundamental repetition and redundancy in themes and experiences, there was variation from year to year, theme to theme, and within themes. There was novelty because many experiences were inherently dynamic, involving change, and because the teacher used suspense and novelty as a way to generate prediction
and interest. Observation of children's talk and behavior suggested that suspense and novelty was an important strand of their experience, from large theme studies to these small routines, activities, and interactional patterns.

3. A trend toward formal organization of content could be found within children's integrated experience. Formal organization was reflected in the permanent signs which hung over areas of the classroom: math, reading, science, art, writing, and so on. It was also seen in the specific lessons the teacher set for small groups in math, spelling, and handwriting, and in the art and music lessons held elsewhere in the school. At times, the content of these lessons derived from themes under study. For example, six "story problems" used seed, plant, and clock ideas (among others) and names of real children (5/10/79). Some spelling words were also drawn from themes or related to them by the sample sentences used. This comes from the chick theme:

   Teacher: Babies. Eighteen is the word babies. The babies hatched last night. Babies. (Transcript, p. 84, 5/12/80)

   Much of the content of these lessons was, however, chosen independently of integrated theme work. Handwriting lessons introduced small groups to cursive writing. Such a group was heard to discuss among itself the question of what was a z, and what wasn't (4/19/79). Math and spelling curriculum sequences had their own logic, and children's work in these areas followed a predictable routine. The teacher speculated that these strands were a relief for some children from the demands of more independent, creative work (6/3/80).

   Theme studies themselves, though integrated from the point of view of formal disciplines, represented for children a more explicit,
conscious approach to learning than did their preschool experiences. This inference is supported by children's references to these studies during interviews. When looking at photographs of the classroom, some children related them to the studies which were going on at the time. First grader Betsy explained "We were studying China," and "We have been studying insects" (Transcript, pp. 4-5, 5/23/79).

Another child said "We were doing stuff with storms" (Transcript, p. 223, 5/20/80). Sean talked about "pictures of things like - when we were studying on Halloween" (Transcript, p. 77, 5/12/80). When asked to tell the observer what he liked to do in school, Sandy said "Maybe studying things. Studying space, dinosaurs, those things" (Transcript, p. 144, 5/27/80).

From the children's point of view, however, it would seem, that they still thought of their school experience in terms of the activity rather than the study. Upon seeing a photograph of a past classroom event, children wanted to say who was in the picture and what was going on. Cleo identified Deborah: "She is sitting down on the floor and is cutting paper" (Transcript, p. 47, 4/30/80). Mary said "And then this is where they're copy - Polly is copying the Chinese writing for her book. Yeah, that's my Chinese book" (i.e., a trade book Mary remembered bringing from home) (Transcript, p. 37, 4/30/80). When looking at a picture of children writing amid paper cups, powders, and spoons, Deborah recalled a student teacher from the previous year who "put things out like salt and she put magnifying glasses over them and we had to write what they looked like" (Transcript, pp. 61-62, 5/1/80). For these children, the activity within the theme (and the
participants) would seem more important to mention than the theme study itself.

These examples provide mixed evidence, and are offered to suggest that the familiar and the new coexisted. A familiar approach through integrated experiences, like children's early, informal experience, continued to be dominant. Within it, however, there were more formal experiences which fell into defined categories of knowledge. The processes of handwriting, mathematics, and spelling in particular were treated as discrete content subjects (while, in addition, continuing to be used by children in the course of integrated theme studies). Theme studies were given names and were referred to by children as studies about X, Y, or Z. This could imply the development of a more conscious, objective attitude toward themselves as learners and toward the world as able to be studied in an organized way, rather than simply experienced. The teacher's action in labeling parts of the room as centers for reading, writing, science, and so on may have contributed to this sense of formal organization of content.

4. More abstract, less physical ways of learning supplemented active, direct, sensory learning. Children were given opportunities for a) more abstract experience via the symbolic system of language, and for b) processing and c) representing experience in new ways. In addition, d) they continued to encounter content concretely, actively pursuing their own purposes (or those they had taken on).

a. Experiences themselves were more abstract. The record shows that children listened to language while seated in one place with many others, for sustained periods of time. They heard stories and
informational books read by their teacher. They took turns sharing things and ideas, and listening to each other. Guests were invited to talk about the space shuttle (2/80) and Chinese writing (5/31/80), for example. Movies and filmstrips offered images, a step removed from concrete reality, and more language as well.

Not only did children experience through listening to written and spoken language, they also read on their own. There was print in the environment which they were encouraged or required to read, in the course of daily life. Reading their job charts, taking lunch count and attendance, and reading labels on art materials were examples of the latter. Opportunities for more sustained reading were encouraged by the presence of both permanent collections and special groups of books related to theme studies or to their new author. Writing by other children in the form of displayed pieces or books was also available for voluntary reading.

b. New ways of processing experience were also introduced, as the teacher helped children record, order, and classify their ideas. Class charts such as the one headed "Brine Shrimp Observations" invited children to contribute, and thereby to use language to formulate and record their thoughts (5/12/80). Observations were sometimes required to be recorded more formally on worksheets such as "Looking with Lenses" (11/30/79). Charts which classified ideas were made with the teacher's help. The farm animal chart (5/9/79, 5/16/80), the witch story chart (11/14/79), the chick observation chart (4/18/79), and the garden planting chart (4/26/79, 5/15/80), would all exemplify means by which the teacher helped children clarify their
experience. The time line, on which children recorded family events (4/12/79) was an example of symbolizing experience in both language and mathematics, as were the many surveys children did throughout the year. Listing of pertinent theme vocabulary in connection with theme studies objectified and made explicit terms children were hearing and reading. The repeated weekly planning of the newsletter which the teacher elicited and recorded not only recalled children's experience but ordered it, and made it more available for use in representations.

c. Experiences were represented using language as well as other non-verbal media. There was a range of kinds of writing produced, with the new, more formal "information book" appearing in connection with theme studies. In addition to required writing such as thought ramblings and newsletter articles, voluntary writing appeared out of theme studies, in several modes - information books, stories, poems. The nature of this writing is the subject of the discussion below of the dimension of mode, as well as of Chapter 5. For now, the purpose is to note that writing, a more abstract way of representing experience than talk, gesture, dramatic play, construction, or art, appeared along with these other modes, in various forms.

d. These more abstract ways of learning were supported by the continuation of concrete experience. The teacher continued to provide these concrete ways. Children also made connections themselves to this earlier way of learning, as they used concrete experiences to support their efforts in working with new content and processes. By providing children materials and this structure of experiencing, processing, and representing experience, the teacher was helping them scaffold
their own learning. Examples follow from which this supporting function of concrete learning could be inferred.

A more remote or abstract content, such as the measurement of time, was made accessible by its embodiment or symbolization in a concrete object. Thus, children handled real and play clocks, timed each others' activities, and decorated their own clock creations. On one occasion, several were noticed by both teacher and observer to gather as close as they could to the real wall clock, as if their physical nearness would somehow aid their mental processes (1/28/80).

A similar use of concrete objects to help with abstract tasks was evident in children's relationship to books. Two children writing about an author moved their chairs next to the display of his books, though not evidently for the purpose of referring to them (5/23/80). A child reading the observer a newsletter article she had written on chicks, took her book and her 'listener to the incubator, since "it belonged there" (5/4/79). Finally, concrete displays embodied abstract ideas. Children and teacher cut out the planets from construction paper, and placed them around the room, where they continued to have significance. The last day of school, when everything else had been taken down, a small red Pluto remained in the corner. It was discovered, carefully removed, and given to one of the several children who spoke for it (6/11/80).

These new aspects of the field of discourse first included a new abstraction in content, as children studied people and things removed from the present setting, and concepts such as time, electricity, and space. Second, there was novelty within familiarity, as repeated, redundant routines and studies were varied from study to study and year
to year. Novelty was also inherent in the dynamic nature of the many experiences with growing things and with literature. Surprise and unpredictability was a common element, as the teacher created suspense through her planning of activities and management routines and in her interaction. Third, children were introduced to a new, more formal organization of knowledge into discrete subject matter fields, while continuing to experience content in its natural integration. They showed an awareness of the existence of formal subject matter lines in their talk about studies. Finally, children used new ways of learning and experiencing to supplement or replace physical exploration. They listened to guests, the teacher and to each other, they read and they wrote, in sustained ways and often by themselves. With the teacher's help, they looked back on experiences, organized and extended them by the use of language, and they represented them in words along with other modes. The teacher helped children into these new ways of experiencing content by continuing familiar kinds of language use (mode) and interpersonal relationships (tenor), as well as by linking abstract content to familiar experiences and concrete examples (field).

**Summary of field of discourse.** This discussion above of new, more abstract ways of learning which were introduced through familiar, concrete, active ways concludes the contrast between familiar and new aspects of content experiences in the classroom. Within this classroom, both familiar and new aspects characterized children's encounter with content. Content, or the field of discourse thus was like the content of experiences in early childhood: it was embodied in the here and now context; it was repeated in its salient features over time; it occurred as a natural, integrated whole rather than as
labeled, discrete subjects; and it was explored actively for children's own purposes or those taken on from their teacher.

At the same time, there were differences in the content experiences of early childhood and those of school. New ideas more remote in time and space were introduced. Repeated experiences were varied, novel, often dynamic and unpredictable. An awareness of the formal organization of knowledge was developing. Finally, learning itself was more abstract, as language in particular was used to supplement and sometimes substitute for action, in exploration and expression. The teacher supported children as they encountered new aspects of content by continuing the familiar ones. She also used familiar aspects within the dimension of tenor (or interpersonal relationships), and mode (or ways of representing and communicating meaning) to support unfamiliar aspects within field (or content). The dimension of tenor, in its familiar and new aspects, and in its connection with field and mode, will be discussed next.

Tenor of Discourse: The Shaping of Interpersonal Relationships

Familiar aspects of the tenor of discourse. This classroom provided a homelike setting in which children could relate to each other and to their teacher in familiar ways. Through her long-range planning as expressed by her use of space, materials, and time, and through her immediate interaction with children, the teacher provided homelike support for children's early school experience. This familiar, homelike quality had the following characteristics:

1. The institutional cross-age organization was familial.
2. The teacher's roles were quasi-parental.
3. The teacher's beliefs were also quasi-parental.
4. The teacher's long-range actions encouraged a sense of community.

5. The teacher's immediate actions also encouraged a sense of community.

6. Children accepted the teacher's underlying authority.

7. Children regulated their own activity, making many choices within the limits of this authority.

These characteristics will now be elaborated.

1. The institutional organization of this classroom was familial in that it included both first and second graders. Therefore, there were at any one time, older children with more experience, who could be resources for others, and whose experience the teacher could draw on. Furthermore, each child had two years within which to grow and learn from this setting, and the teacher had two years within which to know each child.

2. The teacher's many roles were quasi-parental. By confirming the familiar, homelike quality of interpersonal relationships, she was assuring security. This she did through her related roles as a) authority in charge, and b) as supportive parent.

   a. The teacher was the authority-in-charge. The teacher provided fundamental security in this new school setting by being the authority-in-charge. Her authority was unquestioned, as a parent's authority is accepted unquestioningly by young children. She saw herself as the children saw her, in charge, and explained their acceptance of her authority or decisions:

   "... because, not so much they are afraid of me - it is not that type of thing, but they have
developed a respect for what I say. I'm fair (try to be) ... in what I say" (Transcript, p. 73, 5/1/80).

A survey of participant observation notes and transcripts shows that the teacher exercised her authority in many ways, as revealed in the areas of rules, consequences, decisions, and requirements.

Rules were unspoken and minimal, but did exist. The teacher had in mind a certain quality of life in the classroom (or tenor). However, there were no posted rules which she or the children had formulated. In fact, she believed that rules should be minimal:

Observer: But you don't pick up on every little ... every little violation, do you? You have to let things go.

Teacher: You would go crazy. You really would go crazy. The less rules you have, I think, the better. (Transcript, p. 70, 5/1/80).

The existence of these minimal, unspoken rules became evident when children broke them and had to be reminded. The teacher's cues or reminders were frequently subtle, non-verbal cues, or elliptical statements:

Teacher reprimands rarely. Only once when there was extraneous noise, unfocused activity at the art table: "People at the art table ..." and that did it. (4/26/79)

More explicit, if still indirect disapproval was expressed:

Children in the reading center are talking rather loudly. GB says something such as I do not like loud talking in the reading center. (5/30/80)

Even more explicit language was sometimes used:

Teacher: Nat, would you please come out from under a table on the carpet to read? (Does barely). All the way out. (4/26/79)

She was able to redirect behavior in this way, not by threatening or labelling, but by giving new directions:
Consequences of children's breaches of the rules were clear. Salli had borrowed the teacher's scissors but had not returned them to the place above her desk:

Teacher: ... then I can't let you borrow them. Salli? People have -- you have them on the table and I told you to put them back on my desk... You wouldn't like it if I borrowed something of yours and lost them (Transcript, p.50,1/17/80).

Salli had brought a game to school, but was not letting another child use it. The teacher said

If Salli's not going to share, then she can take it home, since we bring things to share (1/17/80).

Messes had to be cleaned up:

Don and Sean silly with some feathers. Teacher told [them] to clean up feathers, come out on rug (Don), sit at board table near teacher (Sean). Children respond quickly. (4/27/79)

Small groups as well as individuals were held accountable:

People who had worked with clay yesterday were asked to clean clay off the floor first thing (5/30/80).

as was the whole class:

Clean-up decreed by GB since children had left room in mess. She had told custodian not to clean ... (5/13/80).

Decisions were made by the teacher, unilaterally, in every area of common life. She decided which experiences children should have as well as the work they were responsible for completing. She modified daily routines and set activities and schedules. For example, she decided when events would take place:

Teacher announces reading conference time. (4/26/79)
Planning time, teacher moves to side board near incubator. Says they will do candling today, also this is the last day to turn eggs, should have eggs hatching beginning Monday. (5/4/79)

In the realm of management:

Mrs. B. told children that she had changed jobs to fit our new room arrangement. She defined each one and assigned it to someone. (5/9/79)

Another time, she regulated clean-up and dismissal in this way:

Math boys: Mrs. B., can we go now? [i.e., to lunch]
Teacher: There are chairs to put up. The magic number is 9. (9 pieces of paper to be picked up or nine things to do to finish cleaning up) (4/19/79)

The teacher chose content for children - themes, vocabulary, and experiences. She organized children for these experiences with definite purposes in mind. Children had worked in small groups and pairs, designing activities that could be timed and recorded, such as ball bouncing. When they returned to this after recess, she reviewed and changed their grouping when necessary to ensure they had partners to work with (1/28/80). She controlled the care of animals:

Mrs. B. giving sugar water to butterflies. (She is busy as curator of these animals and seems to enjoy this. Children are involved, but she participates, and directs). (5/9/79)

and she decided about changing displays:

Teacher: Clean-up time. Take your things from electricity and magnet display, since I will make a new display. (1/22/80)

How the teacher carried out these decisions was commented upon in the participant observation record. She often conveyed a feeling of suggestion or invitation which had the effect of direction. For example, she planned the weekly newsletter with children, saying they would select some people to write articles. An article about the trip
to the conservatory was planned, and Jessica chosen to write it. The teacher said to Deborah, "You want to help?" in an encouraging, warm tone (4/27/79). On another newsletter occasion, the teacher in effect chose Don, but softened this by giving him a choice within the assignment:

Teacher: Don, you haven't done one for a while. What would you like to do? (Transcript, p. 110, 5/23/80)

At the beginning of a worktime, the teacher had these suggestions, which were still recommendations and requests rather than hard and fast directives:

"We have about twenty-five minutes of worktime and I would like you to think about your puppet show and we need to put some hair on your puppet. Now would be a good time to put some hair on. Miss Wise or Mrs. Bridges will help you." (Transcript, p. 21, 11/20/79)

Another observer had also noted this ability of the teacher's to ask rather than tell children what to do, and indeed had shared this insight with the teacher herself (5/4/79). After a newsletter planning time, the observer reflected in a similar vein:

Her manner I wanted to comment on, in organizing children into pairs to write: she is firm, decisive, yet often phrases requests or assignments as a question, and often explains why she makes the assignment - a combination of volunteering and assigning ... (4/27/79)

A possible explanation might be found in the paralinguistic characteristics of her voice, and the meanings they implied. When organizing children for a trip, she said:

If you need to use the rest room, would you do it now please? (Rising intonation seems to ask for assent, to go along with her request). (5/19/80)
Rising intonation which implied a question and demanded an answer might have had the effect of gaining assent, thereby avoiding coercion. It could, therefore, have been one way in which children "took on" the teacher's purposes as their own.

Requirement that children finish their work made the teacher's authority visible. For instance, math folders were handed back weekly with the requirement that children "fix" what needed to be fixed (4/27/79; 5/4/79). Small groups and some individuals were also approached with reminders and special requirements to help them complete work. For example, Betsy was asked to bring her news article to the teacher before being given waxed paper she wanted for clay work (5/16/80). Ken was one of five who were called up at the beginning of work time because they hadn't finished writing their permission letters for a trip (5/4/79).

The teacher voiced concern not only that work be completed, but also that a level of quality be reached. To one child, a second grader, in late May, she said (about his writing):

... we can't accept [just] one line about something we've been studying all week. (5/30/80)

and to the whole class, she talked about the quality of work they handed in last week as if they were handing it "to the garbageman and not to your teacher or friends" (1/22/80).

This discussion of the role of the teacher in providing familiar kinds of personal relationships has started with the teacher's underlying authority, as being essentially parental and security-giving. Some ways in which her authority appeared were described: through her responses to breaches of unspoken rules; through the consequences she
set for breaking rules; through the many kinds of decisions she made; and through her requirements for children's work.

b. The teacher was also like a supportive parent. She shared experiences with children; she supported children in their relationships with the larger school; and she used this scaffolding relationship to support children's experience with new content.

The teacher shared children's experiences and meanings. She participated with them in experiences and supported their efforts to act, to understand, and to represent their experiences. Like a parent, she collaborated with children both in experiencing and in expressing meaning. She scaffolded their efforts so that meaning was kept whole.

Evidence for this intimate, supportive role has been given in the discussion of her physical closeness to children, her working side-by-side with individuals and in close gatherings of small groups. She was seen to participate with children in their experiences, as in their joint observations of the toad, chameleon, and mealworm (5/20/80). She played games on the floor with them (1/24/80). She learned alongside them, borrowing their library books to read (5/13/80), sitting in their midst painting figures to be used by all in retelling *The Very Hungry Caterpillar* (Eric Carle, World Publishing, 1969) (5/23/80).

The teacher supported children in their relationships with the larger school institution. She acted as their banker by keeping or supplying money or change if needed, so children could cope with the cafeteria line more easily. Notes state:

There is a lunch money routine I find interesting. Children can give money or borrow money from Mrs. B. She keeps it in a little box in her desk, and has a
slip of paper with names, and names crossed off, as money is repaid. Children could owe the cafeteria cashier, but she makes this unnecessary ...
(5/1/79)

The teacher also helped them prepare for participation in the schoolwide "bicycle rodeo" by reviewing procedures and questions with them (5/16/80). She emphasized and built on the personal relationship between the school secretary and the children, who helped them in homey ways (mending their torn clothes), and to whom they each sent a thank you card. When Cleo saw a photograph of children writing together, she said "... just like we gave a thank you note to Miss Gray for doing all these things... All the class had to make like little messages to her. Mary put "thank you for sewing my pants" (Transcript, p. 48, 4/30/80).

The teacher used this scaffolding relationship to support children's experience with new content. That is, a familiar tenor may have enabled children to make connections within a new field. Furthermore, it could be speculated that a familiar relationship or tenor was expressed nonverbally, while the less familiar content or field was carried in words.

There were many instances in which the teacher's non-verbal behavior could be interpreted as communicating support, while her words concerned new content. Her close proximity to children was one pervasive way in which support could have been given. In addition, the paralinguistic qualities of her voice was well as her use of endearments seemed to communicate affection.

A review of taperecorded conversations between the teacher and children, one by one or in groups shows that her voice quality varied
greatly in pitch pattern, in what she stressed, and where she paused -
that is, in the paralinguistic variables of pitch, stress, and junc-
ture. Her voice would seem to carry a message which supplemented the
meaning of her words. There has been no attempt in this present study
to represent these qualities symbolically, nor to analyze all of the
teacher's language systematically. The present purpose is rather to
suggest that these paralinguistic features of the teacher's speech
were one way in which she played a supportive, quasi-parental role.
The examples below will include a speculative interpretation of the
meanings these paralinguistic features might have been intended to
convey. This interpretation is possible because the researcher, as
a speaker of English and a temporary member of the classroom culture,
could be assumed to be sensitive to these cues and meanings in the
same way as the children.

There might have been no way to check the validity of these
inferences during the field work phase of this study. The teacher was
not consciously choosing the register she used, nor consciously decid-
ing which meanings to convey in the course of these interactions.
Therefore she could probably not have described why she made the para-
linguistic (and linguistic) selections she did. (Both the matter of
systematic collection and analysis of paralinguistic cues to meaning,
and their interpretation by researcher and teacher in retrospect,
perhaps on reviewing videotapes, might be considered for future
research.)

Examples follow of paralinguistic changes in the teacher's vocal
quality which underlined her role in providing secure, parent-like
interpersonal relationships. Like all humans, she controlled a range
of registers for use in different situations. This discussion focuses on only one register among them.

When responding to children's work, often her voice conveyed warmth, approval, interest, even excitement. After George had worked for several hours on his newsletter article, in which he wrote about his experience of seeing and petting the donkey at the farm, he took it to the teacher to share. Notes record the event:

... George comes and reads his story which was quite long, quite carefully thought out, quite neatly printed. GB gives him all sorts of positive feedback about what she likes: the ideas, the words, the sentences, also the handwriting. Gives him a hug and says thank you. (5/16/80)

What the teacher actually said was:

Teacher: Oh, that's excellent. That is beautiful. And not only is it nice what you said, but look at the ... That is beautiful. I think that is the nicest thing you've ever ...
(Transcript, p. 97, 5/6/80)

Her tone of voice was low, hushed, almost reverent, as she responded to George's story, form as well as content. She was using her voice as well as her words (and her hug) to provide acceptance and approval. It was as if she had said, "You are growing up. It's a good thing to grow up. I will help you along the way by being close."

The teacher often used the occasion of hearing children's writing to extend their thinking and/or their language, sometimes directing children's attention to formal conventions. She seemed to be extending thinking in these following instances. (Marks above words will indicate approximate pitch patterns).

Duncan shared his farm story with the observer. The teacher joined in, responding to his statement:
Duncan: I learned that pigs are hungry all the time.

Teacher: They are?

This question was asked in a quiet but higher-pitched tone, which conveyed real interest in and consideration of what Duncan had just read. It is as if the teacher meant, "Is that really so? You've said something interesting to me" (Transcript, p. 201, 5/19/80).

As Duncan finished reading his pig story, the teacher reminded him of familiar content, and challenged him to extend his thinking and writing to include it:

Teacher: You know what? You told us what a male was called; what about giving the female equal time. Do you know what you call a female? ... Could you tell us what a female pig is?

Duncan: Ah, O.K.

Teacher: Can you add that to the part about the family?

This extension of the field of discourse into new ideas, and new ways of learning, including revision of one's own writing, was supported by her tone of voice, which was higher, confidential sounding, with emphasis on salient words: female, family. It was as if she said, by emphasizing certain words, these are the relationships, this is what is important, while, with the quieter, higher pitch, she was conveying intimate, parent-like support (Transcript, p. 201, 5/19/80).

Daniel told his teacher he was working on a second project.

1 Teacher: Besides your rooster?

2 Daniel: Yeah.

3 Teacher: Oh, that was lovely.

4 Daniel: Three people are working on that.

5 Teacher: What is your three-person project?
6 Daniel: All the kinds of roosters - and all the kinds of chickens.

7 Teacher: Do you mean there is different kinds of chickens?

In line 1, the teacher's voice rises with surprise and delight, as if to say, "Not only have you done a splendid rooster project, but here you are doing something else! Line 3, in a quiet, falling tone, refers to the rooster project, confirming her approval of it. Line 7, "Do you mean there is different kinds of chickens?", again rose in pitch and volume. She seemed to say, "This is a new idea you have discovered. I am excited that you have discovered it." The teacher continued to talk about different kinds of chickens that Daniel knew about, helping him to remember the guinea hen at the farm. Her words seemed intended to confirm and connect with his past experience, and to encourage him to use past knowledge in his writing. Her voice conveyed this idea: "You know a lot and can learn a lot about these things, which are interesting to you and me."

The teacher's response to second grader Polly, who was older and more mature than first graders George, Duncan, and Daniel was different in vocal quality and in content. She read Polly's farm story in a lower-pitched, more matter-of-fact voice, and led Polly to notice omissions which would cause difficulty for a reader. She remarked positively on Polly's spelling of machinery, i.e. mashinarie. The content of this brief conference was predominantly directed to changes needed in form, however. Its serious tone was softened by the teacher's enjoyment of the absurdity implied on line "We washed your hands," and by her use of "sweety," after she had reminded Polly to proofread:
Teacher: Machinery - I like the way you spelled that. What is this? a disc? You didn't proofread this because look what you said here. "Then we on a hayride." You left out something. "Then we washed your hands in freezing water." (laughs) I think when you do this, Polly, you need to proofread it, sweetie...

What the teacher said to Polly in these exchanges through her voice and her words could be construed as meaning "Polly, you are able, but you need to slow down and check your work. You could also do more than you do do. I know you can, and because I have confidence in you, I expect you to become more involved in what you do." (Transcript, p. 95, 5/16/80).

Finally, the teacher's interaction with Sean showed her sharing his interest in the rocks he was weighing and the weights he was recording. He came to her as she was reviewing another child's permission letter:

Sean: Mrs. B.,
Mrs. B.!

Teacher: "We will go June 4." (reading) [the other child's permission letter] Look at that, young man - all the work you did! [speaking to Sean] Which was heaviest, Sean?

Her voice which had been in a middle range as she read the other child's letter, rose in pitch and volume and then traced a descending pattern:

Look at that. All the work you did. A gloss of her meaning might read, "I am proud of you for persisting over a period of time in mature work." Her "young man" emphasized this maturity. The observer's knowledge of this child could contribute to this gloss of the teacher's meaning: "This is new and more mature behavior, not like the lack of concentration you sometimes show or the more physical kinds of activities you often have chosen" (Transcript, p. 157, 5/28/80).
These selections from transcripts of the teacher's interaction with children have been chosen to illustrate the teacher's communication of support and reassurance through the qualities of her voice. Many of these examples illustrate her use of words to help children reflect on ideas or extend their knowledge, while the paralinguistic qualities of her voice have been interpreted as maintaining a familiar kind of interpersonal relationships. That is, when the teacher extended the field of discourse toward the new, she supported children in this new, abstract venture by maintaining a familiar tenor.

Thus, the teacher's roles were like those familiar to young children. She provided security both through her role as underlying authority in making decisions and enforcing standards, and her role as intimate supporter or "scaffolder". (Ways in which her roles were not familiar will be described below within the discussion of new aspects of the tenor dimension.)

3. The teacher's beliefs and expectations were quasi-parental. These beliefs about children and their learning seemed similar to those of a parent - beliefs which had their practical outcome in her expectations for children.

a. The teacher's beliefs about children were quasi-parental. She seemed to assume that children developed at different rates and in different ways, and that their performance varied from time to time. She also seemed to believe that young children were not abstract thinkers. When the observer was discussing the difficulty of asking children to be explicit about what was important to them in their classroom, she agreed:
"It's hard with these little people because they are not abstract thinkers whereas your upper graders might give you more of that" (Transcript, p. 142, 5/27/80).

b. The teacher provided for these characteristics. She accepted children's lack of ability to think abstractly, and provided for their concrete involvement in their environment. She also accepted individual differences. This is shown in the different expectations she had for different children. The observer had commented on the many, open-ended possibilities, both in the environment and on the board, as numbered lists. She replied:

Teacher: ... oh yes, and there's kids too like Sean [who] never get two of those things done.

Observer: I know, so how do you allow for these differences in children?

Teacher: You have to realize that not every child is going to do everything.

Observer: You have more available, don't you? I mean, is that part of your thinking, to make it very rich?

Teacher: You have to because with all the different ability levels you couldn't possibly expect a child like Sean to keep up with a child like Ted or Deborah. They are just different personalities.

Observer: So what they actually end up doing is different - different in quality and quantity.

Teacher: You just have - you know in the long run you just have to know that they are growing in the areas that they need to be growing in. (Transcript, pp. 68-69, 5/1/80).

The teacher's conversation often centered on her thoughts about individuals as "different personalities" as these excerpts from notes illustrate:
Steve thrives in here [according to the teacher]. Can use artistic gift. Pushes himself. Yet his mother is thinking about whether to leave him in informal classroom or not. (5/27/80)

A comment remembered from earlier conversation with G about Don. "Don is a writer." (6/11/80)

Conversation with G about Betsy's thought rambling. She was interested in the fact that Betsy had centered on one thing, one small part of the total tree observation, and had expounded on it... (11/20/79)

The teacher's comments also indicated flexible expectations about the group as a whole. For example, in the beginning of the year, more direction was needed to help children become as independent as they were toward the end. She explained, for example, that in the beginning of the year, she taught the whole class certain techniques such as making surveys, making books, and using salt and flour to make things. Later in the year, children could do these activities independently (Transcript, pp. 152-153, 5/28/80, Transcript, p. 221, 5/20/80).

She also noted differences in expectations from year to year. She reluctantly changed the bathroom procedure from a self-checkout system with magnets in 1979 to a requirement that children ask permission to leave the room, because

... I didn't have the trust there that I've had with some of the other classes that I've had as far as being mature enough to know when to go and how to use it [i.e., the privilege]. I have some kids in here that would drastically abuse it. (Transcript, p. 71, 5/1/80).

These beliefs were reflected in the varied work the teacher planned for children. She provided for six math groups with different work for each (4/18/79), and extra work for those like Daniel whose ability and interests she encouraged (5/30/80). First graders were divided for
their spelling, some working in a second grade book, and one in a third
grade book (5/4/79). There were three second-grade spelling groups
(5/28/80). The teacher was observed to modify spelling lists for
individuals:

Everyone except X and Y - do such and such a
word. (5/13/80)

Expectations in reading varied, as children selected their own books
and followed their own interests. They were influenced by the teacher
through her program and through interaction with her in their reading
conferences, but their choice of content and difficulty level was their
own (4/27/79). The teacher's flexible expectations of children's
writing will be discussed within the section below on mode of dis­
course in this classroom. It will include both her shaping of their
writing activity and her response to their writing.

The question of requirements of children again shows the teacher's
different approaches to different children. It has been stated above
that she used her authority to require children to complete clearly-
defined responsibilities such as their weekly math assignments. She
assisted some four or five children who found it difficult to discipline
themselves by requiring that they have their math papers checked every­
day. The following discussion arose because the observer had not been
able to determine through talking with children whether or not math
was to be done before other work:

Observer: There is still some fuzziness about whether
or not math is something you have to do first.

Teacher: I've never really told them that yes, you have
to do it first. They know that I get after
some people that don't do it. Some kids know
that they can budget their day and get it done.
And other kids do it right away because they are
afraid they won't get it done. Then you've got the kids that don't do it at all, and let Mrs. Bridges chase them around.

Observer: And Friday is the day of reckoning.

Teacher: Then I tried the system of every day I check their papers. There are five or six people that get it checked every day. So this not having to do it [i.e., during the student-teacher's farm project work] has just blown their mind.

Observer: Now the five or six people you check - is that Cleo and Betsy and Sean?

Teacher: Erik has been in on it and Sam has been in on it, Roger. There have been different people - Luke was being checked. It just depends. I will pick children that will consistently not finish. Evan ... And then I watch them for about three weeks and see what they can do on their own. Sean just insists on sharing with me so that was fine. I let him even though they weren't on the list.

Observer: Oh, they kept coming back to you.

Teacher: They kept in contact with me.

Observer: That's interesting. They probably both need that kind of security.

Teacher: That's right ... (Transcript, p. 217, 5/20/80)

This interview shows that the teacher made a special plan for those needing more support, and that there was flexibility within this plan, as the membership of this group changed, as some continued to show their daily work to the teacher beyond the requirement, and as the group did not continue indefinitely.

A further example of the teacher's flexible expectations for children is drawn from observation of Sean whose rock weighing activity has already been mentioned. It was noted that this activity derived from a
previous day's work, and that, in fact, today's work, as outlined on
the board, concerned something else. Nevertheless, the teacher, as
has been shown, supported Sean's productive efforts, and did not remind
him of the day's assignment to work on farm projects and permission
letters (5/28/80). The teacher described how this came about to two
university observers:

Teacher: ... the student teacher told them to finish
their farm project, [she told them] "you have
a math paper to do," and she wanted them to
read a book with partners. Sean ... [said]
"I've got a page." He had stuck to writing.
So that was strictly spontaneous, his own idea.
(Transcript, p. 151, 5/28/80)

Thus, the teacher's beliefs have been shown to be parental in that
she saw children as different personalities, growing at different rates
and in different ways. She acted on her beliefs by having different
expectations for different children, and by providing a flexible pro­
gram through her use of space, materials, and time.

4. The teacher's long-range actions encouraged a sense of

community. She allowed and promoted familiar interpersonal relation­
ships a) by using cooperative ways of working and b) by providing shared
experiences. Both the use of cooperative ways of working, and the pro­
vision of shared experiences seemed to contribute toward a family-like
community, with its own customs and its own history. Thus, content
encountered in here and now experiences was also encountered with others.
Thus, memories of past experiences were also shared with others. The
tenor and field of discourse were intertwined, as content occurred in
interpersonal contexts. This cooperatively-encountered content affected
the mode of discourse as well, in ways to be discussed below within
the final section of this chapter.
a. Cooperative ways of working were provided. First, forms in which cooperative relationships appeared will be described, forms which could be assumed to result from the teacher's plans and policies. These were: instructional groups called by the teacher; special purpose groups; specific, cooperative activities for children as organized by the teacher; activities in which children were invited to participate; activities children were observed to be engaged in, which may have been instigated by the teacher; and children helping each other. These are elaborated below.

Instructional groups in math, spelling, and handwriting were often called to meet with the teacher. Though there was little active cooperation between children required, these groups are mentioned here as they were but one of many, overlapping small group memberships which provided children with opportunities for more intimate, homelike, small-scale, face-to-face relationships.

Special purpose groups were often formed to meet with the teacher, student teacher, or a parent. Examples were the group which planned the backyard garden (4/26/79); the cooking group which made butter and spoon bread with the student teacher (5/10/79), or "fruit basket upset" with a parent (5/15/80); and the four or five who measured the playground with a yard wheel under the student teacher's direction (5/21/80).

Specific cooperative activities were organized by the teacher in which children participated independently but under supervision. Some of these were highly organized activities such as weighing chick eggs and recording their weight (4/18/79 - 4/26/79); timing the activities of a partner (such as bouncing a ball) and recording the results (1/28/80); looking in pairs at rock samples (5/27/80); working in pairs
on crystals (5/28/80); sharing a beaker with a partner for brine shrimp study (5/15/80); observing adopted trees in small groups (11/20/79); and distributing Valentines to each other's boxes, placed throughout the room (2/14/80).

Other activities left more decisions to children, although the initial framework was set by the teacher. Newsletter writing was a prime example. This was a repeated occasion for cooperative work as organized by the teacher. Children's article topics and their writing partners were determined during planning, under the teacher's direction. Sometimes, there was a hierarchy within small groups, as one child was put in charge of coordinating contributions to the "Tidbits" article (5/23/80; Transcript, p. 111, 5/23/80). Observing objects of interest, and then writing about them also allowed children to decide not only what they would observe but whether to work alone or with others; in practice, many chose to work together.

Children could also choose to work together on their farm projects, and many did. On one worktime, these six pairs were noted to be collaborating: Rick and Roger, Sam and Eric, Daniel and George, Dan and Luke, Tika and Mary, and Sean and John, while twelve children, or the other half of the class, worked alone. On other days, this distribution changed as new projects were undertaken alone or with a different person (5/20/80).

In varying degrees, then, the teacher did bring about cooperative activity as a part of the curricular experiences she planned for children. Sometimes cooperative interaction was built into the activity; sometimes it could be chosen by children.
Activities were organized in which children were invited to participate, alone or with others. This category included the displays and interest centers throughout the room, around which small groups and individuals gathered and talked. For example, several boys chose to work with electricity (1/17/80). Another group met and talked around the butterfly garden, each child looking at his or her own larva in its plastic vial, and talking about changes they observed and expected (4/26/79).

In addition to participating by talking in informal, voluntary groups, children could contribute to group charts, recording brine shrimp experiment results (5/12/80), information about vegetable seeds (5/15/80), and sketches of their electricity experiments (1/17/80). Contributions to the class Wild Island map demanded more social awareness. Children had to take into account what others had already made before they added their contribution in "scale" to the group map (1/17/80; Transcript, p. 19, 1/17/80).

Activities children were observed to be engaged in, involving cooperative interaction, may have been initially instigated by the teacher, or they may have been initiated by children though indirectly influenced by her. This distinction could not always be recovered from the evidence. Indeed, the difference between voluntary cooperation and required cooperation, like the difference between work and play, was blurred. The kinds of cooperation which appeared to be voluntary had their roots in school experiences which had been required by the teacher. Examples of these activities are survey taking, play organizing and in general, making and doing things together.
Surveys were taken by children, who went about interviewing classmates on various questions. During a shell study, Polly asked which was children's favorite: "starfish, seahorse, or both?" (5/3/79). Geoff asked children to predict which egg would hatch first (4/26/79). Deborah recorded children's answers to her question, "Did you think of a name for your chick?" (4/26/79). Notes describe Betsy's process of taking a survey:


Plays were organized by children. In this case, a book was being dramatized:

Play group: Cathy, Betsy, Ken, negotiating for parts, centering around puppet theater. Deborah writes out cast for Pippi Longstocking play, then she reads list to Ken and Cathie, who listen, confirming what she reads. (4/26/79)

Betsy and Mary decided to make a play about Charlotte's Web, which the class had just heard. There was high interest in making the characters of plasticine, but the project foundered and the group dissolved (5/29/80).

Another kind of voluntary independent collaboration was observed as children made things together. The polyurethane dinosaur bones engaged a small group over a period of days. While the teacher had provided the dinosaur model, children organized their own work, marked off an area of the room, and sustained effort over a longer period of time than she had expected (5/29/80 - 6/4/80).

There were many instances of children voluntarily making things together (or side-by-side), such as the girls who made little pockets
in their notebooks for tiny letters (5/17/79). However, many of the things children made together derived in their inspiration from the theme study then underway, though they were voluntarily undertaken. Thus, Betsy and Mary were found making a TV and an oatmeal house for their own pet rocks at the time of the rock theme study (5/17/79).

Children also did things together, sometimes related to theme studies, and sometimes not. Don, Jed, and Nat joined in dramatic play on the rug with Don’s farm implements, brought from home for the farm theme study (5/10/79). Don was heard to suggest to Ewan, "Get your pencils out and let's count them" (4/26/79).

Children helping one another is the final kind of observed cooperative behavior, sometimes called "peer teaching". Again, it is not always clear whether the children were acting on their own, or whether the teacher had suggested their cooperation. During the first spring of this study, there had been an arrangement to have sixth graders work with first graders on spelling (4/27/79; 5/4/79). The "spelling buddy" system was the only institutionalized peer teaching observed.

Less formalized instances of peer teaching occurred often. Older children directed younger. For example, second grader Geoff helped first grade Sean as they read the class farm animal chart together (5/10/79). Ted, a mature second grader, explained to George, a small and immature first grader, what the Caldecott project assignment consisted of (5/19/80). Younger children asked older ones for help. Cleo, making a horse picture and story, said she couldn’t find the spelling of horse, and turned to Mary for help (5/19/80).
Children of the same age and ability also used each other as resources. Sam and Sean, writing thought ramblings about their trees which they had just observed, worked out spellings together:

Sam: How do you spell had? h - a - t?

Sean: (tells him had, not hat, that's hat.)

Sam: How do you spell dead?

Sean: D - a - d is Dad. D - e - d, is that dead?

Is d - i - d did? (11/20/79)

Daniel and George were both first graders but differed in maturity and confidence. Daniel helped George start his math: "Now this is what you do" (5/22/80). Three second graders were responsible for a joint newsletter article. Nini and Ken helped Daryl remove an error and compose a sentence:

Nini, proofreading Daryl's writing, volunteers: "That doesn't make sense" (referring to an unintended grammatical garble due to repetition). She goes away. Ken comes over, helps Daryl, then dictates next sentence to Daryl. Daryl says OK, begins to write. Then, with a sigh, says "I can do it myself", and Ken goes off. Daryl's handwriting is painstaking. (5/4/79)

Four girls gave each other spelling tests on the board, one dictating to the other while two stood by. Cari told Caroline to write squirrel:

swrl s qr rl sq ur. "Squirrel is hard. You better look. You're going crazy with it" said Cari to Caroline. (4/19/79)

Finally, children assumed group leadership, as did Ted when reading The Big Water Fight (Norman Bridwell, School Book Service, 1977) to his friends in the reading center:

Don next to Ted, with his arm around him. Sean on floor, coloring next to Nat... They show enjoyment, anticipation as Ted reads. Ted offers to read another story, Terry's Treasure Hunt. (5/3/79)
The various forms which cooperative relationships took in this classroom have been described as falling into these not always discrete categories. The teacher's policy was thus to require and also to encourage cooperation between individuals and within the group, through these different forms.

b. Shared experiences were provided. The teacher's policy was also to provide experiences which were social as well as cognitive, so that children encountered new ideas in an interactive setting. These common experiences then became part of the group's shared history.

Providing shared experiences was a family-like characteristic of this classroom. In a family, young children's experiences occurred within a social context, and family members shared the same past as well as the same present. Language used among those who shared experience, at home or in school, could be implicit and still be understood. Thus, this common history supported children's beginning attempts to speak and write, and what they produced was meaningful in the context. This encouraged children to use language since they could understand and be understood without re-creating the whole body of meaning on which their language rested (Rosen & Rosen, 1973; Wells, 1979).

The teacher's long-range actions promoted and enabled the development of a shared history. She used this history to build a network of ties among children. It might be logical to suggest that any group develops a common history and a network of ties, simply because they are together over time. The reason these characteristics seemed noteworthy in this classroom, however, was that children's common history and network of relationships seemed to have been cultivated and used, in order to bring about language and thinking. It might
have been otherwise: children's social interest in each other probably would always be present, openly or covertly, but might not have become a basic part of curriculum structure. Similarly, experiences might not have been provided which were social as well as concrete and dynamic. Thus, the nature of field and tenor, significant for the kind of language used, might have been different. The teacher's provision for shared experience (whether she did it consciously or intuitively) will now be described.

Many kinds of shared experience were provided. Everything that has been discussed above could be reconsidered as contributing to children's shared experience, from whole class events such as a common literary experience (hearing *James and the Giant Peach*, Roald Dahl, New York: Knopf, 1961), taking trips (to Blendon Woods at maple syrup time, to Little People's Farm, to the conservatory), to small group activities (planting and tending the backyard garden and putting on plays), to working in pairs, (sharing beakers of crystals or brine shrimp). Children belonged to many, different and overlapping pairs and small groups, and so over one or two years, shared experiences and developed ties with many different children. In addition, these pair and small group experiences were connected to and incorporated into the experiences of the whole class. Contributions from home were also blended in, and functioned to enlarge the class experience:

Ruth Ann's grandfather came in and gave us Jerusalem cherry plants, and he told us what to do with them. Thank you, Mr. Brown. Ruth Ann's uncle came in and talked to us about teeth. Ruth Ann did an impression of her uncle's teeth, and her uncle did one to her. Thank you, Dr. Brown. (from Newsletter, May 23, 1980).
Shared experience was made conscious. Children's shared experience was talked and written about, thus in theory making children consciously aware of it and more apt to remember it. The weekly newsletter planning accomplished this reviewing and organizing function, as did making group charts, maps, and vocabulary lists, and having discussions.

Children's responses to people and activities in photographs of past, shared experience. Evidence of the importance to children of this experience is found in their comments on photographs of classroom events. The first comment children often made concerned the identity of those in the picture, and along with that, what had been going on at the time. They usually focused on who and what regardless of the actual question put to them.

A review of six children's volunteered comments about these photographs shows that approximately half of them named children and recalled the event. Betsy, for example, looked at two photographs of the teacher with a pair of children:

She [Mrs. B.] is doing spelling and she is doing it with Trudy and I don't know him, I don't think I remember him. (Transcript, p. 33, 4/30/80).

and

There is this year. I remember it was way back in the year. I remember Monique and Jill were sitting here. I remember that day they wanted to sit by the puppet stage, by their dishtubs and Mrs. Bridges is working there. (Transcript, p. 31, 4/30/80).

Betsy had tried to identify everyone and to create an interpretation of a story to explain what was going on.

When looking at one of a set of photos of "places" in the room, intended to elicit children's concepts of the normal use of those
places, Monique commented instead on the person:

Observer: Now let's see. What are the other places here?

Monique: Who's this? ... Oh, that's Polly ... when she had long hair but she cut it. (Transcript, pp. 53-54, 5/1/80)

Deborah was asked about when things normally happened:

Observer: We'll continue with #48 [of the set on time].

Deborah: Someone was copying off the Chinese numbers and writing them down here. I think Jessica and Nini, they're Chinese, and they write the Chinese numbers out there. (Transcript, p. 62, 5/1/80)

Sean looked at photos selected to elicit comments on "remembered shared experience":

Observer: So. Number 61.

Sean: This is a picture of all the things like, from James and the Giant Peach from last year because we all did a book, a picture ... John did this - "James." I don't know who did that. Steve did this ... Ruth Ann did that. George did that - no, Steve did that and that. And John did that and that. And Trudy did that, and - I don't know who did that. (Transcript, p. 78, 5/12/80)

Mary described events which had led up to the chart in the photograph. This showed characteristics of witches drawn from stories read by the teacher.

Observer: That is picture number 54.

Mary: This, she would - um - she would read books and then she would write book, Jolly Witch. Name of witch - Cluny. Name of cat - yes, a broodle, brindle, or something; Broom, Old Blue. Spells - good spells, like bad spells; home, in the forest, moved to cottage; pot.

Observer: So that was writing the teacher did on the board? Or on that chart? Is that right?
Mary: Yeah. She would ask us the book, the name of the witch, the cat, the broom, spells, home, the pot ... What was the witch like? And then her clothes - black, white, purple.
(Transcript, p. 39, 4/30/80)

Materials of shared experience, and work (or fragments of work) that came out of it was valued. Just as their reactions to photographs showed they were interested in past, shared experience, so also were the children and teacher interested in the tangible things which were part of experience, and in the work which came out of it.

The special materials of children's activities were often given to each child, pair, or small group of children. Thus they received a token or part of the whole: their own caterpillar, brine shrimps, seedlings, tree to adopt, crystal solution, egg and chick, snails, sundials, math stickers, and self-selected book cover for making their own book. Children revealed their interest in these tangible tokens as they showed their stickers to the observer (1/22/80), deliberated over their choice of book cover (5/21/80, 5/30/80), stowed the empty vial from the caterpillar larva in their dishtub (5/9/79), and wondered which butterfly in the butterfly garden had come from their larva, which chick in the brooder from their egg (5/9/79).

The teacher's policies of providing an audience, of displaying and of using children's work, also showed that she valued what they did. The audience for children's talk, writing, and other representations gave them assurance their work had value and meaning as part of the larger group experience. Similarly, the display of their finished work on the walls and in the halls spoke of the importance of the part to the whole. Finally, children's work had its varied, real uses. Original books were placed in interest centers or with library books and
read by others. Newsletters and permission letters went home. Play plans were used to organize plays.

There were also some small events from which the importance of children's past, shared experience to them could be inferred. These events occurred when old work or fragments of work came to people's attention. The teacher and the children treated this work with importance. When thought rambling tablets were borrowed for copying by the observer, children were alert to their return, took them eagerly and replaced them in their dishtubs efficiently (5/25/80). When work on weather was taken down by the observer, children were apprehensive, and needed reassurance that it was being removed with permission of the teacher, and would be returned (5/15/80). Work handed back by the teacher was done so with care, as the observer inferred:

[the teacher] takes down two chalk designs, and asks whose they are. Does not stack up, throw away, try to get rid of impatiently, but asks whose they are since they have no name. Her attitude was one of care and respect for these chalk drawings. She used the name they gave to these drawings - "cool colors" ... (4/26/79).

Care was also extended to items which seemed to have little intrinsic significance. During observations of sprouting seeds, the teacher spoke:

Teacher: Somebody gave me a pea seed that was on the rug. Is somebody missing a pea seed? It looks like this one has started ... Cleo, would you like to put that in with yours? (4/30/80)

Evidence that small items continued to have significance over time came at the end of the school year. Construction paper planets - Mars, Venus, Mercury, and finally Pluto, were carefully removed and
given away, amid children's speculations as to who had made each 

The value placed on these fragments and on children's work by 
children and teacher alike showed the importance they placed on their 
shared experience. This was also shown by their spontaneous responses 
to photographs of people and events in their class. These shared 
experiences were provided for different, overlapping groups by the 
teacher. She also helped children think about and organize these 
experiences, and extend and represent them in work which had value 
for both children and teacher.

Thus, the teacher's long-range action, encouraged a sense of 
community both through her use of cooperative ways of working, and 
her provision of shared experience which became the classroom's unique, 
shared history. Children were thus tied in to the whole; they both 
gave to it and gained from it. That is, children could contribute 
their idea or representation and have its meaning completed by the 
group's common understanding. A social network which tied members of 
the class together over time enabled children to use language for a 
variety of purposes supported by shared meanings. In this respect, 
the tenor of the classroom was familial.

5. The teacher's immediate actions, particularly her references 
to individuals' past experiences, also encouraged a sense of community. 
The teacher implemented her policy of encouraging a sense of community 
a) by talking directly to children about their experiences, helping 
them to recall and think about it. b) She also talked to children 
about other children's ideas and past experience, which had been 
shared by some or all. c) By referring to children's experience, she
recognized individuals, helped children reflect, and recalled their shared, private background.

a. In direct discussion, the teacher helped children remember their own, shared experience. This happened most notably during newsletter planning time. The following excerpt was typical, as children and teacher remembered their trip to the farm in order to write about it for their parents:

Teacher: What kind of information do we need to include in an article for the newspaper about ..., Deborah?

Deborah: We saw the machinery.

Teacher: What machinery did we see? What was it used for? ... The animals that we saw? Ruth? ... Which animals you petted? George?

George: The donkey.

Teacher: The donkey. What else did you get to pet?

Children: Pigs, pigs. The baby pigs.

Teacher: The baby piglets.

Children: The horse, the rabbits, and the little donkey.

Teacher: What was the horse's name?

Children: Terry. She ... won some medals.

Teacher: (writing) Oh, and someone said the rabbits.

Children: Ruth Ann said the rabbits.

Teacher: OK? Were there any other animals we got to pet? That we didn't list?

Mary: Terry won some medals we could say. We got to pet the goat.

Teacher: We got to pet the goat. What other things did we do on our trip? Steve?

Steve: Drank well water. (Transcript, p. 90, 5/16/80)
b. The teacher also talked to children about other children's past experience, referring to them in the third person by name. For instance, when talking to the whole group, she said, "Polly and I thought it looked like a little pig's tail" or "Salli had a suggestion." Through both direct and indirect references, she linked children's names with ideas she was helping them to recall or understand, even when those names were not an essential part of the content.

c. The possible effect of these references was to reassure individuals, to help children reflect on their experiences, and to recall the shared, private experience of the group. Examples will now be given.

Every time the teacher mentioned a child's name, it could be assumed to have the function of recognition and assurance, of strengthening an individual's place in the group, and by extension, that of all other children. Thus, during one session when the teacher was reviewing a group of new books on rocks and ancient animals with the class, she commented on one:

Teacher: Lots of good pictures ... Steve, there you go with your bones [referring to Steve's horse skeleton project] (Transcript, p. 142, 5/27/80).

and later:

Teacher: Then I have two [books] on volcanoes called the Science Book on Volcanoes.

Children: Oh, I've read Betsy's. [Betsy had contributed a copy of this to the class study].

Teacher: I think the story about the farmer is in here. I had somebody read it to me one day for reading conferences. (Transcript, pp. 142-143, 5/27/80).
In these cases, the teacher and the children were remembering other children's past action— a project, a book shared with the teacher or with the class. This remembering served no evident conceptual purpose. It could be said to have strengthened cooperative ties by recognition of children's contributions and to have called up images of concrete aspects of experience.

Other references to children by the teacher would seem to have helped them build on other children's ideas, and organize their own thinking. During a rugtime discussion of shells, the teacher was talking about edible shellfish. Notes paraphrase what she said:

Teacher: What are mussels good for? Cari, what were you telling me yesterday? (5/4/79)

She was using Cari's idea of yesterday to add to the current discussion, showing by doing so that ideas can be pooled, and individuals can contribute. She also asked Jed and Ewan to contribute:

Teacher: Jed, where were you when you found your shell?

Ewan: Scallops were on our beach. (5/4/79)

In these latter two cases, the teacher has personalized and exemplified an abstract idea, that is, that each shell (or animal) has its own kind of environment.

A further example of this use of reference to children's ideas and experiences was found in records of their seed study. While the class was observing their sprouting seeds, there was some disagreement as to whether the sprout observed was a root or a shoot. The teacher asked Daniel about his observations of mung beans:

Teacher: What do you mean? ... What was the little green skin? You think that's a root? Polly and I thought it looked like a little pig's
She seemed to refer to Daniel's idea that the shoot was a root in order to focus this issue. Her reference to Polly's idea, shared with her, that the sprout looked like a pig's tail, probably served to recognize and confirm bonds, as well as to share an imaginative metaphor.

Later, during this same seed observation, the teacher asked children what they had noticed about their seeds, and then summarized their observations to structure the evidence for children so they could draw a generalization:

Teacher: Does it have anything to do with the size then? Some people said that their mung bean had started to sprout. And you said your yellow-eyed bean had started to sprout. The yellow-eyed bean is big. The mung bean is very small. Do you think that sprouting has anything to do with the size of the seed? (Transcript, p. 28, 4/30/80)

On another occasion, children were asked how they could find out "what famous falls touches both Canada and the United States?" They made several suggestions which the teacher elaborated on in discussion. Then she summarized in order to help children look for the falls by referring back to these suggestions:

Teacher: Salli had a suggestion - look under falls. Mary had a suggestion of looking under United States. Steve had a suggestion of looking under rivers to see if maybe something would be there. (Transcript, pp. 13-14, 1/17/80)

Finally, in addition to references which gave recognition, and those which helped children think and learn, there were those which touched on past, shared events understood by those who had participated in them:
Caroline shares lobster shells which parents have brought back from Maine. Begins to wonder what part of lobster each piece is, then to play with pieces, assembling them in various ways to make imaginary objects: a "snail lobster," "It could have been a foot" with claw at right angles to tail, etc. Others laughed with her, as she enjoyed this small impromptu performance.

Mrs. B. joins in. "That's a whingdingdilly!"


These references to individuals seemed to serve to link them to the group as part of a network of relationships extending back in time. At the same time, they linked their ideas and experiences to those of the group. It was thus demonstrated that children's contributions were both valued and useful.

Thus, the immediate action of the teacher encouraged a sense of community by recognizing individual contributions to common experiences. It is suggested that through this immediate action and through her long-range policies as discussed above, she created a familiar tenor of discourse for these young children.

The last two sections of the discussion of tenor will look at children's views and actions, within this family-like tenor. Two aspects will be discussed: 6) children's acceptance of the teacher's underlying authority, and 7) regulation by children of their own activity, making choices within the limits of this authority.

5. **Children's acceptance of the teacher's underlying authority** was revealed both by what children did and by what they said during interviews. All of the children's behavior which maintained familiar patterns of the class could be considered evidence that children
accepted and brought about the kind of social order the teacher desired.

In addition, as has been described above, children accepted teacher's requests, requirements, and decisions. Their view of this is indicated in comments made during interviews with the observer.

Concerning requirements, when children were asked how they happened to write a story or do a project, they usually explained that their teacher had asked them to do so:

Observer: Every time you study something like seeds - do you have to do a project each time?

Deborah: Well, when Mrs. Bridges tells us to. (Transcript, p. 61, 5/1/80)

Similarly, Daniel was asked why children had written the witch stories and books pictured in a photograph. He explained:

Because that was in the fall last year. Mrs. Bridges asked us to do some projects and this one was - this one was this year when she asked us to write some stories. (Transcript, p. 236, 5/21/80)

Finally, Sean is unequivocal in his answer:

Observer: When the people decide to write a story, are they writing it for somebody to read, or are they writing it because they want to write it?

Sean: Well, they are writing it because the teacher told them to. (Transcript, p. 81, 5/12/80)

Concerning limits, children often phrased the unwritten rules of the classroom indirectly, in terms of what "you are supposed to do."

Deborah described what happened during silent reading time:

Deborah: This is at silent reading time. We all have to read. And some of the kids read with Mrs. Bridges. And everyone has to read. (Transcript, p. 57, 5/1/80)

Monique's version of the same rule:

Monique: You can read anywhere but you have to be quiet when it is reading time. (Transcript, p. 54, 5/1/80)
Cleo uses the teacher's name when explaining why the child in the photograph is alone in the middle of the floor doing his math:

Observer: Why do you suppose he chose - he is in the middle of the floor doing his math?

Cleo: I guess - Mrs. Bridges always says you can't work with somebody else, cause you make too much noise [i.e., if you make too much noise] (Transcript, p. 45, 4/30/80)

It is very likely that the observer's questions about children's reasons for their behavior, including their reasons for writing or doing projects, were too abstract, and that the subject of their own motivation was beyond their conscious awareness. However, while they could not report on themselves, they were clear about the teacher's role as decision-maker, and seemed to take her decisions for granted.

6. Children's regulation of their own activity was possible because of the teacher's shaping of the resources of space, materials, and time. The provision of large amounts of time with flexible boundaries, and accessible, concrete materials allowed children to set their own patterns of activity and to determine the details of their experience. These were choices made within the overall, accepted framework of experiences with content (field), with other people (tenor), and with the means of communication and representation (mode), as decided and provided by the teacher.

Making choices for oneself was more characteristic of a family than of a more formal institution which required more uniform behavior. Latitude was given for these choices, and childlike approximations allowed. Therefore, flexibility was noted in the use of space and in transitions from one activity to the next. Latitude was also allowed in these following areas which related to children's work and to their
interpersonal relationships: a) in choosing what to do, which to do, even whether to do an activity; b) in deciding how to carry out an activity, c) in deciding when to do an activity; d) in choosing where to work; and e) in deciding to work alone or with others. Each of these areas had its own limits, within which children were free. These areas will now be described and illustrated.

a. Choosing what to do, which to do, or whether to do it were children's choices. Children had no choice about whether to do certain kinds of activities, such as: weekly math papers, spelling assignments, observations and thought ramblings, news articles, permission letters, certain experiences like weighing eggs, and recording observations about mystery powders. Beyond these specifics, there were choices, ranging from most to least constrained.

For example, all children were required to do certain activities, but were allowed choices within them. All children participated in reading conference time, though they decided on their own books, places, and partners. All children soaked seeds, but could choose which to soak and plant. Everyone made a farm project of some kind.

Next, there were choices which were not explicitly or universally required, though they were often inspired or suggested by the teacher. Some children wrote reports and stories about current themes under study, for example, Polly's rock story (5/4/79), and Betsy and three others' stories on magnets (1/15/80). Mary's pet chick story, written at home and shared at school, likewise represented her free choice but within a theme content provided by the teacher (5/4/79). So also did pet rock houses, decorations made out of shells, seed collages, and fanciful clocks reflect teacher directed themes (5/17/79). Other
choices were also theme-related: Geoff's manipulation of the balance and weights, as he played and practiced with them rather than using them to weigh eggs (4/18/79); Polly and Geoff reading graphs the class had made earlier (4/27/79); and Polly painting the clay birds which would go in a plastic egg-shell nest she had devised (5/4/79).

Finally, children seemed to initiate their own activities: making magic tricks (4/19/79); popsicle stick log cabins and television sets (5/17/79); making football drawings (1/17/80); reading a story to a stuffed owl (4/26/79); and playing train (5/3/79).

In the case of each of these activities, from the most directed to the least, children were free to generate and choose their own ideas. Their own meanings coming out of their experiences were always allowed.

b. How to work was often (though not always) a choice. The way in which children were to participate in certain teacher-directed activities was quite specified, as notes show:

Whole class on rug, teacher explaining how to weigh eggs which were in incubator. Scales, weights, incubator, chart for observation recording. System: calendar with number of eggs to be weighed by pair ... List of pairs and place for them to record first, second, third weighings. (4/18/79)

However, there was latitude in most activities for children to decide how they would carry out activities. Deciding which materials to use, and discovering how to use them was for children to work out. (So also was deciding how to use language, including invented symbols and invented spelling, to represent their ideas.) Supporting this self-regulation were accessible materials, flexible time periods, and child's knowledge of practice with a variety of techniques. As has been said above, the teacher's policy was to give children techniques early in the year so that they could choose and use them independently or with
help from friends. She was quoted as encouraging them to remember the variety of techniques and materials available.

The most general point to be made here is that although the teacher may have regulated certain experiences closely, she allowed children to represent them in their own way. They solved their own problems of how they were going to represent meaning, and she accepted both their meanings (the what) and their approximations (the how). Examples have already been given which apply here: Ruth Ann's taping extra paper onto her roller movie so that it could be attached (5/20/80); Trudy's choice of uncooked spaghetti and pipe cleaners in making a collage (5/19/80); the children's sign "Keep Out of Math Center" posted to protect the dinosaur being assembled (6/4/80).

Cleo confirmed this area of choice which the teacher had given children:

Observer: Who told them [children in the photographs] how to do the projects? Did they decide for themselves how they were going to ... like Polly, did somebody tell her to work with the paper that way, cut the paper that way, paste it that way?

Cleo: We just design our own ideas, Mrs. Bridges said we should design our own ideas, work on something. It's a, a ... project.

Observer: So you have to decide yourself how you are going to do -

Cleo: Like a rabbit or something, how you are going to cut the ears. (Transcript, p. 47, 4/30/80)

c. When to do an activity was often children's choice, especially during worktime. Worktime was not only the longest event, but the event which allowed children the greatest number of choices. The events of rugtime, in contrast, were controlled by the teacher. The events of
reading conference time were similarly controlled, except that children could choose when to read what and where to sit. Worktime was the time when children could plan their own order of activity. They could alternate solitary and social activity, and periods of effort and rest.

There were some constraints in the ordering of children's activity during worktime, from time to time. If worktime began with observations and thought ramblings, these were to be done first. If it was Friday, newsletter articles were to be written so that the teacher could produce the newsletter in time to send it home that day. Occasionally, specific children were reminded that certain work needed to be done first.

Regardless of these constraints, children's response to these requests was not uniform. On the Friday morning the teacher was heard to say:

I would suggest you do your articles for the newsletter first. (4/27/79)

However, a record of work choices shows that some children worked on math, made a birthday card, worked in a handwriting workbook, rather than beginning immediately on their articles. In fact, many of these children were already with their article partners, and soon began to work together on articles (4/27/79).

Children who were late in finishing a piece of work usually responded to requests that they do this late work first. Trudy however, who loved to read above all else, was asked to finish her Caldecott picture, but was observed to read first:

Trudy on rug, needs to do Caldecott drawing, has it next to her, but is reading an Ungerer book [which
had been just shared by the student teacher.
(5/21/80)

Notes show that she had been working on this over several days, and that she did finish it.

Just as children sometimes treated constraints flexibly, so they also imagined more constraints than existed, particularly in regard to math. Some children said that math work was to be done first:

Two boys in the reading corner: Paul, are you done with your math paper? (smiles) Paul had put it up and was preparing to draw on manilla paper, but after this comment took it down and worked on it some more. (4/18/79)

Monique was very firm on this point:

Monique: First you have to do your math.

Observer: You have to do your math first, do you? Does your teacher tell you that you have to do your math first?

Monique: Yeah, cause - if you read - like Mrs. Bridges said last year this boy was trying to read all the books in the class and he never had time to do his math so he never got his sticker on his ... [folder]. (Transcript, p. 55, 5/1/80).

Others said that math could be done when you wanted:

Interview with Jed about math procedures. He explains you have four math papers each week. Friday, finish up, get a sticker. He said you didn't have to do math first, but can do when you want. (5/4/79)

Deborah, when looking at a photograph of children working, agreed with Jed, although she predicted it was likely children might be doing their math:

Observer: What are those children doing in there do you suppose?

Deborah: Doing their math?

Observer: Hmm, How do you know what you do in work-time? How do you decide?
Deborah: Well you do your math or study spelling words or something.

Observer: How do you know what to do first?

Deborah: You just pick. (Transcript, p. 58, 5/1/80)

The teacher explained this apparent contradiction:

I ask GB whether there is a set order in which children have to do work. She says no set order. But she observes some go right to math "for security". (1/17/80)

Looking at what children did rather than what they said, it was evident that they regulated the order of their activity, although they knew that they would be accountable at the end of the week for certain work. In this excerpt, Mary was seen to alternate math and story writing:

Mary: is at group of desks next to front wall. Has math papers, also a witch story underway. She starts on math, gets up and down a bit. Next time I look she is writing her witch story. At 10:50 she is back at math papers, with several pages of her story done. (11/14/79)

Sean had explained he liked doing math in the morning, but if he had other things to do, he could do it in the afternoon (Transcript, p. 81, 5/12/80). His behavior showed this flexibility:

Sean doesn't try math, looks around, gets up, talks. Turns to drawing. (Later in morning I saw him coming back to this paper.) (5/24/79)

In fact, based on observation, whether it was required or not to do math first, many children did so.

Children, thus, were free during worktime to decide when to do their work, within the limits set by such weekly rhythm as math folders and newsletter article writing. At times, some children were given more specific direction to finish a certain piece of work. Even within
this direction, they regulated the details of their own pace (as in
Trudy's case, above).

d. Where to work was a choice children usually had. The
teacher and children's use of space has been described as flexible,
within limits of appropriateness which became evident if violated
(pp.196-197; 226-230). Since the restrictions were few, children could
choose their own situation in the room, even if they used areas for
purposes other than that for which they were designed. Examples have
already been given of this flexible use (such as doing math at the
art table) and of overstepping limits (such as being too loud in the
reading center). Many more examples could be given which support the
conclusion that children chose where to work, and were allowed to move
from place to place. The observer's comment on the difficulty this
causd for research documents this movement:

Process of taking census of what people are doing
at any one time is difficult and frustrating, since
things change. A simultaneous view is not possible.
In-depth observation is not possible. Yet it takes
a while to look around. (4/27/79)

The times when the teacher decided for children where they should work
related to problems of interaction, rather than place only. These will
be discussed in the final section below.

e. With whom to work was also a decision for children, much of
the time. Some events were more highly organized than others, and in
these, the grouping of children into pairs or more was overseen and
made definite by the teacher. Examples were the partners in the timing
activities, the assignment of articles to definite groups, the egg-
turning and -weighing by partners, the measuring and tracing of each
other's shadow. Of course, membership in small instructional groups
such as spelling, math, and handwriting, was determined by the teacher.

In addition, the teacher sometimes intervened to change these associations when someone seemed unable to manage. The observer asked her:

Observer: ... Then the other area of choice is with whom they work ...

Teacher: That's a personal choice but I have some people that you know through the past - that I have some children that I say "you cannot work with them, today. You've been very disruptive." We've talked, we've been talking a lot about responsibility, rights and respect. And being a good class citizen." This person that you are working with has the right to work and not be disturbed all the time, just as much as you have the right to work and you are disturbing each other so much that I want you to work with either yourself or someone else." (Transcript, p. 72, 5/1/80)

She did not always intervene, however, as will be shown during a consideration of the aspects of the dimension of tenor which were new for children.

In general, however, children were free to decide whether to work alone or with others. A previous discussion has illustrated this diversity of their choices, as they were free to choose their own environment, including deciding to work alone (pp. 196-200).

Within this context, therefore, children were allowed to regulate their own activities, and to decide for themselves when and where to work, with whom, and how. They also had choices of what or which projects to choose, and also could decide whether or not to choose some activities.

These freedoms were not unqualified, however. There were requirements and limits within each area of choice. Particularly, choices of
whether to do something, or of what to do were more constrained than choices of where, when, how, and with whom to work. For example, there had to be a farm project, but the details were left up to the children. At any time, however, the teacher had the authority to limit choices and to fix requirements, which authority the children seemed to accept as natural. Thus, there were requirements that certain people work together, that certain materials and techniques be used, and that certain activities be carried out in specified areas.

The similarity for young children between family and school was that the teacher, like a parent, was secure in her leadership role. Children had genuine freedom within areas to make decisions without needing to accommodate to uniform group requirements. The children's actions could be compared to their linguistic approximations of mature language as they learned to speak. Both were individual children's own creations, not copies of a model. Hence there was ambiguity and flexibility noted in their use of places (where), in transitions between events and order within events (when), and in these other decisions of what, whether, and how as described above, as allowed by this homelike characteristic of the tenor or interpersonal relationship. This familiar nature of the interpersonal tenor emphasized the freedoms of childhood, not the responsibilities of growing up.

These, then, were the familiar aspects of the tenor of discourse. The teacher's shaping of the tenor in this classroom allowed children to use familiar, homelike ways of relating to other people. Within a cross-age family group, the teacher's role was like that of a parent. She provided parental security by being the taken-for-granted authority in charge. She also provided security by being an intimate, quasi-
parental friend, one who supported children's more abstract learning, verbally but also non-verbally. Like a parent, she believed that children differed from each other, and within themselves from time to time. This belief was reflected in flexible expectations she had for individuals, and the varied programs she provided.

The teacher's actions, both long-range and immediate, expressed these quasi-parental roles and beliefs. She planned cooperative activities and shared experiences which became part of the group's common background. In the immediate situation of interaction, she referred to these experiences and built on children's contributions to common interests. These long-range and immediate actions encouraged the development of a sense of community.

What were children's actions within this family-like network of relationships? First, they gave evidence of accepting the teacher's authority as natural. Second, within the areas of freedom left to them, they made their own choices which allowed them to regulate their own activity without having to conform to uniform demands of the group.

By being able to use patterns of interaction developed over the preschool years, children were introduced gradually to the more formal relationships of a larger institution. Furthermore, the familiarity of these early patterns was used to support new, more abstract content and ways of communicating and representing meaning. Or, in other words, a familiar tenor was used to support new aspects of field and mode.

New aspects of the tenor of discourse. A school, however, was not identical with a home; and the relationships between people in that school not just the same as those in a family. There were aspects of
the dimension of tenor which were new. These parallel those described above, and will include the following:

1. Children were affiliated with a school, a larger, more formal and complex institution than that of a family or classroom.

2. The teacher's roles were non-parental.

3. The teacher's beliefs were non-parental.

4. The teacher's long-range actions extended children's awareness of a larger, more diverse and complex community.

5. The teacher's immediate actions encouraged responsibility within a larger, more diverse and complex community.

6. Children had experience with the wider authority of school and group.

7. Children had increased responsibility for their own behavior in relationship to the group.

1. The school was a larger, more complex institution than the home or the classroom. In spite of the family-like nature of a cross-age group, this classroom was part of a school, and had to conform to schoolwide regulations and schedules. Children had ties to members of other classes, as the class itself had ties to other classes. For example, it was sometimes invited to be an audience for another classroom's production. It also participated in whole school events, from daily cafeteria to assemblies and fairs. The school world was thus wider and more complex than the world of families and neighborhoods. Children were supported by the familiar aspects of their own classroom but were introduced to new kinds of relationships through their membership in this wider community.
2. The teacher had non-parental roles. Even though the teacher's predominant role may have been parental, she did not act exactly like a mother. She did not often hug children and was never seen to hold them on her lap, even in her most familiar role. In addition, at times she took on new, more formal roles and used a more formal language register. Her conduct of the whole class rugtime when children listened and participated verbally, was more formal than her work with individuals and small groups. Thus, without discarding parental roles which through their intimacy and support gave security, she extended them to include more formal, distant roles, and thereby forwarded children's process of separation and independence.

3. The teacher's beliefs were non-parental. The teacher accepted children's individual differences and accommodated her expectations to them. She also believed that development of independence and responsibility was an important goal (as, of course, any parent does too. The use of "non-parental" implies a difference in degree, not kind.)

Interviews with the teacher brought out this belief with regard to children's work and their social behavior. With regard to their work choices, she has been described above as encouraging children to choose and use a variety of art media, rather than telling them which media to use. She also placed value on "exploring other activities" available within the room, rather than always doing the same thing. One time, she observed that children were only doing what was listed on the board:

Teacher: We sat down and talked about it and I said the idea now that I'm not giving you as much direction because you should be exploring on your own. In fact, I should be able to just maybe say one
thing and you should be able to fill your day or I haven't done this job right ...

Observer: You said this to the children?

Teacher: Yes, we talked about it. We talked about all the things that are available in the room to do. I said the reading center is there for you to use. You shouldn't wait for me to tell you to use it. I said you should be going to it and using it and getting books. I said you should be using the art center. If you want to complement a project with an art picture ... So it was interesting. I think it has been better since then, as far as them finding things to do. I think maybe they felt restricted. Some of the children that were involved were like some of my better students like Deborah and Dan. Students who were very capable were just stopping. Now some of them are first graders too. I felt it was time to discuss it ...

Observer: So you can discuss things explicitly with them when you feel you need to.

Teacher: I think they have been exploring a lot more and not depending quite so much on me for suggestions.

(Transcript, p. 68, 5/1/80)

This same philosophy of independence was evident in her discussion of children's social behavior. During the discussion of children's freedom to choose with whom they worked, the teacher's comments showed she expected children to take initiative in solving interpersonal difficulties:

Teacher: Mary was working with Monique but they weren't working, they were just totally fooling around and bothering one another. I forget what preceded it but something about ... I sat down and Mary said something about she couldn't get her math done and I said well, whose fault is that? She goes well, Monique won't leave me alone. And I said, are you tied to the seat? Do you have to stay there? I said the only person I can see to blame would be you. I said you can go anywhere in this room that you would like to and work. You don't have to stay by Monique. I didn't tell you ... you
know, this type of thing and she just kind of looked down – she knew, she had heard me say it to other people. You have the right to move. Don't blame it on Monique. I said just like Monique has the right to move, away from you. So they have choice. (Transcript, p. 73, 5/1/80)

Thus, the teacher believed that conflicts were normal and natural, and that rather than eliminating this kind of behavior, teachers needed to help children learn how to handle it:

Observer: But you accept the fact that there will be problems. There are better days and worse days. And you are really helping them handle it.

Teacher: Right. And I think that is more important to them. If we realize that these are natural things. Let's not try to maybe stop the behavior so much as to learn how to cope with it and help the person through it. I mean it's only normal behavior. There is nothing abnormal about what they are doing... You know I think that in itself by having your friend move away from you is going to be punishment enough - self punishment. (Transcript, p. 73, 5/1/80)

The goal of independence and responsibility was most generally stated in another interview:

Observer: But I notice you do really encourage them to be responsible for themselves. Isn't that right? Would you say that describes...

Teacher: In everything. That's probably the biggest thing - getting them to be responsible for their actions; to be responsible for what they are doing as far as their work. That's life, ... that's life. (Transcript, p. 218, 5/20/80)

The teacher wanted to help children beyond a stage of moral development in which they saw parents and teachers as the law, as policemen. She looked on herself not as a "big authority figure" but as one who helped
"them make that transition that they naturally go through" (Transcript, p. 218, 5/20/80).

How is this expectation that children should be responsible and take initiative in solving their own problems any different from the self-regulating choices described above? Self-regulating choices represent a familiar kind of social relationship which allows an individual the freedom to follow natural patterns, without reference to the group. By contrast, the expectation of responsibility for one's own behavior is an expectation that children will use inner control in adapting to others, and in extending their own learning. This was the new goal toward which the teacher worked; her means included a family-like acceptance of and accommodation to individual differences in ability to take this responsibility.

4. The teacher's long-range actions extended children's awareness of a larger, more diverse and complex community. The same organization which the teacher used to provide familiar ways of working and relating, also operated to give children new kinds of social experiences. That is, the use of a) cooperative ways of working and b) shared experiences constituted manageable ways of interacting in a larger, more complex group than the family.

a. Cooperative ways of working were used within a larger, more diverse and complex setting than a family. Thus, the same ways of working which developed a family-like sense of community also extended children's experience in relating to others. In their classroom, children were with many others, sharing space and materials, and coordinating their use of time. There were many more possibilities for interaction and negotiation, especially within a room which promoted cooperative
activity rather than silent, individual work. These children also represented a diversity of backgrounds and values which was greater than that within a family. As children managed their own social relationships (under the guidance of the teacher), they gained experience in coping with and reconciling differences (an idea expressed by Rosen & Rosen, 1973, p. 25).

Children coped with their own conflicts and solved their own problems, usually without the teacher's intervention. For example, two boys trying to share a third boy's markers accepted his mediation:

Evan, Sean in conflict over sharing Daniel's magic markers. Sean wants to have them. Evan is not finished. Daniel is called over to make a decision, and announces in favor of Sean. Boys accept his decision. (5/19/80)

Another exchange between two boys working on a farm project together shows disagreement as to the project's next phase:

Daniel: The chick's gonna be easy. All you gotta do is go like this: zzz, zzz (sound accompanying drawing motions)

George: Wait, Daniel. We're not gonna use chicks like that.

Daniel: We're going to use chicks like this, right? Like this ... We're not going to do this ...

George: Yes, we are.

Daniel: No, we aren't.

George: Yeah.

Daniel: No, we aren't.

This stalemate is resolved, as the boys agree to do all the "forms," in Daniel's words, with Daniel drawing and George coloring. (Transcript, pp. 102-103, 5/22/80)
A final incident shows children using more sophisticated social skills in deciding how to divide up parts of a project:

John and Mary are negotiating over an encyclopedia volume both want, also over who will do which animal for chart. (5/19/80)

Later, Mary reported their solution:

Observer: How did you work that out? Was it with John that you were trying to work something out about an encyclopedia or something?

Mary: Yes. He drew the same thing as I did but I drew it bigger. So we decided that that would be the mom and mine would be the dad. (Transcript, p. 98, 5/19/80)

The use of small groups, therefore, provided both a familiar kind of organization and a setting within which to negotiate conflicts and to work out new, cooperative relationships.

Cooperative ways of working also included new responsibilities for routine management of classroom life. The teacher devised systems so that children could take on certain routine responsibilities independently, without close direction. These systems have been described above (p. 223). To recapitulate, they included attendance taking by individuals and attendance reporting and lunch count by one child. At the end of the morning and afternoon, children cleaned up according to assigned jobs (1979) or to a magic number of items to pick up (1980). Children also had responsibilities for math routines, for getting their new papers from one of the six math group's paper "caddies," placing finished work in their math folders in the teacher's file, and putting work that was handed back in their dishtubs or lockers. In 1979, children moved a magnetic nametag from "in" to "out" on leaving the room. (In 1980, the teacher decided children were not ready for this responsibility.) An additional routine which promoted
independence was the availability of lists of children, which were used for survey-taking, play planning, and so on.

Children were also observed taking responsibility for the routine of blinking the lights to signal recess time (since there were no bells). This was observed only occasionally, but was noted as an example of children's taking initiative for routines.

Thus, the teacher planned in advance for children's management responsibility, and for a variety of small group work. The fact that the class was larger and more diverse than a family meant that children were in a new kind of interactional setting. The teacher planned ways for them to practice this new kind of interaction.

b. Providing shared experiences also had the double effect of confirming the familiar and developing the new. Common meaning was established, and individual development encouraged and supported which was new in relation to the whole. Children did have individual as well as social experiences, and followed through by representing these in some way. These smaller ventures into individual expression of personal experience represented new, solitary endeavor, and yet were enabled and supported by the larger, shared experience. For example, Duncan came back from the farm trip and wrote a thought rambling about the farm, including the pigs he had seen. He read an informational book which extended his knowledge of the uses of pigs. Out of this came a report that summarized what he learned about pigs. This book was his own part of the group farm theme projects. He was supported by the common experiences and understanding of the group. This was the familiar aspect. The individual nature of his learning and writing was new, and belonged to the new aspect of the tenor of interpersonal
relationships. (The field and mode were new also, as he engaged with more formal content, and wrote in a more formal way.) Other examples of individual work which rested on common meaning will be given in Chapter 5, when sample histories of individual representations are provided.

5. The teacher's immediate actions encouraged responsibility within a larger, more diverse and complex community. The records of the teacher's interactions with children shows that she rarely intervened in the case of disputes, and that she expected children to take the initiative in ordering their life together. As such, it confirms the observations made above of children working out their problems in small groups.

Children worked out their own conflicts. In this excerpt from an observation of the toad being fed a mealworm, the conflict over a chair is ostensibly ignored by the teacher, though her suggestion to get pad and pencil is obviously intended to redirect children's energies:

<table>
<thead>
<tr>
<th>Children</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let me see, I can't see.</td>
<td>I think some people need to</td>
</tr>
<tr>
<td>The toad can't see it (i.e., the mealworm)</td>
<td>get their tablets and their pencils.</td>
</tr>
<tr>
<td>Oh, yeah! (looking at the toad)</td>
<td></td>
</tr>
<tr>
<td>Oh, oh. Will somebody, ...</td>
<td>Feel him. Watch it, sweetie,</td>
</tr>
<tr>
<td>if somebody will save my place.</td>
<td>there's a whole pan of water there.</td>
</tr>
<tr>
<td>Can I pet the toad?</td>
<td>(Transcript, p. 207, 5/21/80)</td>
</tr>
<tr>
<td>I'm not going to share ...</td>
<td></td>
</tr>
<tr>
<td>Nobody will take it (i.e., the chair)</td>
<td></td>
</tr>
</tbody>
</table>
One child offered advice to another who was worried he'd lose his place, but the teacher remained focused on the toad's action, and the pan of water.

In these next examples (as reported by the teacher), children complained about another child to the teacher. In each case, she turned the problem back to them. Sean claimed John had called him a name. His teacher told him to tell John he didn't like that word. In a second incident, Betsy said that Deborah had become very angry when she, Betsy, misspelled the word absolutely, and had said she would no longer be Betsy's friend (according to Betsy, who recounted the event with dramatic relish). The teacher listened, and then told Betsy to explain to Deborah that she had spelled the word as best she could (5/16/80).

Children took the initiative. Not only did the teacher let children settle their own disputes, she also expected them to take the initiative in solving problems. On one occasion, she was heard to remind children to write their permissions slips for a forthcoming trip, since "they wouldn't want to sit in the office next Wednesday." This was phrased as a reminder of their responsibility. Children were expected to make their own plans to carry it out (5/30/80).

When children didn't take responsibility for their part in a project, the teacher followed through and let them experience the consequences. Thus, when they forgot ingredients for a cooking experience which she had planned to do with them, there was no cooking. Similarly, they didn't go to the class garden when they forgot to bring in permission notes (5/22/80).
In the account of Mary and Monique above (p. 364), the teacher reported reminding Mary that finding a good working situation was Mary's responsibility. This again shows the teacher interacting to encourage independence and problem-solving.

A final instance in which children's initiative was called on case from the last days of observation, as the room was being readied for the end of the year. The teacher put materials on the floor to be sorted independently by the children while she tackled other jobs. She had the same relaxed attitude toward procedure when, that day, children were allowed to select work and put it in a file for the coordinator of the informal project. That same day, too, children were to take home a paper, as announced over the loud speaker:

I noticed that in spite of the stern direction from the principal to be sure that every child got a paper to take home, GB didn't make a big deal of it, just sat with a pile on her lap, and children came to her to get theirs as they gathered up their dishtubs to go home. (6/11/80)

This concludes the discussion of what the teacher did through immediate interaction to encourage responsibility within a larger, more complex community. She allowed children to work out their own conflicts. She expected them to take initiative in solving problems and showed this by what she did and did not say. Their independent behavior was encouraged by this interaction, while being enabled by her long-range planning.

6. Children had experience with the wider authority of school and group. It has already been noted that the school was a broader, more complex institution than the family or the classroom. Children who accepted their familiar teacher as the underlying source of
authority, also were in the new situation of relating to a) school-wide authority and b) the authority of peers.

a. **Children related to the larger school community.** They were in a subordinate position to other school personnel: other teachers, including special teachers, the school clerk and school custodian, and of course, the principal. They had to learn what the expectations within each relationship were — how to speak and act, and what to say. They had to learn how to reconcile occasionally contradictory expectations and to accept different ways of interacting than they were used to in their classroom. Teachers who scolded them when they forgot and ran in breathlessly from the playground invoked a familiar, common rule, but with a harshness which was not at all typical of their teacher: "Don't you know recess is over?" (5/21/80). The fact that this class was one of only three informal in a school of eighteen classrooms increased the complexity of relationships for children and teacher with peers and superiors.

b. **Children also related to the authority of the group within their classroom.** It can be suggested that the overall shaping of the context by the teacher put children in the position of exercising authority over themselves in small groups and as individuals. Her planning for small groups and shared activities allowed groups and individuals to practice self-discipline. Her role as authority remained, but was usually in the background.

Evidence that children helped maintain the standards of the class supports this idea that the group had authority. Many instances were found in the participant observation notes of children regulating each
other, invoking unwritten classroom rules, and enabling the teacher to remain uninvolved.

Children explained these rules to the observer when looking at photographs. These were rules for the conduct of routines and for the use of the room:

In the reading center: "You are supposed to read and you can talk too but you are supposed to whisper if you talk." (Transcript, p. 53, 5/1/80)

At the art center: "You're not really supposed to work in there with your math because people are painting there. They might get paint on your math papers." (Transcript, p. 52, 5/1/80)

When finished with a thought rambling: "You're supposed to show the teacher." (Transcript, p. 75, 5/12/80)

During reading conference time: "We all have to read." (Transcript, p. 57, 5/1/80)

The observer had arrived at the same understanding of reading conference rules:

O.K. to change places, books; to talk quietly to friends; to ask friends for help; to share with friend.  
Not O.K. to make a lot of noise, disturb others.  
John and Sean are borderline.  
Enforcement by children for group, tell others to be quiet, work out who gets chairs, how reading area is used. Teacher's control or standards are taken on by children as "ours." (1/22/80)

Children were also observed to articulate rules to each other when others threatened to break them. These rules may have been children's own abstracted versions or inventions, similar to others used before. Since there were no posted rules, and there was little explicit talk about them, their existence was only evident in such interactions. For example, in the reading center, John and Sean were noisy, others "shushed" them, and Cleo finally told them to be quiet (1/22/80). At 9:30 on another day, Mary went through a "knees-thighs-waist" Chinese
jump rope routine without the rope, before settling down to her math. The children on the reading center couch said good-humoredly, "The reading center is for reading, not for doing Chinese jump rope" (11/30/79). In the art center, Ewan reminded a girl who was sitting on a stack of three chairs: "You are sitting on three chairs. You are only supposed to sit on one of them" (5/24/79). (Perhaps this was an invented rule.) Also in this center, second grade Daryl reminded first grade John, who was about to saw wood, "We don't do that except in the afternoon" (4/26/79).

Other rules concerned procedures during observations, this one of the toad and the mealworm. Children were evidently only supposed to have one mealworm at a time:

Ted: He [the mealworm] crawled on my arm.
Child: I'm getting another one.

Ted: You can only have one at a time. Why do you want another one?

and later in that same observing event:


There was little actual tattling. In this case, the teacher was glad for the information, and acted on it. Sam reported to the teacher that a child was writing in her locker. Thereupon, the teacher announced that children are not supposed to be in their lockers, and got up to look at this child, who then left (11/20/79).

In other cases, children talked about "telling" but didn't. "John, I'm going to tell" (Transcript, p. 213, 5/20/80) and Sam's "I'm going to tell" (Transcript, p. 93, 5/16/80) were two occurrences of this
phrase. Other instances of telling have been cited above as examples of problems the teacher gave back to children to solve.

The teacher's point of view about children's maintenance of the rules fits what children told the observer and what the observer saw the children say and do. In an interview, the teacher said that children should be responsible for disciplining each other. She was talking of rudeness during sharing:

Teacher: I'll tell you what - when they sit down for sharing if someone is being rude - when the children self-discipline each other, or discipline one another - it's more effective sometimes than if I do it. Which is really interesting. Sometimes it just fascinates me, how one or two people can take charge and just - stifle it [i.e., the rudeness or lack of control]. (Transcript, p. 73, 5/1/80)

Children experienced, thus, a new and different kind of authority than that of teacher (and parent before that). This experience came in the relationship with the wider school, and within their classroom with their peers. They were given opportunities to practice these new, diverse relationships outside their room. Within the room, they helped maintain rules which they had taken on as "the way they did things" rather than as directives from the teacher.

7. Children had increased responsibility for their own behavior in relationship to the group. This contrasts with freedom to regulate their own activity, which was a familiar way of behaving for young children. This last section emphasizes children's self-regulation in order to adapt to external demands of others. Thus it is different from the earlier discussion of the familiar aspect of tenor, in which self-regulation was used to meet internal demands. The self-regulation to meet internal demands was possible because the constraints were few.
Time and space were flexibly shaped. Rules were implicit and few. Children's approximations in work and in behavior were allowed. Yet a) there were constraints, and b) children did have to consider others more than when in smaller, less formal neighborhood and family groups. Thus, they had to adapt their behavior to the needs of others. This was the new aspect of tenor.

a. There were new constraints on children's behavior within the more complex network of the school. Space, materials, and time had to be shared by many more than in a family. Content (field) was studied with others in ways requiring or inviting cooperation. Interpersonal relationships (tenor) were more formal and complex than in a family. Furthermore, the teacher's actions encouraged independent problem-solving, as she gradually distanced herself from them and gave them more responsibility for regulating their individual and common life.

Even the self-regulating choices that children made, described above as a familiar feature, imposed a requirement for responsible choice. During reading conferences, it was familiar for children to be able to choose a comfortable place in the room with a friend, and to be able to change positions, books, and friends according to their own inner motives. However, it was new and institutional for children to read (rather than paint, for instance) during reading conference time, to maintain a quiet atmosphere, to conduct themselves responsibly if they chose to go to the school library, and to be ready to read with the teacher when called. The same contrast could be made for other events. Worktime, with its multiplicity of choices also imposed a responsibility to make those choices and to fit in to the requirements of the group. Math needed to be handed in by Friday. Caldecott
pictures were to be finished. When the teacher called a spelling group, children needed to go quickly, and did.

By planning for choice within limits, the teacher gave children room to meet individual needs and interests, as well as experience in adapting their needs and interests to those of the group. So also did she use small groups and the provision of shared experience both to make use of familiar ways of relating, and to support more complex activities of reconciliation and independent work.

b. Work in pairs, small groups, and within the class meant children had to conform to social rather than individual patterns. Their behavior during rugtime furnishes an example of this new, non-familial constraint. In order to hold this rugtime event, children had to sit on the rug, stay seated, and listen quietly. They spoke according to complex rules for that event, which gave the conversational control to the teacher or sometimes to a sharing child on the "sharing chair". Within these constraints, they could hear stories, see film trips, listen to sharing, discuss, plan newsletters, and hear directions for activities. Children's general conformity to these unspoken rules for rugtime made the event possible. (The familiar aspect of the tenor of relationships was the allowance of self-regulation within large patterns. Children's rugtime behavior approximated these unspoken rules, as they were seen to wiggle and shift in orientation and position, to talk quietly on occasion, to handle things, and to make gradual transition from the rug to the next event.)

The same kinds of generalizations could be made about each event, and about each area in the room and its use. The necessity of considering others demanded new, adaptive behaviors on the part of children.
Rather than being told exactly how and what to do, the teacher expected them to be responsible to the group. By allowing approximations within clear structures of time and space, she enabled children to practice this responsibility.

Children in this context were thus given new responsibilities to a wider group. They were expected to act independently in a way which was adapted to the needs of others. These new expectations were modified by the continued allowance for approximations and self-adaptive behavior. The authority which was fundamentally embodied by the quasi-parental teacher, was beginning to be diversified. Children were aware of their relationship to school authority outside the classroom, in its various but usually more formal manifestations. They also experienced authority as shared with their peers. The simpler situation of the single authority of parent or teacher was becoming more complicated, just as children moved toward the responsibility of growing up and being separate, away from the dependency and freedom of childhood.

These have been the new aspects of the tenor of discourse. While maintaining familiar, comfortable ways of relating with people, the teacher introduced new kinds of relationships which were more typical of a school than a home or neighborhood. The class was not an island but a part of the larger school organization, and subject to its formal and informal rules, which children began to deal with directly. Within the classroom, the teacher used a range of roles, including more formal, verbal ways of relating (while maintaining a parental, familiar role). She believed that responsibility and independence were goals to be worked toward. She encouraged this self-discipline in various ways.
In her long-range actions, she planned for cooperative ways of working in small groups to give children practice in reconciliation. She delegated management routines to children. By providing shared experiences, she supported a new kind of independent, individual work with the common understanding of the group, which knew the context out of which the individual work had come.

She also encouraged self-discipline in her immediate action. She was heard to encourage children to solve their own problems, work-related and interpersonal.

In this more complex social situation, children were required to relate to other authority outside the room. Within the room, they were observed to accept responsibility for maintaining standards or rules. They were expected to be responsible to others, in order to enable their common life to go forward.

**Summary: tenor of discourse.** In reviewing the teacher's shaping of the interpersonal relationships in this context, the dual nature of her goal was evident. She was interested both in providing security and support, and in encouraging growth toward independence.

Security and support came from familial kinds of relationships: the parental roles of the teacher provided security both through her authority and her scaffolding support; her acceptance of individual differences; her use of children's natural desire to do things with small groups of friends and her provision of things to do which became their common history; her use of this history to strengthen a sense of community; her response to children's meaning; children's acceptance of her authority, and their freedom within it to regulate their own activity patterns.
Growth toward independence came through new kinds of relationships: those within the larger, more complex school institution; the teacher's more formal role and her expectation of independence; and children's practice in independent problem-solving through interaction as they adapted their behavior to group as well as individual authority.

On the one hand, therefore, the teacher ensured a gradual introduction to the new social world of the school by making use of familiar ways of interacting. On the other, she extended these ways so that children gradually had experiences with more formal, independent, institutional kinds of relationships. The teacher was, in sum, modulating a shift from security and dependence to separateness and independence. The sense of community she fostered was therefore a base for the growth of individuality.

Mode of Discourse: The Shaping of Children's Communication and Representation

In this study, Halliday's term mode is interpreted to include the verbal and non-verbal means available to children in this classroom, which they could use to represent to themselves or communicate to others the meaning of their experience. Thus, although language and particularly writing is the focus, these were seen in relation to other channels of expression. Similarly, although communication with others was of interest, representation for oneself was also thought important.

For Halliday, mode was the part played by language in the total event, and had to be considered as interacting with field or tenor (1974, pp. 52-54). The following examination of mode in this classroom will attempt to bring out these interrelationships.
Again, mode will be discussed in terms of familiar and the new. That is, which aspects of the teacher's shaping of the mode of discourse were like children's earlier experience with language and other modes of expression? Which were characteristic of a more abstract, decontextualized, formal, explicit, and controlled use of language? This shift toward formality parallels a development of experience with more remote and abstract subject matter (field) and increased responsibility for self within more complex and diverse social relationships (tenor).

As in the dimensions of field and tenor, the teacher controlled the shift in mode from familiar to new by what she said and did, both through long-range plan and through immediate interaction. In general, she built on children's language abilities developed over pre-school years, allowing an informal kind of language use. At the same time, the content experiences she provided and the social relationships she encouraged brought about a need for new kinds of language use. This shift will now be detailed, beginning with what was familiar in this context.

Familiar aspects of the mode of discourse. The mode of discourse in this classroom was like that children used in their preschool years, in the following respects:

1. The functions or purposes for children's expression were familiar to them.
2. The audience for children's expression were also familiar.
3. The teacher responded to children's work supportively and flexibly.
4. There were varied channels available for children's expression of their purposes.

1. The functions or purposes for children's expression were familiar to them. a) These were often embedded in the concrete situation; b) they were mixed within a single piece of writing; and c) they included language produced for its own sake as well as to communicate. These familiar purposes or functions were provided by the teacher's shaping of the context. She used the concrete situation to support children's language. She also allowed children to represent their experience in their own way, without requiring them to follow specialized rhetorical models.

a. Language was embedded in the concrete situation. First, much of the language children used was embedded in the present, concrete situation - embedded in two senses. Some language was embedded or context-bound, as it depended for intelligibility on knowledge of what was going on in the setting. In addition, language was often kept close to the concrete object it referred to as if mere nearness or tangibleness could mitigate the abstractness of the spoken or written word. For example, children wrote thought ramblings about their sprouting seeds with the seeds in front of them, while touching and talking about them (5/16/80). On another occasion, children's popcorn stories were decorated with actual pieces of popped corn (4/19/79). Finally, the writing children did about their imaginary islands took place in the midst of island construction. It is possible these constructions supported their talk and writing, and this language helped them develop ideas to finish their construction (1/24/80).
Language was mixed in function within a single piece of writing. Children's oral and written language was thus often embedded in the situation, and supported by the presence of its referent. In addition, it was mixed in function. That is, unlike highly differentiated adult language with its special purposes, such as poetry and legal language, to name merely two distinct sorts, children's language was mixed in function (and form). It did not adhere to strict rhetorical models. To use Britton's (1970a) terms, poetic elements were found in what would normally be transactional language, and expressive elements were pervasive.

A few examples of oral and written language will be given which illustrate the point that functions were mixed rather than pure. First, starting with the mixture of poetic and transactional elements, transcriptions of oral language show rapid shifts in function, as children's relationship to their experience shifted. The small group of boys observing their tree alternated a rather self-conscious scientific observational approach (transactional) with that of a playful, imaginative interpretation (poetic), as these notes describe:

Sean, John, Sandy share a low-branched hawthorn. Sean sits in crotch of tree, gets down, swings from branch. Then he notices or "observes" as they are supposed to. John keeps saying, "You're not observing." Sean notices moisture in the tree scar, talks about moisture (mmo - oysture). (Note alternation of physical activity, social exchange as play: then serious attention to phenomenon selected by focus for child.)

John discovers a few white spots, announces their tree is being attacked by white spots; great interest as all rush to see, including people from other groups. (Again, a mixture of objective observation and imaginative play. How would this fit into Britton's three-way function division?) (11/20/79)
Later, when writing up these observations, some of these same children were helping each other spell (transactional language) when Alex introduces a playful (poetic) theme:

Sean: How do you spell spot? (Sounds it out with Sam, successfully.)

Sam: How do you spell hollow?

Sandy: Look at my hair. (He is moving his hair around to look like a creature of some kind.)

Sean: Sam, do you want to look like a Martian? (Sean has put pencils behind each ear.) I am a Martian. I am a Martian. etc. (11/20/79)

Many other examples could be cited of the mixture of playful, imaginative (poetic) language, and transactional language: Polly's calling the shoot of a pea seedling "a pig's tail" (Transcript, p. 26, 2/7/80); Ted talking to his mealworm: "Mealworm, you can't climb up my fingernail. You'll split" (Transcript, p. 209, 5/20/80); and Mary's spontaneous comment about the well water at the farm, "Fresh, right out of the ground," which conveyed the pleasure of remembered sensation through the rhythm and assonance of her choice of words (Transcript, p. 90, 5/16/80).

Similar examples of a mixture of poetic and transactional elements were found in children's written language. A group chart of observations of children's brine shrimp (4/80) included many factual entries: "My shrimp hatched on 4-10,"; "The brine shrimp's food puffs up." Steve; and "I found out that the brine shrimp egg's are pink." Sensory observation also gave rise to a higher level of transactional thinking, in this case a generalization of an inverse relationship: "his food is bigger then he is and we are bigger then are food is" by
Mary Green. Many also made use of analogy: "The brine shrimp look like specks of dust floating on the water." Deborah; "The brine shrimp look like white little hairs moving." by Polly; "The shrimp eggs look like cinnamon." Analogy became poetic metaphor in the case of "My brine shrimp are playing folio the leder." by Salli, who created a bit of language which had poetic life of its own, rather than simply serving to describe objectively.

Thus, within an ostensibly scientific task of objective description were found a variety of functions, ranging from objective, transactional language, at levels of recording, reporting, and generalizing, to language which made use of analogy and metaphoric language, and became interesting in itself for its poetic form.

There were many examples of expressive language, that is, language which revealed the speaker or writer's role in the event, even if this role were logically extraneous. For in spoken language, in the midst of a nominal focus on content, talk would switch to personal and interpersonal concerns. Mary and Monique wrote the "Tidbit" section of the weekly newsletter together. Monique started composing out loud: "We went to Ruth Ann's garden," paused, and then said, "My birthday is tomorrow. I'm going to ... tomorrow. I can't wait." (Transcript, p. 160, 5/29/80).

Expressive language also appeared more subtly as children talked and wrote about their projects. Their focus is ostensibly on their projects, but their own role appeared as a significant part of their experience. These are not mature thinkers, disciplined to remove traces of personal involvement in their account of their work. Thus, when children and the teacher shared their seed observations, they
talked not in terms of the seeds which were seen to behave in a certain way, but instead used the pronouns I, me, and mine, as well as ours and we. John explained: "I noticed that the other side of my yellow-eyed pea was wrinkled ...". Ruth Ann said: "One of my yellow-eyed beans is starting, and the other ..." Mary began: "I'm trying to see ... " [i.e., the purpose of my experiment is ...] (Transcript, p. 28, 4/30/80). When Betsy and Deborah shared their storm project, with the researcher, they were asked how they came to do this project. Betsy explained: "... we were doing stuff with storms too and so we decided to make this a storm project and me and her 'cause we are friends and we wanted to do it together" (Transcript, p. 223, 5/20/80).

Other examples could be added, since children in the classroom interacted freely in many situations, and usually used an informal rather than formal register. Children talked about themselves and their feelings as well as about the world outside:

Child: Come on, Tika. Your turn to hold the frog.

Tika: Un-un [i.e., no it's your turn.]

Child: I'm scared.

Child: I know. (Transcript, p. 148, 5/27/80)

Different feelings appeared in Betsy's language. She let her teacher know not only that she and her friends were planning a play, but also how excited she was:

Betsy: Mrs. Bridges. We're - Monique, Mary, Betsy - and we're all, we're all making, we're choosing a chapter of Charlotte's Web and we are making out our play. (She shows the teacher a plasticene character.)
Teacher: Oh, is this Fern? oooo.

Betsy: This is Fern. I made her. (Transcript, p. 157, 5/28/80)

Written language revealed something of the writer in this same way. Expressive spoken language is a normal mode of discourse for most people, much of the time. Expressive written language in the adult world is appropriate, for instance, in informal letter writing. Writing becomes more differentiated and formal as functions demand. Elements of the expressive which tell about the speaker rather than the subject of language are discouraged as being inappropriate. Hence dissertations and journal articles are written in the impersonal voice of the third person.

This was not yet so for these children. Their involvement in their activities appeared in their writing as an important part of its content. About half of the brine shrimp observations had references to the observer as well as to what was being observed. Those appear in the left hand column.

### Elements of Expressive Language

by Daniel  Yesterday morning 4-10-80
When I was looking at the Brine shrimp eggs I found out that the Brine shrimp eggs had spots. I also found out that the Brine shrimp eggs were lighter in color.

Roger  I found out that wen I pot my eggs in the ... dey the necst dey they wer sprd ... I found out that the Brine Shrimp are pink.

My shrimp hatched on 4-10.

### Transactional Language

It only takes two days for the brie shrimp to hatch.

By Ruth Ann

The brine shrimp has grown now. They look like little snow flakes. They are white.

Tika
<table>
<thead>
<tr>
<th><strong>Elements of Expressive Language</strong></th>
<th><strong>Transactional Language</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>his Food is bigger then he is and we are bigger then are food is. by Mary</td>
<td>The brine shrimp look like specks of dust floating in water. Deborah</td>
</tr>
<tr>
<td>My brine shrimp are playing follow the leder by Salli</td>
<td>The brine shrimp look like little specks of dirt. Tika</td>
</tr>
<tr>
<td>My brine shrimp move in a circle. by Ted</td>
<td>The brine shrimp's food pufs up. by Steve</td>
</tr>
<tr>
<td>I think that the Brine shrimp food tastes sweet. by Ted</td>
<td>Some of the shrimp are yellow and some are brown. by Steve</td>
</tr>
<tr>
<td>The brine shrimp is like little shrimp and I found out that the brine shrimp like dark colors like purple and blue. by Alice</td>
<td>The waters about 69 F. by Steve</td>
</tr>
<tr>
<td>4-21st Brine Shrimp I nodised that my experiment worked with my Brine Shrimp in 1 tablespoon of salt.</td>
<td>After a wile if the eggs havent hachd the eggs clump together. by Betsy</td>
</tr>
<tr>
<td>Rick 4-21 I see that my ...</td>
<td>The Brine Shrimp look like white little hairs moving. by Polly</td>
</tr>
</tbody>
</table>

Thus, it could be proposed that children's writing and speaking in this classroom was like their language use at home and in their neighborhood because it was embedded in the concrete here and now situation, and it was mixed in function (and form). It was a mixture of objective (transactional) language, which focused on content, and poetic language which emphasized form. It was also a mixture of objective (transactional) language which described without reference to the
speaker, and expressive language which revealed the speaker's involvement in the content of the language. This familiar mode of language use was possible because the teacher shaped the context to provide a supportive concrete situation, and to allow language to be used without the constraints of formal models.

Language was produced to satisfy the user as well as to communicate. A further homelike characteristic of children's early school language, their speaking and their writing, was that it functioned not only to communicate but also to satisfy its creator. This distinction is therefore related to both made above - to the mixture of poetic and expressive elements in children's language, in that it emphasizes the child as creator or arranger of language to please the self (Britton, 1970a, p. 124). This distinction is expressed by the contrast between language used in the participant role - to get things done - and language used in the spectator role - to please the self, and to share the pleasure with others. Britton quotes Oakeshott (1959) who says that for the young, words are not fixed signs but poetic images. When we are young,

[we] speak an heroic language of our own invention, not merely because we are incompetent in our handling of symbols, but because we are moved not by the desire to communicate but the the delight of utterance (Oakeshott, 1959, p. 61, in Britton, 1970a, p. 91).

By inference, much of children's talk seemed to be motivated by this "delight of utterance". It gave pleasure to the speaker, pleasure in sound or image it called up. A clear example comes from the tape of the toad observation, when one voice in the midst of others, chants and almost sings, "The TOAD!", and seems thereby to express both delight in sound and sense (Transcript, p. 206, 5/20/80). Others
include Jessica's soft "chick, chick, chicky" sung to the newly hatched chicks (Transcript, p. 1, 5/17/79), and Ruth Ann's dramatic play with toy dinosaurs which occupied her for an extended period of time, as she switched roles and voices and played with ideas and feelings:

Ruth Ann: Yummy, yummy, ... help, help. Don't eat him. He's ...
That's not fair.
Hey, you want to ...
Miouw, miouw.
Help, he bit me!
Mommy, mommy! Oops, I forgot, I ...
Daddy daddy!
Come here ... Hey, don't ...
Why don't we be friends?
All right. Just as long as you don't eat ...
Just call me Small. Just call me Big.
Where are you? Where are you, Small?
I'm right down ...
Where are you Big?
I'm down here.
Where are you, Big?
Hear.
We're going to have a little trouble. Why don't we go out to eat?
What's on the menu today?
Oh, I forgot, I forgot.
Oh, well, anything.
Well, here you go.
Can I have some? Yummy, yummy.
I get some, I get some.
Hm, these aren't bad, these aren't bad.
(Transcript, pp. 160-161, 5/20/80)

In written language, children's "delight in utterance" appeared as delight in their "constructs" (Britton, 1970, p. 164). Children made books, and displayed stories and reports. What seemed important to children was that they had made these, not that there was information which needed to be communicated to someone else. During interviews, children often referred to their writing in terms not of a process but a product: Betsy said "... when we were making this book
Mary said "When I was in first grade I made 'A Chinese Rabbit,' 'The Chinese Rabbit,' 'The China Rabbit'" [trying to remember the name of her book] (Transcript, pp. 40-41, 4/30/80).

Betsy's explanation of how her rock story happened to be written shows the importance of the materials and activity of book-making to the genesis of her story:

Betsy: ... I read [i.e., wrote] this book, took me a few days, and I read [i.e., wrote] this book because I was wandering around in the art center and I didn't have nothing to do. I saw some wallpaper inside of a book.

Researcher: Why do you think you thought of a book? Just seeing the wallpaper - was that what made you think of a book?

Betsy: Yeah. Other people were making books. They were just making books of stories - and I saw the wallpaper and I would like to make something that we were studying about and I forgot what we were studying about and then I remembered it was rocks. (Transcript, p. 4, 5/23/79)

The making of tiny books by two girls has been already described (p.335). These were made to fit inside tiny envelopes, to go inside a pocket inside a folder - an elaborate sequence. Inside all there was secret writing (5/17/79). Mary also referred to making tiny books when she was in first grade (Transcript, p. 37, 4/30/80).

There was evidence of a feeling for a written construct even when given orally, without a text. During the sharing of tree observations, Evan spoke his contribution as if he were reading it. Notes for the day say: "Evan shares, 'reading' his writing, but actually composing orally" (5/22/80). The transcribed tape begins "I discovered when I was ...", and then unfortunately, is inaudible (Transcript, p. 102,
Through the change in voice quality, Evan seemed to be setting apart his writing as a construct, as different from the exchange of ideas that was taking place in the ordinary talk about the trees.

It is not the intention to claim that children never used language to communicate, or to "get something done" in the participant role. In the discussion below of the "new" aspect of mode in this context, communicative uses will be described, such as permission letters. However, it is here suggested that children often talked and wrote because there was inherent satisfaction in this creative process, that making something with words was enjoyable because one worked (and played) with materials of sounds, letters, and ideas (along with concrete materials) to arrange a representation of the personal meaning of experience, and so to reexperience it. This function continues into adult life, as the specialized language of literature. The point here is that its roots were noted in language used for its own sake, rather than to accomplish practical matters. This use was encouraged and appreciated by the teacher, who valued children's creations in varied media, language among them.

In conclusion, this section has dealt with ways in which the functions or purposes for children's language use were familiar to them. When they came to school, they could continue to use language for purposes it had served them in their early years. First, it was said that children used language in the context of the immediate situation, and often in close physical conjunction with its referent. This was contrasted to an abstract approach to language use, divorced from a here and now situation. Next, it was said that children's
language was mixed in function, in contrast to specialized, differentiated adult language. Britton's terms were used in characterizing elements of poetic and expressive as well as transactional language. Children were said to use language in the spectator role for its own sake, for delight in utterance or in written construct, as well as "to get things done" in the participant role. This mixture of functions was contrasted with the possibility that children talked and wrote only to communicate information to others, and were constrained to follow rhetorical models.

The teacher planned a context which made this varied language use possible. There was both a supportive material environment with concrete and dynamic experience, and there were possibilities and requirements for interaction. The uses which were generated ranged from spontaneous, voluntary and often brief to more extensive and structured language use. Among the former were notes written to friends or the teacher, such as Betsy's note about money owed her teacher left on her desk (1/15/80), or Deborah's note to save her place: "Deborah's place do not take" (4/27/79). Among the latter were these familiar events, as described above in the discussion of the teacher's shaping of time (pp.232-242): group charts, permission letters, newsletters, observations and thought ramblings, stories and reports. Each writing event was supported by the interaction of those who had shared experiences, and by the present, concrete setting.

2. The audiences for children's expression were also familiar. There were a) audiences for children's language and other representations, and b) these audiences frequently collaborated during experiences,
during the process of writing, and during the sharing of oral and written language. Children also created group charts collaboratively.

a. There were audiences for children's talk, writing, and other representations. Those who were close to children — their friends, their teacher, their parents, those they knew well in the school such as the school secretary — were living, responding audiences for what children said, wrote, and made. That there were audiences has been described above in many places. To review, observations and thought ramblings were often shared during their creation, and then read and heard by the teacher and others. Newsletters and permission letters were taken home, stories displayed and read by others, cooperative charts posted and added to, and thank you cards delivered (to name a few). One clear example of friends being first audiences for each other comes from a recording of Mary and Monique's joint newsletter writing session:

Monique: O.K. Mary, Mary, let me read this to you.

Mary: I'm listening.

Monique: "We went to Ruth Ann's garden this week, this week. And everything is growing. Something was nibbling on the pea plants."

Mary: Good. Listen to mine. "As you know, we are having a Gatheroo on May 31 from noon to four. There will be twenty games, there will be twenty games and jewelry too." You know, we had it last year. (Transcript, p. 161, 5/30/80)

It could be speculated that these girls were motivated to hear their own written language and to share their satisfaction at writing it with each other.

In general, therefore, some kind of audience at some point was always available for children's language, written as well as oral.
This was made explicit by second grade Alice, when she gave a rule for thought rambling time: "We let her [the teacher] see them, if we don't share them. We share on a rug" (5/25/79). The personal reaction contrasts with the possibility that what children made or write is never responded to, or at most, is only graded and returned later.

b. Audiences of peers and teacher frequently collaborated, participating in the process of creation with the child. Through talk, teacher and children contributed new content and helped with form.

Whereas alone, the child's work might not have made sense, taken as a whole, with others' contributions added, the representation had meaning. In this, the process was like a conversation, whose sense is a joint creation of the participants. In its collaborative nature, it contrasts with the solitary nature of sustained oral and written discourse which schools ultimately try to develop. In early childhood, children learn to hold conversations, entering, responding relevantly, taking turns, and finishing. It is this conversational competence which the teacher tapped.

The reason others could collaborate with children in constructing talk and writing is found in the teacher's shaping of both field and tenor. Children and teacher had done things together in the past; they had been actively, personally, and concretely involved together in experiences which were now part of their shared history. Therefore they could help each other construct meaning since they understood each other.

A few examples will be given to illustrate the idea that the members of this classroom were collaborative audiences for each other.
Both oral and written language were used to construct meaning jointly (as were other, non-verbal channels of representation and communication). This process was particularly evident during "observations," and the writing and sharing that followed.

Oral language was collaborative. This is illustrated by these exchanges during an observation. A small group of children and the teacher gathered around a terrarium, feeding mealworms to a toad and a chameleon. Many, though not all of these utterances, are incomplete in themselves. Some required a shared setting and event to be understood; some referred back to previous utterances of others. (Some utterances seemed to be addressed to children and the teacher; some to the animals, and some to self.)

Don, Ted, and others are looking at the toad. The teacher was preparing to feed it a mealworm with tweezers:

Don: Look at his ... Ted, look at his ears, on the side of his head.
Ted: Oh, they're little circles.
Don: They are just little things cut in.
Sean: Where, Don?
Ted: Wait, his ears.
Child: Come over on this side.
Teacher: Oh, I'm sorry. I didn't mean to attack you (i.e., with the tweezers, said to the mealworm). I'm trying ...
Ted: What are you going to get, a mealworm? (to the teacher)
Don: See, look at that little, look at that little hole, in the side of his head.
Child: Oh, it's neat.
Don: Give it to toad. Put it on his toad's back.

Child: What are you doing?

Child: Oooo, oh, let's see if he eats it.

Child: Oh, he crawled away.

Teacher: Might not be hungry.

Child: Give it to the chameleon. (Transcript, p. 208, 5/20/80)

Collaboration in this kind of talk was enabled, of course, by the presence of the material context, which acted both as a non-verbal "partner" in the conversations, and as a support for solo discourse, "talking to oneself".

The writing process was collaborative. Requests for spelling help seemed to be most common, but children also talked together about ideas and wording. This spelling example is typical, as these boys worked out spellings for their newsletter articles about the farm trip:

George: How do you spell soft?

(Transcript, p. 94, 5/16/80)

While others were still observing the mealworm, toad, and chameleon, Ted began to talk about his writing (as marked by asterisks). He announced his decision to start writing*, subsequently tried out a wording**, and asked for confirmation of a spelling***. His talk in the midst of others' talk was as much for himself as for them. Yet the possibility exists that the presence of others encouraged his verbalization of thought.

Child: Oh, he's soft.

Child: He's puffing up like he did on the bus.

Child: Ooohh! (toad jumping in his hand?)
Ted: Well, what did he do, did he jump?
*I'm going to start writing. (Transcript, p. 208, 5/20/80)

George: Look, he is going into my thing. He's stuck in there.

Ted: **Should I say "before he catches?"

Child: Look, he almost crawled two feet! (Transcript, p. 212, 5/20/80)

Child: Give me the tweezers fast. He's almost full!

Ted: ***Do you spell before b-e-f-o-r-e?

Child: o-r-e, yeah.

Child: He fell three feet! (Transcript, p. 212, 5/20/80)

Help was solicited for composition as well as for transcription and spelling. Cynthia and Mary were writing an article for the newsletter about the class's new author:

Mary spells for Cynthia while looking at the books on the book stand. They search for wording. Cynthia says "How about 'He illustrates books'?" (5/4/79)

A final example also illustrates a broader kind of collaboration. Mary and Tika planned their joint roller movie story together, "The Lamb and the Colt." They decided what would happen in each frame of the movie, and which one would write it. They were dealing collaboratively with the substance of the story as well as the mechanics of encoding it (5/20/80).

Sharing of oral and written observations was often collaborative. Children gathered on the rug for this (unlike newsletter articles which were shared individually with the teacher). Sharing talk and writing was one step removed from the concrete context of observing, and this placed heavier demands on language. However, this language made sense because the immediate, common experience was fresh in
everyone's memory. Support for children's language also came from the teacher whose verbal contributions filled gaps and made connections, in contrast to her less active verbal role during actual observing.

In this instance, small groups of children have just observed their adopted trees on the school grounds, and then have recorded their observations in their thought rambling tablets. After a time, the whole class gathered on the rug to tell each other what they had observed, and/or to read what they had written. The teacher then shared her observations of berries, describing what they looked like under a lens:

Teacher: I opened my berry up even further and what did I see? In this berry I found eight seeds. They looked like miniature pumpkin seeds from one side when you look at them, but when you turn another way they look like apple seeds, because they are shaped like ... They are hard when I tap on them. I cracked a seed open inside ... seems to be a shell. Then I started looking at them under the microscope.

Child: We thought we saw ... 

Child: ... a spider web.

Teacher: I know. It looks like there is something on the seed that looks like a little thread... it just looks like a little spider web. We were wondering if the seeds were attached to something... (Transcript, p. 21, 11/20/79)

The teacher has just engaged in an especially long description of her own observation, perhaps in order to give children ideas of new ways to observe. Her talk has made a place for the children's comment "We thought we saw a spider web." She takes this comment and gives it further context, relating it to her own observation, and leaving the group with an implied question.
Collaboration was also evident as written observations were shared. After these same tree observations, children were invited to talk about discoveries and to read their thought ramblings. The teacher linked their contributions together, as she did when calling on Sean:

Teacher: Sean's got the same tree. Let's see if his is different ...

Sean: (with much throat clearing, and in a reading register) "My tree has a white spot, and also in a hole, there is sap or water or moisture from the rain".

Teacher: Did it rain really badly over here last night?

Children: Yes, yes. No! It thundered over there ... (Transcript, p. 21, 11/20/79)

Here again, a larger context is supplied for a child's language, in this case, a child's written language. While this writing is quite explicit, it is extended further and given probable connections to other events. (Unfortunately, other children's voices reading their writing on this occasion, were not successfully recorded.)

Finally, collaborative chart writing occurred when the teacher posted a chart and invited individuals to contribute to it. Children could each add their own ideas in their own language. Even though these contributions often would not stand alone, together, and under the teacher's unifying headings, they created a collaborative text. Examples are drawn from various theme studies:

"What Do You Want to Know About China?" (5/23/79) Children wrote their questions.

"Try My Experiment" Children sketched their bulb, wire, and battery experiments. (1/17/80)

"Brine Shrimp Observations" (described on p. 388 above)

"Weather Words" Children wrote their own definitions of "observe," "forecast" (5/12/80)

"Seed Observations," with columns headed Seed; When can they be planted?; How long before germination, maturity?; How deep do you plant them?; How far apart?; Other comments: How much sun? water? Do they need stakes? (5/15/80)

"Our Map" Children added features to sketches of islands drawn from a book the teacher has read (1/17/80)

A general concluding point can be made that because the teacher had planned activities which encouraged and sometimes required interaction, it is logical that this interaction would bring about conversation, which by nature is collaborative. Therefore, any sample of communicative conversation could be used to support this point. For example, children who surveyed their classmates, jointly used oral and written language to complete each transaction. Paula went about the classroom asking "Did you think of a name for your chick?", and recording her classmates' suggestions. As participant observation notes state, this writing "becomes a joint activity, as namer and scribe collaborate or check each other's spelling, discuss the idea behind the name" (4/26/79).

An audience thus was provided for children's language. It was a responsive, collaborative audience so that, as in early, preschool conversation, meaning was jointly constructed. Another comment from the participant observation notes summarizes the importance of
audience to this joint construction of meaning: "Children have immediate audience for their writing, if they want it.... Talk fills out [written] text. Every child's contribution adds to the texture of the whole" (5/12/80).

3. The teacher responded to children's work supportively and flexibly. The teacher's focus was on what children said and did, that is, on the content and form of their work, rather than on their worth as persons or adequacy as performers. She was a dependable audience, enjoying children's representations and receiving their communicative messages. She conveyed acceptance non-verbally, (as had been said above, pp. 320-326), through closeness and paralinguistic qualities which communicated affection and security. This acceptance was not a product of praise or reinforcement, but was an underlying, taken-for-granted relationship. Her response was characterized by a) a shared interest in children's work, both in content and form; b) help for children in expressing their meaning; c) use of and display of their work, and d) flexible expectations for individuals.

a. Teacher and children shared an interest in children's work, what it concerned and how it was expressed. Their attention was thus focused on the field of discourse, on interaction with the "it" of content which linked teacher and learner, or "I" and "thou". At times, and with certain children, she focused on the form of their language, especially their writing (pp. 320-326 above). In these cases, the form became the content of their mutual attention.

There was evidence of the teacher's own interest in the content of the class's studies. This interest was both genuine and a conscious policy:
A remembered conversation with Mrs. B., on the day of children measuring their shadows every hour on the playground. I commented to her that she seemed so interested herself in these matters, i.e., in noting that the flagpole shadow moved so much in relation to the paint brush shadow. She said, "Mrs. B has to be interested. (Her phrasing it this way suggested that she was seeing herself objectively in her role as teacher, as seen by the children, and that she consciously intended them to know she was interested. I do not believe that because she was expressing a conscious policy of teaching means that she is assuming an insincere role. She does genuinely seem interested, along with her undoubtedly greater interest in the development of children.) (5/1/79)

This mutual engagement in the content and form of children's work contrasted to a possible evaluative response by the teacher, either in words or non-verbally (cf. Mehan, 1979). In this mutual engagement, the teacher's focus was familiar, like that of a parent, who responded to what children said or did instead of evaluating the success or failure of their language, either its content or form.

An example will illustrate the teacher's focus on the child's work. Sean had recorded the weights of his soil and rock samples. When reviewing this record, she was dismayed to realize she had misunderstood his intended meaning, and had focused instead on what she perceived to be an error of form. The point is not that she showed greater interest in meaning over form; both were of importance to her. However, her overall concern was to understand the child's intention and respond relevantly. Her eventual response was non-judgmental and informative:

Teacher: Oh, that's interesting. You changed it. You said was and then you said is, down here. Did you get tired of spelling was? You spelled was with one too many letters. You spelled it wase.

Sean: I tried to spell weighs.
Teacher: Oh, I'm sorry. Is that supposed to be weighs? ... I'm sorry. Here is the word weighs. Isn't that a strange word? It comes from the word weight ... And look at the little word that is in there.

Sean: I know, eight.

Teacher: The number eight. Eight, and that is one of your spelling words. So you could just take the t off and you have got the word weigh. Now if you want to spell weighs, the word weighs, what do you have to add to the end of it? If you want to spell weighs, what do you have to put on the end,

Sean: s

Teacher: ... when you are adding an ending that makes it more? Weighs. O.K. Sean weighs 32 grams [of material]. (Transcript, pp. 158-159, 5/28/80)

An example of discussion after tree observations also illustrates the teacher's focus on the content of the talk, on what children had noticed, and on how their trees had changed since last time. Notes described this discussion:

Children gather on rug, "to tell about what we saw, or discovered". Teacher responds to the content of their writing, commenting, adding, extending, relating to previous, other observations.

Ruth Ann, your bark is shedding. How many people noticed their bark is splitting?

Did everyone hear what Betsy did? (She had looked at a bit of bark under a microscope.) (11/20/79)

The teacher had responded to Ruth Ann's observation of shedding bark, and Betsy's method of observing under a microscope. She had not directly evaluated these children's contributions, or the children themselves. (Of course, the fact that she has made use of these children's contributions has given them indirect recognition as important members of the class.)
Thus, both examples illustrate not only a mode which is familiar but a quasi-parental relationship in its focus on the content of common interest rather than on the performance of the child. Even during the examination of the child's spelling miscue, the teacher showed interest in his reasons for spelling as he had done, rather than in his adequacy as a speller.

The teacher's behavior was thus like that of a parent who focuses on content of common interest, and builds on ideas child initiates, supplying a comment on the basis of knowledge gained through shared experience. The adult in each case fills out what may have been an incompletely expressed idea, and makes it accessible to others.

b. The teacher helped children express their meaning. She collaborated with them when needed by taking down their words in dictation if they were unable to do so themselves. Surveys of insects made in the fall showed that some children wrote their own captions, whereas others copied their dictated text below the teacher's writing of it (6/9/80). This technique was also used to help Sean, who, when in first grade, was not really interested in writing, a judgment of the researcher's confirmed by the teacher. She told of his writing a thought rambling consisting of one word, Summer. Notes say that the teacher "had him come to her, talk, dictate, and then he copied underneath" (5/31/79).

c. The teacher planned for use and display of children's work. Charts were added to and referred to. Children's stories were available and read by friends, and reports posted. Fragments of children's work were treated with respect (pp. 342-344 above).
d. Finally, the teacher had flexible expectations of the work of individuals. She accepted the characteristics of children's work which were homelike and childlike - informal language, its implicit rather than self-explanatory nature, its mixture of expressive, transactional, and poetic elements within one text. She accepted the differences between children in length and number of pieces of writing, and in their control of writing conventions.

Thus, the teacher could be said to respond to children's work, both its content and its form, rather than evaluatively to children as persons. Much of the time, content of children's language (and other representations) was of mutual interest. The focus was on this rather than on the adequacy or level of children's performances. At other times, form itself was the focus of mutual interest. Whether the focus was on form or content, the teacher responded informatively to children without evaluating the success of their performance.

The teacher was a special kind of audience. Like others, she responded to children's work, collaborated with them in building meaning. She was different in that she was the mature leader, the one who had knowledge of subject matter. She also knew what children's experience had been so that she could predict their meaning. In this, she was providing a familiar mode of discourse and a homelike way of using language.

4. There were varied channels available for children's expression of their purposes to audiences. The teacher structured the context so that purposes for language use (and other kinds of representation) were familiar, and audiences were responsive and supportive. She also provided and allowed a variety of channels for this expression.
First, available channels were broader than words alone. The provisioning of an art center with accessible materials has already been described, as have projects children made using varied media to represent their theme experiences. Children also engaged in pantomime, in dramatic play with toys, in dramatic retellings, and in improvisation. It could be suggested that spontaneous play was a frequently used mode of representation. Ideas from theme studies were assimilated and played with in ways which could never have been programmed by the teacher, though they were enabled by the context she created. For example, a fleeting example of playful representation occurred when, during sharing of observations, Mary put her hands over her face to show where the mealworm's legs were (5/28/80). A more extended example came from Rick and Roger's dramatic play with plasticine, paper, and other materials, as they drew on ideas from weather, chicks, seed, and farm studies to improvise a play "The Farmer and the Giant Chick", over three days (5/21/80 - 5/23/80).

The teacher described a discussion of the sea which led to pantomiming of seaside activities - digging in the sand, bouncing balls, feeding the gulls. This theme had come from the shell study, and the representation or use of theme ideas was developed through talk and expressed non-verbally in pantomime. Notes summarize the teacher's belief:

Teacher believes that other uses have to be made of children's reading [i.e., study] than writing - in this case, drama and talk came out of the shell study. (5/4/79)

This was confirmed in a subsequent interview:

Researcher: What about different ways of representing ideas? You do allow lots of choice in that,
don't you? With painting and making diagrams and surveys and all sorts of other things and modeling. Do you think that is just as valid a way of expressing what you've learned as writing?

Teacher: Absolutely ... For some children, ... in the traditional classroom they didn't have that kind of experience. So how do they feel? ... In here then they can express the way they feel. (Transcript, p. 221, 5/20/80)

Writing, thus, was thought of as only one of many ways in which children would "express the way they feel." Writing "would come", with time, and by implication, through varied experiences represented in varied ways. However, the teacher believed that there should be some writing with every study, by each child. Yet, her expectations were flexible:

Researcher: So you don't have any feelings of disappointment if only, say four or five people write books out of a project?

Teacher: You have to have some expectations so I do expect everybody to do some writing of some sort. Maybe ..., maybe if it's a book, maybe it's an observation.

Researcher: Out of each study?

Teacher: Sure, you want to get writing from everybody, but getting writing ... from Eric is like extracting a permanent tooth from an adult. It is just, it's hard. (Transcript, p. 221, 5/20/80)

It can be said, then, that writing was held to be one, but only one, valid way of representing experiences, along with various combinations of play, drama, art, and construction. When asked how the teacher looked at writing, she answered: "I think I try to look at it as something that is just another way of communicating" (Transcript, p. 153, 5/28/80).

Talk was also considered valid, for even within the domain of words, writing was only one kind of expression. The characteristics
of this talk have already been discussed as being familiar and homelike. It was often collaborative, conversational, and implicit, rather than self-sustained and context-free. The point to emphasize here is that talk was an available and valid channel for expression, along with non-verbal media, and, of course, writing.

Talk was acceptable during sharing of observations, as some children were found to read what they had written, and some to tell what they had seen. During newsletter writing, Cleo's oral contribution as a member of the Tidbits committee was pointed out as of value by the teacher to Polly:

Teacher: Did these people [Sam and Cleo] contribute?
Polly: Yes.
Teacher: Whose writing is all this?
Polly: Well, see, Cleo didn't contribute to us but Sam and I did.
Teacher: Didn't she talk to you about it?
Polly: Yes. She told us what to write, but ...
Teacher: O.K. But she just didn't write it down.
Polly: Yes!
Teacher: But she really contributed ...
Polly: um, hum!
Teacher: ... with her voice. O.K. Great. I'll keep that and you can erase the Tidbit section on the board. (Transcript, p. 114, 5/23/80)

Rick and Roger's three day dramatic play with plasticine figures and construction paper, dirt, seeds, water produced no writing, nor any art "project" that had more than an ephemeral existence. Yet
this essentially oral language activity was taken seriously as constituting their joint farm project (5/21/80 - 5/23/80).

Writing was also available to children, within these familiar possibilities for representing meaning, and indeed was sometimes required. It was a familiar mode of representation in that children were able to select their own ideas, wordings, and were encouraged to manage the conventions of writing in the best way that they could, even inventing symbols for letters, vowels and words. In addition, there was little attempt to restrict children to certain forms or models. Rather, these evolved from functions brought about by their experiences, including of course exposure to literary forms.

Examples of the intuitive choices children made in these aspects of writing will now be given. First, children's personal response to experience was highly valued. The meanings they wrote about were what they had selected from what had happened to them. The teacher's concern to understand Sean's writing about his rock weighing experience above (p.405 ), and her reception of George's story about the donkey at the farm (p. 322 ) attest to the respect she showed for personal meaning.

Wordings, too, were the child's own to choose. Sean's word weigh was important. There is little other positive evidence to support this point, since children and teacher did not discuss children's choice of words explicitly, but instead talked about their ideas and/or formal conventions. On the other hand, there was no evidence to suggest that the teacher was attempting to control directly children's choice of words.
The managing of conventions - spelling, punctuation, arrangement on the page - was left to children to work out together or alone, with help from the teacher when particularly sought out, and in conference with her. Thus, she encouraged independence by accepting invented spellings, for example, and yet she was a resource when needed. This delicate distinction was explained in the following interview excerpt:

"How do you spell mealworm?" Whatever [the child] tries to write ... Maybe it sounds like, "Oh, she is so hard-hearted, she won't help me spell this word," but you know, now, if he wants to come over and ask me "how do you spell mealworm, I'd really like to know" ... "Sure, I'll show you how ... But in just in the midst of our writing to pop out and say how to you spell it, without even trying, that's ... We've had words that deal with those sounds; try to figure it out. (Transcript, p. 222, 5/20/80).

Her decision at the beginning of the second year to allow children to invent symbols for words and letters made it possible for everyone - even new first graders - to write immediately (Transcript, p. 154, 5/28/80). Under this policy, Sandy's writing evolved from the use of invented symbols to the use of capital letters, and from "one big line of letters to putting more than one letter. It was still a jumble, but he knew what it meant" (Transcript, pp. 153-154, 5/28/80). These capital letters emphasized the starting letter of words, and sometimes made no sense at all - but when asked, Sandy could reconstruct their meaning in "flowing sentences" (Transcript, p. 141, 5/27/80). Sandy progressed to separating "words" with a finger space. By April of that year, and with some tutoring help, he was writing so that others could read his text, though his thoughts were no longer as elaborate as they had been during his time of invented writing. The teacher
concluded by saying that "I would let him do a lot of dictation"
(Transcript, p. 154, 5/28/80).

Unlike Sandy, Betsy was a fluent speller, using logical but sometimes unconventional sound correspondences to represent words and phrases she had internalized from stories (and from living). She was fond of such words as definitely, especially, and absolutely, which she spelled as they sounded to her. A survey or plan for a picnic found in her dishtub gave sandwich preferences of classmates: "blony with manaz, slomy with manaz, slomy not manaz, ham with manaz." Her internalization of literary convention is apparent in the story

"The Little Woman in Chinatown":

Once there was a little woman.
She lived in a small house
on a big mountain in Chinatown.
One night the little woman heard a
knock, knock, knock on her door.
She opened the door and said "who is
that?" in a low voice.
"It is I, the great mayor of the town.
I want to visit your house."
"Warm yourself by the fire. It is cold."
"I know.
It is getting near Christmas.
I must give the townspeople my present
to them.
The taxes are lowered."
The little woman was so happy that she
gave the mayor a whole bunch of
food to eat.
The woman was no longer sad.
She jumped for joy and the woman
lived happily ever after.
This book is dedicated to Mrs. Bridges

(Transcript, p. 1, 5/23/79)
When asked about her favorite page, Betsy picked out "It is I, the
great mayor of the town. I've come because I want to visit your house",
which she reread dramatically, though she did not and perhaps could
not say why she liked this. Betsy had written in this style without
self-consciousness, intuitively, and voluntarily. She had not been
told to write in this form. Other children's writing also appeared
to reflect what they had heard and read. "Reports" and "stories" were
written in the style of objective (or "transactional") language, or
in the imaginative (or "poetic") language of story. These styles were
chosen by children consciously or unconsciously, rather than being
imposed.

One last kind of choice could be mentioned which children made
in their writing - that of planning the arrangement on the page.
Monique discussed Mary's witch story book, commenting that the picture
of the witch on the first page had no hat. Mary explained that other­
wise, there would have been no room for the writing (11/14/79). She
had solved her own page arrangement problem.

This final section of the discussion of familiar aspects of the
mode of discourse has emphasized the varied channels available to chil­
dren. These channels were broader than words alone, and included art,
construction, pantomime, improvisation, and play. Within language,
talk was acceptable as a way of expressing meaning. Writing was also
encouraged, and children were allowed to choose what they would say -
their own meanings, and how they would say it - their choice of words
and conventions such as spelling and page arrangement. They wrote in
forms which they chose intuitively rather than being constrained to
follow models.
Familiar aspects of the mode of discourse in this classroom allowed children to use language in homelike ways. The functions or purposes for their expression were familiar. As they had in earlier years, children used language in concrete contexts, in conjunction with their active experiencing of subject matter (field), along with familiar others (tenor). Their spoken and written language was mixed in function, containing elements of transactional, expressive, and poetic language. They often used language for its own sake, for the "delight of utterance", and for the creative satisfaction of making written constructs, rather than solely for communicative purposes.

Audiences were also familiar. As in early years, there were responsive, collaborative audiences for children's written and spoken language, because of the teacher's provision of shared, concrete experiences (field) and opportunities for interaction (tenor). Contributions from individuals, which might not have stood alone, thus together made sense.

The teacher was a special audience for children. Conveying acceptance non-verbally, she responded collaboratively, focusing on topics of mutual interest - the content or even the form of the child's language, rather than on the child's performance. As the mature member of the group, but one who shared experience, she could respond to their language, helping them complete its expression, and building on it.

Finally, in addition to a familiar sort of language use or function, and a responsive, collaborative audience, children had available a range of channels or media by which to represent their meanings. The teacher encouraged and valued non-verbal representation, and talk
as well as writing. Within the tenor of interpersonal relationships, children were given the responsibility to decide how they would represent their own meanings, in language and otherwise.

In short, the mode of discourse in this classroom was familiar to young children because language use was supported by a collaborative focus on children's meaning. "Texts" which expressed this meaning were jointly constructed of many materials, verbal and non-verbal, so that children's individual contributions gained significance through their connection with the shared experience of the group. The teacher's shaping of function and audience relationships (like her shaping of field and tenor dimensions), and her use of the resources of space and time made this family-like mode of discourse possible. In the next and last part of this chapter, what the teacher did to encourage the use of a new mode of discourse will be described.

**New aspects of the mode of discourse.** While maintaining opportunities to use language in familiar ways, the teacher tried to encourage more formal, explicit, controlled, and decontextualized language. In doing so, she was working toward one goal of schooling, that is, the development of language as a means of communication and a tool of thought, whereby ideas and institutions could be created and changed. She encouraged this kind of language use along with provision of new, more abstract content (field) and new, more complex social relationships (tenor). These new meanings and new social needs furnished impetus toward new language use.

Her shaping of the dimension of mode, like that of field and tenor, balanced a provision of security through familiarity with an encouragement of independence. Very often, she supported an extension
into new kinds of content or language use with a familiar tenor, albeit expressed non-verbally.

The mode of discourse in this classroom was different from the mode children were familiar with in these aspects:

1. The functions or purposes for children's expression were new.
2. The audiences for children's language expression were new.
3. The teacher's response, while continuing to be supportive and flexible, selectively encouraged greater attention to language itself.
4. Among the channels available for children's expression, writing was increasingly expected, encouraged, and valued.

The functions or purposes for children's expression was new. They were new in that a) purposes were more abstract, b) uses were more specialized or differentiated, c) there was new emphasis on communication along with representation, and d) new use of language as an aid in abstract thought. Rather than requiring or teaching these uses directly, the teacher provided occasions and experiences which brought them about.

a. Purposes for language use were more abstract. Language was used for content separated from the here and now context. That is, children used language to talk about what happened in the past, and what would happen in the future, as well as what happened at a distance. In contrast to writing about their sprouting seeds with seeds in hand, they wrote after a brief interval about their trees, after more time about their farm trip earlier that day, and, still later, in the newsletter article about the events of the past week. They wrote about a future event when they asked permission to go on a trip to the garden,
the farm, and the library. Thus, the content about which they wrote was within their mind as images and ideas, rather than being concretely present.

Children also wrote about things which were more remote in space. The farm was a bus trip away, as was the metropolitan park. Subject matter such as rockets, weather, and the tree industry, was not only physically remote but psychologically more abstract.

Children thus wrote about things that were removed in space and time, and were more conceptually abstract. This new abstraction in function was sometimes supported by the presence of a known audience (a familiar tenor) or by the presence of a concrete token of the subject, such as a collection of wood on the display table (a familiar aspect of field) (11/14/79).

b. Uses for children's oral and written language were more specialized and differentiated, rather than being mixed in function. Children appeared to have abstracted distinctive features of different types of language use, and to be able to use these types to shape their language productions. They were developing control and in some cases, an awareness of these distinctions. The teacher's role was thus indirect in making available to children a variety of clear models of language use.

There were no observed attempts to have children write after models. However, children heard and read a variety of written texts, from informational books to picture books and longer, "chapter books." Their teacher also retold stories using hand-painted magnetic figures on the chalkboard (5/23/80). Every theme had its collection of related
books. In addition, children heard books by their "new author," re-read them and wrote about them.

The suggestion is proposed that children's own writing began to be differentiated in its functions as the salient features of texts they read and heard were abstracted. Children were exposed to models; evidence of their abstraction appeared in their writing. Examples of their writing in different functions now will be given, among them reports, stories retold and written, and different kinds of thought ramblings.

Children talked about their "reports" and the "information books" they wrote. Deborah described a photograph of a friend:

> There is Hannah writing a report, I think. Like Mrs. Bridges puts a sheet of paper and we write down things that we can do on it and then we pick a project that we want to do and we just write it, do it. (Transcript, p. 62, 5/1/80)

Steve explained to the researcher that his report on pigs came out of his farm trip thought rambling and from books:

> Researcher: From books. But are those in the words of the book or is your story in your own words?

> Steve: Well, it's it is the same words but I don't like to say, say this said, it said, it said "pigskin is used for leather gloves, footballs and purses" but I said "I learned that pigskin is used for leather gloves and footballs and purses." (Transcript, p. 203, 5/19/80)

Steve is thus approaching awareness of the impersonal form of informational writing, even though he decided to recast his report in expressive language.

Evan made a "report" for his farm project. Starting with an encyclopedia, he then wrote his text. A crayon barn followed, which
was finished with the addition of a magic marker silo and doors. The whole was mounted, with the text below:

Farmes are in all pears of the 50 stats like Ohio and Canada.

Evan, 5/80, grade 1

This statement is in the transactional function, with no expressive or poetic elements. The self is excluded. The unconventional spelling and use of the construction "like Ohio" show these are Evan's words, but the overall style is formal.

Betsy and Deborah's joint storm report borrowed heavily from the wording in informational books in most cases. However, the section on sandstorms was, according to Deborah, done "out of her own head":

Sandstorms are storms that are caused by very strong winds. When sandstorms happen, the wind blows the sand around. Sandstorms usually happen on deserts or on beaches.

Deborah, grade 1
(Transcript, p. 224, 5/20/80)

Betsy's writing on hurricanes is also in her own words. She has kept herself very much in this piece:

A hurricane is a disaster in my opinion: heavy rains and floods, 90 foot waves, not for me, no way. Hurricanes happen over water. Florida, Cuba, Texas, Mexico, California, and more states. Near the Pacific and Atlantic ocean have this disaster.

Betsy, grade 2
(Transcript, p. 225, 5/20/80)

Mary's "Information Book About Animals" contained a series of reports. Her pages on the chick began formally, with passive tense and book phrase "take the place". Toward the end, however, expressive elements intruded as her own experience and feelings were shared with the reader:
Chick

Chicks are put in an incubator to keep it warm. It take the place of the hen who is on her nest and keeping them warm. After 20 days chicks start to peck in a shell you can hear them peep peep inside their making their way out. When they are first born there wet and scraggly looking you can see how cute they are after the dry off.

Mary, grade 2 May, 1980

These examples show that children were developing an awareness of informational writing, and were approximating its characteristics to varying extents. They were gradually moving into transactional writing.

Children also showed their internalization of the features of poetic language in the stories they retold and wrote. This was evident in Ted and Ruth Ann's individual retellings of the Little Red Hen, using magnetic figures on the chalk board:

This is a play of how Little Red Hen saves her friends. One day, the little red hen was walking and she saw that all of her friends were falling from the sky. Pig, turkey, goat, and horse. And she said, I must—and then she looked up in the sky and even the mill was falling. Right then in an instant when she saw that she ran over to pot maker and she said, "Oh, pot maker, will you make me a pot please" "Yes." And she said, "Thank you very much." "You are very welcome." And she took it over and she got all the water that came from the mill and then after that she was walking by thinking of something that could save her friends and she saw a seed. Then she said "I shall save the seed." She poured all the water on the seed and after a little bit the seed started to grow and grow until it was ready to cut and she cut it all off and she chopped it up and she got the kernals and she made some flour and then she made some biscuits, and she took the biscuits to the pot maker, and said, "Here in return for the water, that you gave me." "Thank you." With the rest of the wheat she made... and turkey land safely and pig land safely, horse land safely and goat land safely. And then they were all so happy that they forgot all about the mill and then little red hen said, Oh, my gosh, we forgot all about the mill. What will we do?... And they piled up every, all the left over wheat.
and they piled up the bag of flour and they piled up everything else that they had and then the mill land safely. And they all celebrated with some biscuits and ate all the biscuits up. And that is the end of the story.

Ted, grade 2
(Transcript, p. 76, 5/12/80)

"Turkey, Pig, and Little Red Hen and the Upside Down World." One day a witch dropped a magic seed in a field but the witch did not notice. She rode on to Florida. One day Turkey was looking for worms. She found a seed. She called all the animals - "Horse, Hen, Pig, Goat, look what I found." "It might be magic" said the Hen, and "Maybe we can become magic," said the Pig. "You can't just go around eating stuff" said Billy Goat. "I think Billy Goat is right" said Horse. "Oh, Turkey, can I have a piece?" said Pig. "Yes," said Turkey. "Oh, can I have a piece, too?" said Hen? "Yes," said Turkey. "How come you guys are upside down?" said Billy Goat. "We are not upside down." "You are too." "No, I'm not." "Are too." It went on until Horse said "It looks like we are upside down to you and it looks like we're upside down to you." And then it was all, and then it was all, and then "that you are upside down" said Horse. They chattered on and Horse was always the one to settle them. Horse got tired and soon he went home - back to the barn. And then it was always Pig when Horse left. It was almost five o'clock and Billy Goat fell asleep and when it was twelve the spell was off. The end.

Ruth Ann, grade 2
(Transcript, pp. 161-162, 5/30/80)

Each child has used familiar elements to pose a different dilemma and solution, elements which have come from more than one story, but which obey structural rules for such tales, each having a stylized, formal beginning - "one day" - and an explicitly stated ending phrase. In between, characters are introduced, and then immediately a major event and problem is described. It is evident each child knows intuitively the structural rules for creating coherent tales.

Their use of oral language was in the poetic function. They used language as spectators, to create a whole, a "verbal object" (Britton,
1975, pp. 90-91). They were not themselves expressively present; rather, they became the roles they took.

Many written stories exemplified this same unity of function. Children wrote as well as retold in the poetic function. Out of every theme study came not only objective transactional writing, but also imaginative poetic writing. Mary not only wrote "The Informational Book About Animals" (above, p. 420), but also wrote stories using this thematic material from the farm study in an imaginative way. She has made an illustrated roller movie:

The Little Red Hen

One day Little Red Hen was walking home from her friends house. and she heard something in the bushes. So... she looked and saw five eggs and they were in a nest and they were still warm. She waited 2 hours and the mother did not come. So she took them home and sat on them. The next day they hatched and they were ducklings. Then Little Red Hen took them to the pond and they went swimming. They found their mother and they lived happy ever after.

Mary, grade 2 May, 1980

Polly has made a caterpillar "shape" book, and has used collage illustrations to decorate her story:

Once upon a time the lived a caterpillar named Buckeye. Buckeye was a boy. Buckeye went to a football game and that's how he got his name.

It was night time and Baby was scared so he went into mother's room.

Buckeye had only a mother and no father. But it was a sad father died when Buckeye was 1 year old.

When they were in the car going home Baby said Could I have lunch? yes.

it was lunch time and Buckeye said Can I have lunch with my friend? yes said mother.

Mom decided to get married again so she did.
and the family lived happily ever after.
Polly, grade 2  May, 1980

Polly's story uses thematic material superficially related to the
butterfly study, but draws more deeply on family life, in its everyday
and more dramatic aspects. The form of her story obeys the conventions
of ritual opening and closing, and manages to resolve the problem of
the widowed mother deus ex machina.

Children thus wrote in both the transactional and poetic functions.
It should be noted, however, that the tendency of children's language
to become more differentiated in function was a tendency rather than a
clear-cut, abrupt change. The impetus for this tendency seemed to
come from the situation as shaped by the teacher. Children's texts
reflected the demands of these situations to varying degrees, as shown
by these examples of writings in thought rambling tablets.

Writings in thought rambling tablets arose from varied situations
and exemplified varied functions. Looking through children's thought
rambling tablets for the year 1979-1980, these types of situations can
be reconstructed, and examples given of each:

observations: written about insects, adopted trees, cater-
              pillars, brine shrimp, toad, chameleon, meal-
              worm

evaluations: children's evaluation of the work they had done
              that week

thought ramblings after an experience: writing after visiting
                                      the farm, the sugar bush and the metropolitan
                                      park, after or while constructing imaginary
                                      islands, after making paper

writing on a specific topic, sometimes after a "starter" phrase:
If I were a bee (ant, termite, etc.), I would ...
          (insect theme)
writing about the color green (spring, rain themes)
cloud shapes thought rambling
fall leaves
Christmas in other lands
The kinds of language use brought about by these situations ranged from objective description and generalization (transactional) to imaginative and metaphorical (poetic) language. Expressive language was also very much present, occurring as elements within these other types.

Examples will be given of these uses to illustrate the idea that new functions were brought about by the teacher's planning. First, transactional writing occurred in connection with observations. While observation often included the observer's role, there were some which only reported what was seen:

- the Catterpillar shed his skin twice. She is in a great big web. the feet look like the tip of a toothpick. She goes the bathroom on the side of the container and sheds her skin on the ground. the web is sticky Polly, grade 2 Spring, 1980

- The Brine Shrimp eggs are all bunched up and it has Hairy stuff in between Don, grade 2 Spring, 1980

In a later observation, Don has included expressive elements. His reference to "our chick," "my seed" may reflect the way in which the teacher has organized these activities:

- There is lots of baby shrimp. The mother brine shrimp have little white sacks on them. and some of the brine shrimp are mating. Our chick is moving all around in the egg. My seed hasn't come up yet Don, grade 2 May, 1980

Don's seed observation is similarly objective, with the exception of "you can see through the skin", a phrase which describes his experience more than the word transparent would, if, indeed, it were in his vocabulary:
The kidney beans are puffing up and cracking. On the peas you can see thru the skin and they are puffing up too. On the radish seeds are changing color and they are a little bit bigger. The yellow eyed beans are puffing and cracking.

Don, grade 2
May, 1980

Evaluations called forth expressive language as well as transactional. Children were invited to write down their own opinions and feelings about their work, and in the process, could describe this work, which they did to varying degrees. Mary has revealed the specifics of what was significant to her in her gym experience:

I think I did a good gob on my leaf paiting.
and my math.
and in jim I went hafv way up the roep
and I did 24 jup roep.

Mary, grade 2
Fall, 1979

John's evaluation is typical. He has added a sketch of the beaker of brine shrimp, labeled "1 cup" and "John and G," (G for George with whom he shared the beaker):

This week I think I inproved on my math and a good listener to.
I also think I Did a good job on my Brine Shrimp.

John, grade 2
Spring, 1980

Deborah has summarized some math learnings in her evaluation:

This week for math I'm doing division in the hundred's. I have to do it the long way. I learned that when you do division the long way you use three math signs +, X, and -. I also learned that when you work a division problem its the only math symbol that you start out with the tens or hundreds.

I also was a good listener.

Deborah, grade 2
4/18/80
Thought ramblings written after an experience also brought about mixtures of transactional and expressive language. Daniel wrote about what he "found out" at the farm:

I found out that manure is used for furtuliezer.
I also found out that if there were no holes in the hay loft the hay would get so hot it could start a fire.

Daniel, grade 1
5/14/80

Evan reported on two facts of interest to him learned at the farm, using a conversational style:

Did you ever No That Thay Own 85 Akers of land
they have 3 Rosters.

Evan, grade 1
5/14/80
The thought rambling assignment to write about the island children were making led to transactional writing in which features of these islands were described.

A poetic, imaginative process was required to create the island community, and showed that children had internalized features of societies in general. The process of describing, however, was transactional, as a catalog of features was given, and as story was missing. These examples illustrate this particular kind of transactional language brought about by the teacher's assignment as part of the overall island theme study:

Zappin Island

Zappins are triangle shape They have big eyes And have jellyfish Legs They have Six Legs. They eat zaggin and Mopey fruit. They have Ponds to drink out of. They Like to Play the desert Game where you get on A cactus and you try to stay on the Cactus. The zappins Look Like this And their flag looks like this. They have a bridge to get to the other side of the lake. They read books called hopes. And there's a bay called Zappin Bay They fought the magins and They won the magins flag. Looked like this when they eat the zaggins they spit the seeds out and They grow Agin. They have a Park called Zappin Park with A side and A Swing And A Tetertoter. There is A Stream That goes Threw the Land. There is a hidden cave The island is split in four.

The
n
d    Ted, grade 2
1/24/80

Swimie island

this country is swimie island All year it is Hot there. It has some places you may like to go there is some places such as: wrige, swimie, lake and universal. at universal it has the country flag at swimi there is a swimying pool you may like to swim
in that and at swimie Village there are lots of houses, and trees. and at swimie lake there are lots of lakes and some people swim there too. there are 4 places in swimie island if you see swimie island you'll Probery think that it is GiGantike. with all of its city's. this Island is a free island. the stuff in this island is very expenceve. Like 1 piece of Bubble Gum is 75 cents. The flag has 2 colors pink For the ladies. and Blue for the Gentleman. the flag Colors go in thin Boxes intell the colors go into the middle.

Paula, grade 2
1/80

The teacher occasionally gave more specific suggestions for thought ramblings, both for content and form. Early in the year, children used the phrase "If I were ..." to structure writing in the poetic function. Duncan dictated his, and copied it under the teacher's writing:

If I were a grasshopper, I would hop all over the grass.

Duncan, grade 1
9/80

Ted's is more elaborate, and in his own hand:

If I were a King termite I would be most afraid of a Praying mantis And I would eat wood and I would be yellow and white. And I would live in the ground.

Ted, grade 2
9/80

In March, children wrote about "green," using a framework which suggested a poetic form and point of view:

Green is the rain
racing down a window,
Green is the season of spring.
Green is St. Padrics Day on March 17.
Yellow is the little rain drops falling from the sky.

Steve, grade 2
3/17/80

green is envy
green are leaves
green is walking in the ...
On another occasion, in connection with the weather theme, children looked for familiar shapes in clouds. This imaginative experience produced transactional and expressive language, as children described their experience:

I saw a dog in the clouds. I saw a snake in the clouds.

Duncan, grade 1

I was laying on my grass looking in the sky looking for things and I saw a lot of things like boats cats dogs a beautiful horse

Mary, grade 2

In these examples below, the cumulative, rhythmic effect of repeated "when" phrases in Don's writing, and the sensory appeal and repeated sounds in Mary's writing put both of these thought ramblings in a poetic category:

Fall

When the leaves fall from the tree it is fall.
When the birds fly south and where the butterflys fly west and when the dogs and cats get their winter coats and when the rivers freeze it is fall when most all the animals hibernate like the frog and the turtle and the insects fly away

Don, grade 2
Fall, 1980

The prickly, prickly humpy, bumpy leaves come down to ground.
I lay in thim all day there crisp, crunchy.

Mary, grade 2
Fall, 1980

Except for writing about Christmas in other lands, this thought rambling writing which was produced in response to more specific
suggestions, tended toward the poetic. It broadened the range of functions represented within thought rambling tablets.

In summary, children wrote reports, stories, and (in their thought rambling tablets) observations, evaluations, thought ramblings, as well as more directed, specified pieces. This range of functions was brought about by the teacher's provision of experiences and organization of work. The examples not only illustrate this range, but the point made above that functions though tending to become differentiated, were still mixed. In particular, many expressive elements were present, revealing the importance of children's involvement in their experience.

c. Another new function for children was the emphasis on communication, on speaking and writing to those whose common background could not be assumed. Along with a continuation of opportunities to create with words and other materials for the sake of making something, there was new encouragement to represent ideas so that they were self-explanatory or explicit. This was brought about by a change in audience as well as a change in function (to be discussed below), and had consequences for the characteristics of the text. Indeed, these factors are different sides of the same situation.

Weekly newsletter writing was a repeated occasion for formulating ideas with the needs of audiences in mind. The teacher explained to the researcher that, especially in the beginning of the year, she asked children if their parents would wonder what children had meant by phrases they had suggested for the newsletter. She wanted to help them see if their ideas would be understood by another reading them (5/4/79). In this excerpt, taken toward the end of the year, teacher
and children were talking about their news in order to decide what
parent readers would like to know. In this case, they already knew
from the last newsletter that chicks were incubating:

Teacher: What other kind of information should be include
for telling our parents about the hatching of
the chicks? Deborah?

Deborah: (inaudible)

Teacher: What it looks like when they hatch (writing
this on the board) What would be the first
question that somebody would ask you when you
said "Our chicks hatched"? What do you suppose
they would want to know? Steve?

Steve: (inaudible)

Teacher: When they hatched (writing this on the board)
Did they hatch Monday, Tuesday, Wednesday?
What would another question might be? Some­
body would like to know.
You told them that your chicks had hatched, what
might they ask? (Transcript, p. 89, 5/16/80)

Similarly, before children wrote their permission letters, the teacher
helped them summarize information necessary to include. When review­
ing them with individuals, she helped them find and repair gaps and
anomalies:

Teacher (reading a child's permission letter):

"We are going to the Lane Road Library on June 4,
1980, at 10:30 - or 10:00 to 12:30. We have to
walk." And you capitalized the We and you put a
period. That was beautiful. "We need a lunch
and a drink." Then you said "to sign up for the
summer reading." It sounds like you have to take
a lunch and a drink in order to sign up for the
reading club. Doesn't it - the way you have put
your sentence. Could we say - "We need a sack
lunch and a drink"? (Transcript, p. 156, 5/28/80)

Newsletters and permission letters had real communicative func­
tions, and thus gave practice in this kind of writing. In addition,
children wrote letters to the Forest Service, wrote thank you letters,
birthday cards, and Valentines, all of which placed demands on their communicative language.

These communicative uses contrasted with much of the other writing they did, that is the transactional as well as poetic function. This other writing was an end in itself, and was read or heard by others with the same background of knowledge. However, a continuum best described this shift from language for self to language for others.

These communicative uses of writing could also be compared and contrasted to communicative uses of talk. During children's sharing of their ideas and observations, they had a listening audience that did not share their particular meaning, so they had reason to be explicit as they did when writing to communicate. Oral sharing, however, was like conversation. The teacher and the group could fill in and add to what the child said, thereby creating meaning jointly. In writing, even with a collaborative partner and with teacher's informative response, children were more on their own. They were helped in this more solitary structuring of text by needing to communicate something to someone, the new function emphasized in this dimension of mode.

d. There was new use of language as an aid to abstract thought.

Not only were talk and writing used to communicate with others or to create verbal objects, but they also functioned to help children examine their experience objectively. While evidence for this kind of use is not easily accessible, it could be inferred from what the teacher and children did. Language as an aid to thought has been categorized as a new use of language on the basis of an assumed course of development, from less to more controlled and abstract use of both
language and thought, both becoming gradually independent of the physical or social context. This was the course of development the teacher wanted to cooperate with and promote.

Talk and writing were both important in clarifying thought. Talk functioned not only as a valid mode of representation, but as a way of helping children to reflect on and organize their experience. That is, it functioned during theme studies as a pervasive way in which children together and with their teacher, worked out ideas and relationships, extended vocabulary and developed new concepts. As such, it sometimes led to writing. The tenor of relationships and the field of concrete, dynamic and shared experiences encouraged interactive language use, which could bring about formulation of thought, will be given of a) the ways in which the teacher helped children use language to clarify thinking and b) the children's own spontaneous use of language to order their experience.

a. The teacher helped children use language to clarify thought.

Many examples can be found of what she did to draw language and thinking practice out of experience. Talk was especially important. Newsletter planning itself was a repeated procedure during which teacher and children together looked back over the experiences of the week, and ordered them through spoken and written language. Under the teacher's guidance, an outline was constructed on the board which helped recall main ideas and subordinate details of these events, and hence also assisted writers:

1. Lane Rd. Library John
   a. why
   b. when
   c. what we need
2. Rocks and Fossils Sam, Sean, Rick
   a. people sharing rocks, dinosaurs
   b. listening to tape
   c. word chart
   d. filmstrips
   e. looking at different rocks
   f. styrofoam Rex: 4 1/2 feet tall, 6 feet long

Crystals Steve

Tidbits Mary, Monique
1. Gatheroo 12-4
2. Toad - Speedy
3. garden - eating our peas (5/30/80)

During theme studies certain routines were followed which helped children reflect on and organize their new experiences, both concrete and literary. One repeated practice (mentioned above, p. 284) was to assemble theme vocabulary on a paper with a symbolic shape, thus farm words on a barn, butterfly words on a butterfly. These words were then talked about and used in writing so that from their occurrence in these spoken and written multiple contexts, children were able to abstract their meaning.

On one occasion, the teacher used familiar contexts and known words to develop awareness of certain new "shell" words. Bivalve was related to bicycle; mussel to muscle (playfully); angel wing, turkey wing, butterfly wing to their name sakes (5/4/79). During the island study, she developed the meaning of the words "coastline," "symbol," and "scale" as mentioned above (p. 286). She used the common literary experience of hearing Elmer and the Dragon, the concrete focus of her island sketch maps, and the prospect children had of making features to add to the maps, to create a context from which children could abstract meanings of these words (1/17/80).
Another procedure which helped children use language to clarify and organize thinking, was the teacher's planning for some sort of chart on which features of things being studied could be recorded. These charts made visible the relevant factors in the structure under study, and often enabled children to compare and contrast, distinguishing invariant features from those which were variable. The witch chart, the planet chart, the garden planning chart, the farm animal chart, have been discussed above (p. 308) under the dimension of field, as examples of new ways of processing experience. Here, the purpose is to suggest the importance of language in this processing and ordering of experience.

In her interaction with children, the teacher often put them in the position of having to talk, and thereby to use language to formulate thought. Typically, small groups and individuals who had had particular experiences within a commonly understood experience, could tell about this to those others who hadn't shared it. Thus, the small group returning from Ruth Ann's garden reported to the rest on the state of the sprouting plants that afternoon. They were having to formulate their own thoughts and language in order to be clear to those who hadn't shared this particular experience (5/15/80).

Similarly, when children were candling their eggs in pairs, the teacher led them to talk about what they say. The teacher made her purpose explicit, and showed the value she placed on talk in this exchange with the student teacher:

Teacher says Egg #5, I'd like to see. Children come up and candle egg with her, looking at egg against projector light, first looking at informational book about development of embryo, and talking with her about it. At recess, Mrs. B.
b. Children used language spontaneously to order their experience. It should be reiterated that their use of language to think about and clarify their experience can only be inferred. It has been shown that talk in this classroom was pervasive, and writing was used for an expanding range of purposes. Talk as a means of collaboration was noted early in the field work process:

Interaction: Does the collaborative nature lead to explicitness, awareness of own processes, both surface and deep? Process of explaining to another, teaching another, defending one's view with another gives practice in analysis and expression? (4/26/79)

While children had many reasons to talk to each other, there were occasions when the talk seemed to serve their thinking. For example, when weighing eggs, words summarized the sequence of adjustments:

Two girls at scales, weighing eggs:
"That's too much."
"That's way too much."
"One more."
"That's balanced." (4/18/79)

These girls later used the balance to compare the weight of two rocks. This non-verbal experience has generated language which was used to formulate an abstract relationship:

Cari and Anne are comparing weight of two rocks by using balance: "This one's more heavier, this one's heavier." (5/17/79)

Similarly, language and thought were generated by children's observation experiences. Ted's close and unhurried observations of the chameleon eating the mealworm reveals the complexity of this event. His language captures this complexity. Presumably, the process of
putting these relationships into words helped Ted formulate questions of comparison and contrast:

Ted: He (i.e., the chameleon) eats it with the side of his mouth, and it hangs out. When the frog eats it, or toad eats it, is there anything left hanging out? (Transcript, p. 208, 5/20/80)

Later, in the same session, there had been talk of which creatures ate mealworms, and of whether humans could. First grader George summarizes, to no one in particular:


Ted reached a higher level of generalization when he commented that the caterpillar, the littlest figure in the teacher's retelling of the Very Hungry Caterpillar (Eric Carle, World Publishing, 1969) was like the seed in the Little Red Hen. Ted linked these dissimilar phenomena on the basis of underlying abstract characteristics. Both are small, and grow to take on a role of key importance in their respective stories. Ted made his remark after the teacher's retelling, while children were moving into worktime. No one except the researcher heard (5/23/80). This thinking was similar to though less complex than Mary's, whose writing about the different size relationships between humans and their food, and brine shrimp and their food was discussed above (p. 402). Her thought rambling read this way:

his Food is bigger then he is and are Food is not bigger then we Are?

Mary, grade 2
April, 1980

Her entry on the Brine Shrimp Observation chart is slightly different:
Both talk and writing, therefore, were used to clarify thought. Though there are more examples given of talk, it can be assumed that the writing children did when observing, when writing reports and stories, led to thinking. Not only did children have to decide how to transcribe their words on to paper, they needed to formulate their message, drawing on direct and indirect experience, a thinking as much as a language experience. It has been suggested in this section that children were gradually learning to use language to manipulate and control ideas, with increasing objectivity and detachment from the context. Language as an aid to thought thus was said to be a new, less familiar function for children.

This concludes the discussion of the new aspect of function. While providing children with opportunities to use language for familiar purposes, the teacher also encouraged them to talk and write for new purposes. Thus they were using language for purposes that were more distant in time and space from the immediate situation. Their language was becoming more specialized, as they showed an intuitive ability to produce different forms within the transactional and poetic functions. In addition to the continued use of language to create a representation or to make a verbal object, for its own sake, they were put in situations requiring explicit, communicative language. Finally, they used language to organize and extend their experience, and thus to aid their thought.

Old and new uses existed as a continuum of possibilities. The teacher balanced the provision of security and the encouragement of
independence in this area of mode as she did in every other area of all dimensions of the context. A similar balance is seen in the kinds of audiences she provided for children's language, to be discussed in this next section.

2. The audiences for children's language expression were new. They were different from the audiences children were accustomed to in that a) external audiences became more distant in time, space, and/or degree of intimacy, and b) the internal audience of the self became important as solo discourse was structured by inner dialogue instead of external collaboration. These new kinds of audiences and audience relationships were provided as part of the experiences that the teacher planned, which also allowed for the continuation of audiences familiar to children.

 a. External audiences became distant in time, space, degree of intimacy, and extent of shared background, though usually not all four at once. That is, children wrote to their parents when they wrote newsletters and permission letters. This was an intimate audience though removed in space and time. In contrast, their thank you letters to a guest who spoke on rockets were to one who had immediately been concretely present, but who was not intimately known to them. Letters to the Forest Service seemed to combine all these factors of distance, however, since recipients were removed and unknown.

 Other children sometimes became more distant audiences in the sense that they had not shared the particular experiences being told or written about. This kind of distance, like the physical distance of their parents and the psychological distance of the guest speaker, placed demands on children's language. They needed to be explicit
about that part of their experience which wasn't shared. For instance, children knew there was a class garden, and what had been planted. They didn't know which shoots were up, how far up, nor that something had been nibbling the leaves (5/15/80).

These more distant audiences were provided in the midst of a usual condition of familiarity. Usually, children's language was heard or read by friends and teacher in the immediate situation of its production. Within this continued condition, then, there was an expansion in range of audience, as there had been in range of function.

b. The internal audience of self became important as solo discourse was structured by inner dialogue instead of external collaboration. Children took on more responsibility for structuring and sustaining their own language, and for producing extended text. Examples of language produced alone include retellings, stories, reports, permission letters, and sometimes newsletter articles and observations. Children were often given the choice of working alone or with others, and when working with others, the relationship was sometimes a side-by-side rather than a collaborative one. Newsletter articles were sometimes worked out together, but often the subject was divided between children, who then each wrote their own part. Thought ramblings, for example writing about one's island, were done alone. In these cases, the teacher planned on occasion when children had full responsibility for structuring their own text, using internal rather than external dialogue.

The teacher thus gave children experience with a new way of using language - when no external audience was present during the construction of text. However, she supported this new experience in several ways.
First, a collaborative audience was available before and after the writing. Before any writing was done, there was usually talk which helped generate and order ideas, and which was often abstracted into an outline or list on the board. Following the writing, there were audiences - friends, the teacher and the group - who were interested in hearing or reading the child's writing. Second, the teacher supported this new solo writing by providing a continuation of familiar aspects of the other dimensions of field and tenor. If a child wrote alone, they wrote about a concretely present field, as they did when writing about their islands, as Sean did when writing about his experience weighing rocks and soil (5/28/80), or when telling about and showing his electricity experiment (1/17/80). When talking alone, as children did when retelling stories, this solo language use was supported by concrete objects - magnetic figures of the characters in the story or things being shared during "sharing".

This new aspect of mode - writing with self as audience - was also supported by the provision of a familiar tenor. Not only were these concrete experiences that were being written about, but they had been shared with others. Therefore, when writing alone, there was the psychological support of the understanding of the group which could be assumed. This made the reconstruction of a total body of meaning unnecessary, a task probably too overwhelming for most.

Thus there were new kinds of audiences for children's work. First, those who heard or read what children said or wrote were often farther removed from the children's own experience; they were in many senses more distant. Second, the collaborative audience which often supported children's composing was on occasion absent, so that children had to
become their own audiences, taking the role of reader or listener in order to produce understandable text. This shift to new kinds of audiences was gradual, and was based on a continuing foundation of familiar, immediate, and collaborative audience relationships.

3. The teacher's response, while continuing to be supportive and flexible, selectively encouraged greater attention to language itself. She was still interested in children's work. It could be claimed that her relationship became more formal as she focused more explicitly on the form rather than the content of that work, with certain children. She would nevertheless still be attending to children's representations, rather than evaluatively to them as people. It was that her attention seemed to shift from one aspect to another of the work itself.

This more formal register was noted in the case of children whose language was more developed, and who often were older. It was characterized not only by a change in what the teacher said but also in her manner - the paralinguistic character of her voice. A review of her tape-recorded interaction with children as they shared their writing with her shows this difference.

For example, when second-grade Polly showed her permission letter to the teacher, most of the teacher's comments pertained to form, and drew Polly's attention to her use of capital letters, in an evident attempt to help Polly be able to abstract and formulate general rules for the use of capitals:

Teacher: (reading) Polly's: "Dear Mom and Dad, May I have permission to go to the Lane Road Library?" I have a question: why did you make permission a capital P? Is it a special word that needs to be capitalized?
Polly: (inaudible)

Teacher: Is it? Why did you capitalize go then? Do you have to capitalize go? Now what about Lane Road Library? So we should change the big G in go to a little g? And make this L a capital L. Lane Road Library. (Transcript, p. 156, 5/28/80)

The teacher's voice changed as she emphasized certain letters and words, (Lane Road Library) and deemphasized others (go), probably in order to make this contrast clearer to Polly. Her first phrase "I have a question" is low-pitched, quiet, even, and serious. Her question "Is it a special word ..." and "Is it?" both rose, as if to imply the negative answer.

Deborah, a second grader like Polly, was helped by cues and words to see a spelling miscue and to discover a pattern for the correct spelling of a word. The teacher's voice, while not as low as it was initially with Polly, was mid-pitch rather than high:

Teacher: Deborah, let me see that. Would you read the second word to me? Start at the beginning and read the second word. O.K. Thank you. How did you spell think? What would the vowel be? It is a in thank, isn't it? What would it be in think? (Transcript, p. 95, 5/15/80)

In contrast, the teacher's voice is higher and more inflected when talking with Evan, a first grader, about his farm story. Evan's "I can't think of any more" led her to help him recall his experience more fully. She was concerned with content more than with form. (In fact, an extended discussion followed this excerpt in which the teacher and several children tried to establish the day of hatching):

Evan: I can't think of any more.
Teacher: (reading Evan's writing) "On Sunday and Monday the chicks hatched. Most of them are fluffy yellow."

Evan: I can't think of any more.

Teacher: O.K. Did you see them hatch?

Evan: Yahhnn...

Teacher: Did they hatch on Sunday? When we came in on Monday morning, were they hatched? ff (Transcript, p. 96, 5/16/80)

Finally, in the case of Steve, a second grader, but one who was serious and sensitive (unlike confident Polly) the teacher commented on content and form. She discussed in a positive way the content of his self-evaluation, and then drew his attention to one element of form. Her tone of voice was mid-level, and moderately inflected:

Teacher: Steve, would you read this for me?

Steve: "I worked hard on my horse bones (i.e., plasticene skeleton bas-relief of horse) and I am working hard on the chicken project. And I worked hard on my math. I think I did a good job on my stallion. I think I was a good class citizen."

Teacher: Steve, I think you are always a good class citizen. You're a good listener. You are pretty respectful of people working, aren't you? I have a word I want you to spell for me. How do you spell the word bone?

Steve: b - o - n - e?

Teacher: Now when you want to make a word plural, more than one, what do you have to add to it? What letter do you put at the end of a word when you want to make it plural? Like girl - girls, boy - boys. (Transcript, p. 115, 5/23/80)

Other examples show this same contrast in the teacher's response to other children. It seemed that with younger, and/or less mature children, she was apt to use a higher-pitched, more highly inflected tone of voice. With older, and/or more mature children, it seemed she
was apt to use a more matter-of-fact voice. Her comments to younger children pertained primarily to content; with older children, they focused more on form.

These tentative generalizations grow out of the observation that the teacher's voice did change from time to time and child to child. In other words, there were real differences in her register. It is possible that the pattern and meaning of these changes may relate to the development of the child and the kind of relationship appropriate to that development. They may also relate to the nature of the teacher's response, that is, whether it is to content or to form.

Like the generalizations about the teacher's paralinguistic communication of affection and security, (pp. 320-326 above), these tentative interpretations would have to be explored systematically.

These examples have been given to show the teacher's efforts to increase children's awareness and control of language itself, as she helped them attend to features in order to discover patterns for formal conventions. In doing so, she made use of paralinguistic qualities - intonation, stress, and juncture changes - as well as other non-verbal resources such as closeness. She also coordinated changes toward abstractness of content (field) and increased social responsibility (tenor). Most of these decisions were probably intuitive, but were made so that connections with familiar kinds of subject matter, personal relationships, and language use were maintained. These continued contextual characteristics formed a firm basis for extension in these dimensions toward the unfamiliar, which was encouraged selectively for certain children, and for all through certain activities.
The nature of these decisions was revealed in the teacher's interaction with children as a special audience for their work.

4. Among the channels available for children's expression, writing was increasingly expected, encouraged, and valued. It should first be restated that the variety of non-verbal channels continued to be available and that all children, more as well as less mature, were expected to use these channels to represent their experience. Thus, Ted devoted much time to his papier maché calf over the last weeks of his second grade experience (5/80). Thus, the teacher was interested to know how Polly's barn project had turned out (Transcript, p. 95, 5/16/80). Thus, Betsy and Mary dramatized Charlotte's Web with plasticene figures they had made (5/29/80). These children were among the older, more fluent and habitual writers in the class.

If children represented their experiences through writing, the earlier familiar conditions of choice remained available. That is, they continued to choose their own thoughts, and to use their own words and method of transcription, with increasing help from the teacher in becoming aware of this latter aspect (pp. 441-445).

However, writing was not just another way of representing experience. Through a combination of means, the teacher especially encouraged it, by requiring it at times, and by suggesting it as an option often. The resulting kinds of writing will be described below. The means by which she brought this about will be discussed in the final summary of the dimension of mode.

First, as has been stated, above, the teacher's goal was to have everyone do some writing in connection with each theme study (Transcript, p. 221, 5/20/80). The teacher did, in fact, plan for
repeated, required writing events, so that children were given regular practice in composing and transcribing. Among these were newsletters, thought ramblings of various kinds, observations, evaluations, stories, thank you letters, permission letters, and recording of science experiences. Children took for granted their teacher's assignment of this writing, explaining in many interviews, they wrote because the teacher had told them to.

In addition to required writing, children could choose to write in connection with theme studies, and indeed, on any occasion. Many "projects" were essentially writing projects, such as children's stories or reports. Others involved or led to writing as pictures were captioned, and constructions labeled and described. For while this writing may not have been explicitly required, the teacher often guided children to extend their representations with written language. For example, Katie who made a stuffed paper horse, followed it with a story, and the two were displayed together (5/10/79). What children wrote was given a place of honor, clothespinned by a piece of rick rack along with displays of theme books and artifacts, so that others were able to read them. Other optional kinds of writing included survey taking, adding to group charts, making one's own tiny books and scrapbooks, writing stories at home ("because I had nothing else to do," as children often said) and then sharing these at school. In interviewing children, it was not always clear whether they had made the choice to do this optional writing, or whether there may have been an individual suggestion made by the teacher or student teacher. Certainly, both situations occurred.
Thus, children were especially encouraged to write, while continuing to use other varied modes of expression. Some writing was voluntary, some required. The writing thus brought about was a new means of representation for many children. This and other new aspects of mode will now be summarized.

In this section, new aspects of the way children used language and other media have been contrasted with familiar ways they had used before entering school. These were said to exist on a continuum, with encouragement toward the new being based on a provision of the familiar. The teacher brought about reasons for children to use language in new ways - to write about matters removed from the present concrete setting, to produce increasingly specialized and varied kinds of language, to communicate explicitly, and to think more abstractly with the aid of language.

New kinds of audiences - those less known to children, or even if known, lacking a shared background of experience, brought about the need for explicit, communicative language. The collaboration from peers or teacher in the midst of composing and transcribing was modified, when children were sometimes put on their own to write, structuring and sustaining their text independently. They became their own audience, working out ideas and language in dialogue with themselves.

The teacher continued as a special audience for children's work. She gave informative responses to the specifics of that work, and selectively directed the attention of some children to formal features in order to help them induce rules for conventions.

Finally, within the continued provision of many means for representing experience, including talk, the teacher brought about writing
by requiring it and by encouraging children to choose it. Both re-
quired and optional writing was supported by the teacher's shaping of
the context, not only by her balance of old and new aspects of mode,
but also by what she did in shaping children's experience with content
(field), and other people (tenor). This shaping will now be reviewed
in the following summary of the dimension of the mode of discourse.

Summary: The Mode of Discourse. The teacher's shaping of the
mode of discourse in this classroom allowed children to continue
representing meaning in familiar ways. She enabled them to use what
they had learned in their earlier years, and thus provided security.
At the same time, she helped them develop new ways of representing
meaning, especially through language, and thus encouraged growth toward
independence.

Familiar ways of using language provided a basic foundation for
more abstract language use. These included: the use of language within
a concrete context for children's own purposes; the provision of
familiar, collaborative audiences who constructed meaning jointly; the
teacher as a special audience who responded informatively to their
intentions; and the availability of many different ways of represent-
ing meaning, such as art, construction, drama, and play as well as
talk and writing.

New ways of using language were encouraged as the teacher planned
situations which called for: a broader range of language use, often
about more distant subjects, to audiences who were more remote or had
not shared children's experience; more independent writing without the
collaborative support of the teacher or of peers; more attention to
aspects of form; and finally, more use of writing within a continued variety of means of representation.

Interactions of Field, Tenor, and Mode of Discourse: Support for Writing

These three dimensions of the context have been described above in terms of their familiar and new aspects. For the purposes of this description, they have been kept separate. However, it was often stated that the introduction of a new aspect in one dimension was supported by the continuation of familiar aspects in other dimensions. The introduction of the new mode of writing was thus supported by continuation of familiar aspects within one or more dimensions of field, tenor, and mode.

A brief discussion of a) the interdependence of these dimensions will be given. This will be followed by a description with examples of b) the support which writing derived from a familiar field, tenor, and from familiar aspects of mode.

a. These dimensions of the context, in their familiar and new aspects, existed in interdependence with each other. As abstract concepts, they had no independent existence. Rather, they could be found embodied in any situation or event. Thus, two boys sitting side by side in the corner of the reading center writing their thought rambling about their imaginary islands (1/24/80) could exemplify a certain field (the immediate island under construction), tenor (closeness of friends, the possibility of interaction), and mode (their own choice of language within the teacher's assignment which determined topic and use of the writing channel). Each dimension affected the others. Likewise, the teacher's chart "Try My Experiment", 
inviting children to sketch their electricity experiments for others to try, contained implicit reference to all three dimensions—children's active experimenting with content (field), their involvement with others as they were encouraged to share their experiences with each other (tenor), and their communication and representation through making labelled sketches and diagrams (mode) (1/17/80).

Even though these three dimensions of the context functioned in integration, they could be said to be separate realities. According to this analysis, the nature of each dimension had its effect on the total context. In particular, familiar aspects of one or two dimensions could be used to support new aspects of the other one or two. Thus, in the example above of boys who were together but each writing about his own imaginary island, the new mode of writing by oneself was supported by the homelike way of relating to others (tenor) and a content experience which was familiar in its concreteness and immediacy (field). In this example, tenor and field therefore supported mode.

Sometimes, these relationships were reversed as a familiar mode and tenor was used to support a new field or content. The China study introduced new content which obviously could not be directly experienced. In contrast to this new field, the tenor and mode were familiar. Children worked together adding questions to the large sheet of paper on the floor which asked "What Do You Want to Know About China?", thereby collaborating as they talked and wrote (5/23/79). In this case, new content was supported by familiar ways of relating and using language, or a new field by familiar tenor and mode.
Support for new experiences came not only from other familiar dimensions but also from within the dimension itself being extended. For example, within the dimension of field, the remote study, China, was made more concrete by the display of Chinese items – the fans, the posted Chinese writing, the illustrated books, the dolls. Within the dimension of tenor, the more formal relationship of the teacher when commenting on the form of children’s writing, co-existed with the informality of children’s physical closeness to their teacher. Within the dimension of mode, “making things” accompanied and supported writing.

b. Writing was a new mode of discourse. It was supported at times by one or more of the following: a familiar field, familiar tenor, or familiar elements within mode itself. Each of these familiar situations will now be elaborated in turn.

First, a familiar field of discourse supported children’s writing. Experiences with content were concrete, as materials were observed and handled. Literary experiences were vivid, and were embodied through the presence of books which had been shared and were used and referred to. Things to write about were at hand and often could be re-experienced. Their importance is shown by Deborah’s comment. When she saw a photograph of children writing in their thought rambling tablets, she commented, "We have to observe things"; she could have said, "We have to write things" (Transcript, p. 59, 5/1/80). Children did things in their classrooms or went on trips. Guests and parents brought new ideas, things to share, and led experiences. Even if the content children were studying was itself remote or abstract, there were concrete tokens available which children could touch and study.
Included in this were books-as-objects, and figures for retelling familiar tales. Cooperatively assembled collections which related to themes under study, such as various kinds of clocks, rocks, and minerals, wooden objects, made large themes of time, volcanoes, and trees, more accessible and tangible.

Second, a familiar tenor or kind of interpersonal relationship supported writing. One major characteristic of children's experience with content was that it was largely shared. Children carried out the concrete activities summarized above in the company of their friends and their teacher. Although they had their own experiences within the larger, shared experience, they had a history in common which made them able to understand each other without full, explicit explanation.

The teacher and children who shared each other's history were able to collaborate in the construction of text. Other children helped as writers composed and transcribed. The teacher collaborated before composition as she participated along with children in their experiences, drawing their attention to features of interest to them and to her, as she did on the garden visit, during outdoor tree observations, and in the classroom around the terrarium. Before they wrote, she often helped them organize their thinking about the subject, by using their ideas to make cooperative charts, outlines, and vocabulary lists. She helped children after writing, as she was often their first audience for what they had written. Her response was to their work, while conveying underlying acceptance of them as people. Both the teacher and other children related to the writing child in a close, family-like way, thus supporting the child's new, more abstract
activity. A different kind of support came from parents who were intimate, though at the moment of writing, distant audiences.

Third, there were familiar aspects of mode which supported those which were new. These were like familiar aspects of field and tenor, and indeed reflected them. Language used within a familiar field reflected a familiar function. Language used within a familiar tenor of relationship reflected these audience characteristics. These familiar aspects of mode will now be reviewed.

The function of language in the field of discourse was familiar. Children used language without regard for consistency within formal models, to reveal the importance of their own role in their experiences, their enjoyment of formal, poetic elements of language, and their objective reporting to others of what that experience was. They used it, along with other, non-verbal means of expression, to create "verbal objects." The desire to work with concrete materials in order to make something, as a concrete representation of experience (field) was linked with the desire to make something with words, as a "verbal construct." Making things led to writing; indeed, writing was talked of in terms of making things (Transcript, p. 40, 4/30/80). Chinese books with shiny, metallic wallpaper covers (5/79), roller movies (5/80), papier mâché witch puppets and original witch stories written after hearing many stories read, are all examples of writing kept close to concrete activities.

The audience, the tenor of relationship to hearer and reader was also familiar. Friends, teacher, and parent were children's familiar, collaborative audiences who shared experiences and the opportunity for interaction, and thus could collaborate in constructing
meaning. The teacher as audience was special, since she responded to
their meaning and intention and contributed what was necessary to make
children's meaning clear and relevant to the common meaning of the
group.

Many channels were also available. Children had opportunity to
represent meaning in many ways, including talk. Children decided which
experiences to represent, how to represent them, including which words
to use and how to handle the conventions of writing.

These familiar aspects of the dimensions of field, tenor, and
mode were used to support or scaffold a new mode of language use,
along with new, less familiar content, and new kinds of social rela­
tionships. These new modes of use will now be reviewed.

New aspects of mode were supported by familiar aspects of field,
tenor, and mode. New aspects included writing for new purposes or
functions: writing about matters more remote in space and time, or
more abstract; writing in more specialized ways; and writing in order
to communicate or to examine conceptual relationships with the help of
language.

New aspects also included writing for new audiences: those more
distant, geographically or psychologically, or those who did not share
the child's background; and writing with oneself as audience, without
collaborator. The teacher as audience continued her support but
selectively shifted focus to take in elements of conventional form as
she read children's work with them.

Finally, within this continued emphasis on a variety of repre­
sentational means, writing was given special emphasis, as it was both
encouraged and frequently required.
How were the familiar aspects of the dimensions of field, tenor, and mode used in this classroom to support these new kinds of language use? A few examples will be drawn from this chapter to illustrate some different possible combinations of familiarity and newness. Each writing event was familiar and new in different respects, and differed in its amount of pressure toward the new. These examples are arranged in an order from the most to the least familiar, from a thoroughly embedded observation writing event to the task of writing about far away, abstract content to a more remote audience in a more prescribed, "thank you letter" function:

Small group observations: a familiar field, tenor, and mode a new mode

The language generated within small group observations was varied, but among it were utterances of some complexity. The field of such an experience was familiar, as children were close to an immediate, concrete, dynamic event. The tenor was familiar, as children interacted freely with their friends and with their teacher as co-learner. The mode was in part familiar, as since they used spoken language with no constraint for various, mixed functions. It was also new, as the complexity and interest of the real life situation pressed them for more complex language forms in which to express their observation and questions (p. 373).

Report from the garden visit: a familiar field, tenor, and mode a new mode

The small group of children who sent to visit the class garden were engaged in familiar, concrete activity which involved walking, observing, measuring, and recording interactively with each other and their teacher. Part of the mode of their expression was familiar, as they used talk to report to others. Part was unfamiliar, first as they measured and recorded in words and numbers, and next as they were put in the position of being explicit to those back in their classroom who had had their particular experience (p. 339).
Little People's Farm thought ramblings: a familiar field and tenor

When children wrote about places and times removed from the here and now, they were using language for a new purpose or function. Thus, they wrote about their trip to Little People's Farm during the afternoon following their visit. Their writing was thus removed from their concrete experience. Furthermore, since this was a thought rambling, they were expected to write it by themselves, generating their own ideas and means of transcription. These new aspects of function and audience within the dimensions of mode were balanced by the continuation of a familiar field and tenor. Their experience with content had been direct, concrete, active, and personal -- thus a familiar field -- and was not far removed in either space or time from their writing (5/15/80).

Permission letters: a familiar field, tenor, and mode

When children wrote to their parents to ask if they could go on a class trip, they needed to be explicit in order to convey necessary, unshared information. This was a new mode stressing communication. Field, while familiar in the actual activity or content, was more remote, since it dealt with what had not yet happened. A collaborative tenor supported the new aspects of this experience, as the teacher helped children decide on important information to include, and listed it on the board. She also read over their letters with them afterward, helping them through her response to achieve the needed explicitness (Transcript, p. 156, 5/28/80).

Thank you letters to a guest speaker: a familiar tenor and mode

Writing thank you notes to a guest speaker who had talked on rockets exemplifies a probably unfamiliar field: the details of rocketry, learned by listening to a talk, rather than through direct experience. The tenor of the letter writing experience was familiar, as collaboration was with children and teacher, and as the teacher helped children organize their thoughts in notes they could refer to on the chalkboard. Aspects of mode were new, particularly writing a letter in a more formal audience relationship, about new content from which children were to select, "telling one thing that you learned". (2/80)

These examples illustrate a few types of combinations which seemed to occur, as the teacher used familiar aspects in one or more dimensions to assist children into a new way of using language. The following
chapter will present examples of texts and will explore these specific interrelationships within the dimensions of the context.

Summary and Conclusion: The Teacher's Shaping of the Content

This chapter has presented material drawn from notes, audiotapes, collected writings, and photographs to describe the nature of the context of this first and second grade informal classroom. This context was assumed to have generated certain meanings, which in turn included the kind of language used. In order to study the use of language and particularly of writing in this classroom, it was necessary first to examine the context which gave rise to this language. What were the meanings within this classroom, and how did they relate to language, both talk and writing?

A further assumption was that the teacher created this context, through her decisions, both long-range and in immediate situations. This is not to ignore the many other factors which no doubt contributed to the nature of the context, but rather to emphasize her key role.

There have been two separate approaches to this description of the context, both resting on the assumptions of the importance of context to language, and the importance of the teacher's decisions in shaping that context. The first approach has been an attempt to describe the setting of this classroom in terms of the teacher's use of the resources of space, materials, and time. Thus, the description of the context began at a phenomenal level, as regularities were inferred and patterns proposed. The teacher's use of these material resources of space, materials, and time was described both as it appeared to the observer, and as others saw it. This use was reported
in terms of themes, with implications drawn for the nature of children's experience.

The second approach to description of the same context was made at a more abstract level of inference, in terms of the shaping of three less tangible dimensions. These dimensions together were assumed to describe the context in a comprehensive way, and were organized around the teacher's shaping of children's experience with content (field), people (tenor), and language and other channels of expression (mode). These more abstract dimensions subsumed themes for space, materials, and time, by which they were implemented. All the teacher had to work with were these fundamental materials of space, materials, and time. Her use, however, was guided by her decisions about content, interpersonal relationships, and the role of language as a means of representation and communication.

Themes for space and materials, and for time.

Four themes summarized the teacher's use of space and materials, and four themes, her use of time. The first themes stated that the teacher's shaping and provisioning of space, and her shaping of time allowed a family-like way of living, with the possibility for children to regulate their own activity. The second themes claimed that this particular use of space, materials, and time allowed and promoted an experience-based curriculum. The third themes described the clear organization of things and events which enabled children to act with independence. Finally, the fourth themes noted flexibility in the use of space, materials, and time, by both teacher and children.
The relationship between themes for space, materials, and time, and the dimensions of field, tenor, and mode.

The first two themes for space, materials, and time allowed children to use familiar ways of relating to others and familiar, active ways of learning about and representing the world, the same points made in the discussion of a familiar dimension of field, tenor, and mode. The last two themes stressed the contrast between the clear structure presented children and the approximate behavior flexibility allowed. Clear structure was also seen in the redundancy of ideas and experiences (field); in the acceptance by children of the teacher's authority and their responsibility for their own decisions (tenor); and in the clear examples of different kinds of language and different kinds of other media (mode). Approximations were seen as children: experienced content informally, actively, and in its natural integration, drawing their own generalizations from this experience (field); gradually acted with reference to a larger, more complex social setting (tenor); and used language and other materials to represent their experience to their own way (mode).

This provision of clarity in the dimensions of field, tenor, and mode (through the teacher's use of space, materials, and time) was related to the concept of scaffolding. It was analogous to the presentation of a clear language sample by parents to a language learning child. Within this clear presentation, the teacher kept in balance those elements that were familiar and those that were new, changing this balance according to her perception of children's "learning edge." Thus the nature of the clear sample shifted, and
children were introduced to new, more abstract, more demanding ideas, relationships, and language use.

The response children made to this clarity was allowed to be approximate. That is, what children made of their experience was allowed and respected, regardless of how approximate it was in comparison to adult models. What they did was, within the teacher's limits, self-initiated. The teacher's control over their experience was thus in the context she created; they were free to make their own meanings within this context.

Their meanings, and the means by which they represented and communicated them, would change and grow, as they continued to have further experiences. In theory, their approximations of meanings and of conventions, would become progressively differentiated and refined. In theory, time and practice in processing and representing progressively more complex and abstract experience would bring about this refinement and differentiation.

An Analysis of the dimension of field, tenor, and mode.

The second part of this chapter presented an analysis of the context in terms of dimensions of field, tenor, and mode of discourse. Within each dimension, the teacher planned for a continuation of children's familiar patterns and an introduction to new, wider, more complex and abstract experiences. She was thus providing security while encouraging independence, a dual goal shared by parents and school alike.

Generalizations arising from this analysis were formulated as aspects of familiar and new experiences within each dimension. A summary will be given first of what children coming to this classroom
may have found to be familiar, and then of elements that extended their experiences with content, people, and words. The use of space, materials, and time put into effect a context with these dual characteristics.

**Familiar aspects of the context: field.** Children were able to continue exploring their world as they encountered it, rather than as formally or logically organized into discrete subject matter areas. This world was concretely present, rather than remote in space or time. Children were able to act on this world, following their own purposes, or those taken on from the teacher. Finally, the teacher provided many experiences with the same or similar content, and helped children see connections. She also used familiar, predictable routines in studying this content. Through this redundancy, children had many opportunities to infer regular patterns, and to develop generalizations.

**Familiar aspects of the context: tenor.** Also familiar were the teacher's quasi-parental roles which provided children security through what she said and did, verbally and nonverbally. She was taken-for-granted both as the source of authority and as friend and supporter. Her expectations were flexible, and allowed children to set their own patterns and rhythms of activities. Through providing and referring to shared experiences, and through making use of children's natural interest in doing things together by planning for cooperative activities, she encouraged a sense of community.

**Familiar aspects of the context: mode.** When children entered this classroom, they were able to use the means of communication and representation which they had been practicing in their preschool years.
They used language for their own purposes, or functions, often along with active participation in concrete settings. They used it freely to represent the meaning of their experience, expressing the importance of their own involvement in it. They also made things with words, and enjoyed the look and sound of their creations. In addition, they used language to report on the world they were experiencing, and to communicate with others. These functions - expressive, poetic, and transactional - often occurred within one piece of writing or talk, as children were not constrained to follow a mature, specialized form. Audiences were familiar, and often collaborated before, during, or after writing in constructing meaning. The teacher as a special audience used children's language fragments to weave together a "text" which had meaning and connection to their individual and shared experience. She was interested in children's work - their ideas and the way in which they expressed them, and commented on this rather than on their adequacy in giving an expected answer.

Children thus used language with others in familiar ways. In addition, they were encouraged to represent their ideas through other, non-verbal channels as well as in words. They were free to select from their experiences that which had been significant for them, and to represent this in their own way, choosing their own projects and materials, language among them.

New aspects of the context: field. School brought new as well as familiar experiences to children. First, they were introduced to the wider world of historical time and distant place, as well as to more general and less concrete themes of study. Second, within the security of repeated, familiar routines, experiences, and studies,
there was novelty as these were varied from year to year and study to study. In addition, suspense and surprise were built into routines and activities, and were inherent in the dynamic growth and change of many materials children worked with. Third, these more abstract and novel experiences began to be perceived by teacher and children as belonging to domains of organized knowledge. Children referred to direct studies of processes - "math," "spelling," and "handwriting," which occurred along with their use in integration. Their names for theme studies varied in level of abstractness, from "time" and "space" to "brine shrimp" and "chicks," the latter showing their view of learning was still closely linked to the phenomenal level of experience. Fourth and last, children studied content in more abstract and verbal ways than they had as pre-schoolers. Their direct, physical approach was supplemented by a process more removed from direct action, as they used language to take in new ideas, to organize and extend, and to represent them.

New aspects of the context: tenor. Children were introduced to a new, more complex network of social relationships, one which demanded more independence and responsibility, as they needed to act with reference to the group. They were, first, members of a class, larger and more diverse than a family. They were also part of the larger, more formal organization of the school. They had to learn implicit rules of behavior appropriate to these new roles and contexts. Within their classroom, their teacher related to them at times in more formal ways, and encouraged their independence by expecting them to be responsible. They were in charge of solving their own problems, working out their own conflicts, and managing many classroom routines.
They practiced these while working in small groups, and when making an individual contribution to those who had not shared their experience.

**New aspects of the context: mode.** Through provision of new ways of relating to people, the teacher brought about reasons for children to represent meaning in a new way. First, they had opportunities to practice talking and writing for new purposes, and in new functions. Thus their language became more differentiated as they wrote "stories," "reports," and "observation." Children also talked and wrote about content that was removed from the here and now. They used language (particularly writing), not just to make something, but to communicate content and to work out abstract relationships in thought. Second, audiences, too, were removed from children's present setting, bringing about a need for explicitness. Often, children became their own audiences as they used language and constructed text outside of the usual collaborative situation. Third, the teacher as audience, drew increasing attention to the form of children's work, in order to help them gain control over rules for conventions. Finally, she required and encouraged the use of writing, among continued provision of other modes of representation and communication.

**Interactions of field, tenor, and mode of discourse: support for writing**

The final section of this chapter (pp.451-456) made explicit what had been described throughout: the use of familiar aspects of these contextual dimensions to support those which were new. Although this interdependency existed between all dimensions, the focus in this discussion was on the support of the new mode of writing by familiar aspects of the dimension of field, tenor, and mode. Typical writing
(and talking) events were analyzed in terms of their provision of familiar elements, and their pressure toward the new. In general, it was suggested that familiar, concrete content and homelike, collaborative ways of relating to other people before, during and after writing seemed to support children as they formulated their thoughts into written language. These generalizations were stated:

A familiar field of discourse supported children's writing.

Familiarity came through concrete content, or tokens of abstract content, and through vivid literary experiences, with books-as-objects.

A familiar tenor or kind of interpersonal relationship supported writing.

Children's experience was shared, and so children shared a common history, could assume each other's understanding, and assist collaboratively in the construction of meaning during composing and transcribing. The teacher who also shared this history could assist through participation in experiences, through helping children to process them, and through her role as responsive audience.

Familiar aspects of mode supported aspects of mode which were new.

Writing for familiar purposes, in familiar, often mixed functions, to familiar, collaborative audiences, including the teacher, reflected a familiar field and tenor of discourse. Writing to represent children's own meanings in their own way was also familiar, as was representation through talk and other, non-verbal means.

New aspects of mode were supported by these familiar aspects of field, tenor, and mode. There were the new aspects of mode which writing entailed, whose unfamiliarity was mitigated by the provision of familiar aspects of field, tenor, and mode of discourse. Writing
was used for more remote and abstract content, and for more specialized purposes, including communication of unshared ideas and examination of conceptual relationships. Audiences were similarly more remote, either in actuality, or in terms of psychological distance and lack of shared background. Children became their own audiences and collaborators as they learned to structure solo discourse. The teacher helped them focus on form needed to communicate, as well as on content. While other modes continued to be available and valued, children were increasingly put in the position of practicing writing within situations which varied in the support they offered through the familiar, and the pressure they exerted toward the new.

This chapter will close with a final example drawn from an interview with Betsy. It expresses anecdotally these relationships between the dimensions of the context - the close ties between children's activity as they experienced the world (or bits of it), alongside their friends, classmates, and teacher, and the way they represented it using language and other means. Betsy's focus is typical of others in this class. As she looked at the final "texts" in the photograph of her friends' illustrated and mounted tree stories, they called to mind her total experience with things and people. Writing was the last thing she mentioned:

Betsy: ... and by Jill, Steve, Don, and they made trees. We were studying about trees and we marbelized them. We put paper in, and what we did was put some ink in the water and let it swirl around ... and then we put the paper in. And it marbelized it. And then we put construction paper on it. Wrote about it. (Transcript, p. 35, 4/30/80)

This example includes not only reference to what children did (their experience with content) but who was involved (their experience with
others). The teacher had created a context in which "doing things with friends" seemed to be the focus of children's interest and attention. Writing occurred within this focus, as a part of experiences children had together. Thus what the teacher did to develop the supportive aspects of the dimensions of field, tenor, and mode, helped children into writing as a new channel of expression.

What the teacher did could be traced back to her use of space, materials, and time to create a context which supported children in two, related but not identical ways. First, she linked home and school by providing a context with familiar aspects, while at the same time, introducing children to new ideas, new relationships, and new kinds of language use. Thus she balanced the familiar and the new dimensions of field, tenor, and mode of discourse.

Second, she provided a clear structure and allowed children to act within it freely, making their own approximations. This latter distinction, between clarity and approximation, described the context the teacher established so that children could create or build their own systems of thought and language. The former distinction described the teacher's modulation of familiar and new elements to assist this inferential learning with a supportive, social and material context. In particular, she provided familiar support by using children's approximations to build a meaningful text.

Both balancing the familiar and the new aspects of the context, and providing clarity and allowing approximation imply a dynamic, changing process, as the teacher adjusted the amount and kind of support or scaffold she provided to the group and to individuals. This chapter has sought to describe the details of these adjustments.
THE CONTEXT FOR WRITING:
A DESCRIPTIVE STUDY OF ONE FAMILY-GROUPED,
INFORMAL FIRST AND SECOND GRADE CLASSROOM
VOLUME II
DISSERTATION

Presented in Partial Fulfillment of the Requirements for
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By
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* * * * *

The Ohio State University
1982

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<td>18. Location of Meaning in Text and Context</td>
<td>601</td>
</tr>
</tbody>
</table>
CHAPTER V

TEXT IN CONTEXT: EVIDENCE OF MEANING

Focus and plan of the chapter

Text-in-context. This chapter will focus on an examination of selected written texts, with the connection between written texts and their context of prime interest. How did these written texts relate to the context? In particular, what was their history, as they arose over time? What were the interactions between the dimensions of field, tenor, and mode which affected these texts? Most fundamentally, how did the meanings as created by and embodied in this context affect what children said and did, including what they wrote?

Text. Here characteristics of the texts themselves will also be discussed, in particular as they reflected context. Elements of context that "complete the text" will be identified, i.e., the part of the implied meaning of the written text that could be located in the context: for instance, in oral language, in concrete setting, or in shared history. The written text itself will also be described, in terms of content, explicitness of semantic relationships, syntax, and conventions of writing.

Meaning. Instead of emphasizing text itself, the unit of interest will be total meaning. Total meaning here is considered to consist of the written text, the spoken text, non-verbal representations, the meaning in the present context, and the meaning residing implicit in children's shared background and assumptions.
Individual representations, ranging from large to small, from the conspicuous to the unseen and unknown, will be assumed to be but a crude index of the meaning of experience to the child. This meaning is, of course, unknowable in any absolute sense. Glimpses are available through children's talk and behavior as preserved by pencil, camera, and tape recorder. By pulling together clues, inferences can be made of the possible meaning of experience to children. Their writing and other representations can then be examined in this light.

**Personal within social meaning.** Although the texts are the children's own, the context to which they are linked is not individual, but social. The assumption that has guided this analysis is that children's individual representations derive their meaning from their embeddedness in classroom life. Meaning comes from being a part of the whole, but is nonetheless personal. Because the whole classroom context "makes sense" (F. Smith, 1981), individual parts are tied in and make sense too. Like the medieval view of book-writing, the creation of this overall text-within-context could be seen as a "collective cultural enterprise" (Stubbs, 1980, p. 101).

To recapitulate, the focus of this chapter will be on individual children's meaning, as revealed by their texts, and by the preceding and surrounding context. Examples will be selected from the repeated "writing events" of this classroom to illustrate the following:

1. **The context** which preceded and surrounded the text: the text's connection to oral language, the concrete setting, and shared assumptions and history.

2. **The text,** elements which are embodied in writing and those which are implied by the writing and found in the context.
3. Meaning, as inferred from evidence drawn from features of both context and text.

These examples follow, preceded by a brief discussion of writing events in general.

**Writing events.**

These were the repeated, familiar occasions for either required or voluntary writing. Like other events in this classroom, each had its own, distinctive character, in spite of variation in detail. Children came to know what to expect, for example, in the newsletter writing event as compared to the observation writing event. Purposes of these events, roles of participants, and the role of language itself, varied distinctively from one to the next. Thus, they illustrated a range of "contexts of situation" within one "context of culture" (Malinowski, 1923).

Writing events were thus analogous to "speech events", characterized by sociolinguists as "identifiable genres" or "organized discourse" (Ervin-Tripp & Mitchell-Kernan, 1977, p. 12). They also could be described in Harste's (1980) terms as "orchestrations of complex social events," with pragmatic and semantic understandings supporting syntactic and graphophonic systems, in this case, of reading. It is in this sense that writing events have been described above (pp.232-242), each having its own set of distinctive features, and thereby bringing about a range of kinds of writing. These writing events included newsletter planning and writing, writing evaluations, writing in thought rambling tablets, and writing observations. "Writing events" suggests the embeddedness of writing in the "context of
culture. Support for writing thus came from the interaction of things and people as these events were brought into being.

Each writing event had both a social, (interactional aspect), and a concrete, (content) aspect. In addition, the writing in each event was usually surrounded by talk, and by opportunities for non-verbal expression. The unity or meaning of these events thus came from these overlapping dimensions of field, tenor, and mode, within which language — varying in its completeness — was embedded and from which it took its meaning. Writing events, like speech events, were jointly constructed.

From the children's point of view, writing was merely a part of these events, which seemed to have become "institutions" within the classroom culture. That is, they seemed to have become familiar occurrences with commonly understood characteristics so that shorthand references to them — "evaluations," "observations," "surveys" — stood for particular purposes, relationships, and modes of representation.

Selected examples of writing events and embedded texts.

Three writing events have been selected as examples of certain aspects of the context which made up each event. Each event will be described, and then a summary given of its analysis in terms of field, tenor, and mode. The detailed analysis of the context will be given next, and will be followed by an analysis of the text.

These events are: a) thought ramblings: Sean's island story and the role of talk; b) newsletter articles: George's donkey article and the role of time; and c) observation writing: mealworms, an observation embedded in action and social interaction.
Thought ramblings: Sean's island story and the role of talk.

Like others, Sean wrote a story about an imaginary island he was constructing. This writing came after several weeks of experiences within related shape, map, and island themes. After children had talked about these experiences, the teacher asked them to invent their own island, deciding on features of topography, inhabitants, customs, language, the island's flag, and so on. They were also to decide how to make a representation of their invented island. When some had finished, and while others were still working on their constructions, the teacher asked them all to write about their island.

Sean's written and oral texts are shown below. (The written text is transcribed from Sean's taped reading.) These texts are followed by analyses of both context and text.

Sean's written text:

My name is Robin. I like to go to Animals' Island. On this island I have a fox, an ox, an alligator, and a lion and a porcupine, a beaver, an armadillo. And I like to go on the path through the mountains before supper.

Sean, Grade 2
1/24/80

Sean's oral text:

Obs: So what kind of a creature is Robin?
S: Robin is a ...
Obs: ... human being?
S: No, it's just a, it's the chipmunk.
Obs: Oh, it's the chipmunk. I see.
S: He hides in the cave most of the time and then he comes out here to get grass, water, and, um, then he comes over to here - he goes over to here and then he sneaks over - he goes over this bridge. The lion guards the bridge and then he comes back but then goes over this way and gets a drink of water, there, and then he comes over, sneaks over and then he goes back to his cave. Sometimes he comes out and goes under a lion so - sometimes I pretend like the lion is in the
water, which is under the bridge and he has
to sneak over the bridge. And then this is
the flag and you can see it - it’s the other
side, that side, see that’s an animal on the
other side of the flag...
Obs: Oh, animals, yes.
S: (Sigh) See, since I had to have some, I pretend
like there is some streams going around over to
like that - I’m going to paint some more right
here, to make. Also, I’m going to make a path
going over to that bridge - and then attach to
that bridge.
J: (waiting to read his island story)
We don’t have all day, you know.
Obs: But he has lots of ideas about his island.
S: And, I don’t know, this is just like a secret
pond where he can go over to from his cave. He
can also swim. He is a special kind. This little
pond where he plays with his other friends and
lots of other guys.

Familiar aspects of the dimension of field. Both present and
past aspects of the field of discourse were familiar. There had been
a long history of related theme experiences which preceded the island
writing, from the shape theme displays as observed on January 15th
to the final reading and expansion of the island writing on February
7th. Within these three weeks, there were also other themes, seem­
ingly unrelated to the island theme, such as magnets and electricity.
But the shape-island-map theme continued as a viable thread of
experience.

Over this relatively long period of time, there were many related
and redundant content experiences which prepared for new writing and
for oral composition. New ideas came through the story of Elmer and
the Dragon, the filmstrip The Little Island, The Wump World story,
through connections made during discussions to shapes, flags, maps,
scale, and symbols. The teacher helped children organize these
experiences so that they could use these new ideas in their maps,
group and individual, and in their writing. She helped them develop
clear structures of content, for instance, as she used new concepts in multiple contexts, such as scale, coastline, and as she helped children list features that belonged on each of three islands.

Concrete experiences with this related and redundant content supported talking and writing. This was true of the group maps, and of the children's writing about their individual islands. In Sean's case, the island was part of the text, as it supplied the setting which otherwise would have had to be described rather than assumed. In deciding on the kind of island he would make, Sean had to think through decisions which prepared for his oral and written composition. Furthermore, the island construction supported but did not contain Sean's oral language, as his story kept going "off the edges" of his mpa. His explanation, "I'm going to make a path going over to that bridge - and then attach to that bridge" gives his plan to extend the island beyond the cardboard base.

Familiar aspects of the dimension of tenor. Relationships in the classroom supported both Sean's writing and his oral composition. Experiences before and after writing were social, involving the whole class, as individual contributions to discussions were recognized, as stories were heard, filmstrips seen, and maps planned. In addition, putting features on group island maps was a social process. Sean's oral composition was also social, though constructed alone, since his friend John was an important audience for his island story.

Familiar aspects of the dimension of mode. Verbal interaction with an audience was a more familiar mode than writing, and was routinely available to Sean. His oral text is longer and more elaborated in content than his written text, even though constructed
alone rather than collaboratively. It was as if the act of speaking helped develop the narrative, an instance of language being used to aid thought. Making something was also a familiar mode of representation, as children were given the challenge of constructing their own islands.

New aspects of the dimensions of field, tenor, and mode. The thought rambling writing event was a new kind of language use, in comparison to the familiarity of talk and of making things. The field, the purpose for writing, was to create a new world with words. Sean and others had to invent their own subject matter. The tenor during writing itself was solitary rather than collaborative. Children worked side by side but wrote their own thought ramblings. Sean who happened to sit apart at a separate desk did the same. The mode was restricted to writing, by definition, since this was always a feature of writing in thought rambling tablets. Construction and talk came before and after.

Children were helped to deal with the newness of thought rambling writing by the familiar aspects of the context. That which had been new in the past was now familiar, and a part of children's shared background. That which was familiar in the present surrounded the new activity of solitary writing and supported it. Figure 9 below reconstructs the history which preceded Sean's island texts, both written and oral.
<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Field - What was being studied (Themes and sub-themes are underlined)</th>
<th>Tenor - Relationships brought about by study; children's choices</th>
<th>Mode - Language, other means of representation and communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/15/80</td>
<td>Work from past <strong>shape</strong> theme was displayed: square, cube, etc.; two-, three-dimensional shapes</td>
<td>No information</td>
<td>Shape constructions had been made</td>
</tr>
<tr>
<td></td>
<td><strong>Electricity &amp; magnets</strong> now being studied</td>
<td>Work in small groups</td>
<td>with batteries, wires, bulbs, switches</td>
</tr>
<tr>
<td>1/17/80 8:30</td>
<td>&quot;<strong>Star Spangled Banner</strong>&quot; discussion about words: flag</td>
<td>More formal, whole group rugtime interactional pattern</td>
<td>Listening, talking</td>
</tr>
<tr>
<td>8:50</td>
<td>Ben Franklin story: ties to electricity, magnet themes; historical time, distant place - Philadelphia; vocabulary in context: invented; genres of books: informational, biography</td>
<td>Use of &quot;our.&quot; Pooling of children's suggestions given within more formal rugtime format.</td>
<td>Talking about types of reference materials which could be read.</td>
</tr>
<tr>
<td>8:50</td>
<td><strong>Maps:</strong> location of the famous falls which &quot;touches both United States and Canada? What kind of resource material would we have to look at to find the answer to our question?&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td>Field</td>
<td>Tenor</td>
<td>Mode</td>
</tr>
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<tr>
<td>1/17/80 8:57</td>
<td>Maps and Islands: Sketches on large paper by teacher of shapes of three imaginary islands from <em>Elmer and the Dragon</em>, now being read to children. Children asked to add remembered features from story. These listed cooperatively on board in answer to &quot;What would help us identify Wild Island?&quot; Concepts in context of shape, ferry, port, city, scale, directions of north, south, east, west. Concepts implied: certain animals, plants grow in certain environments.</td>
<td>More formal rugtime format continues. Children pool ideas, which teacher elicits and orders on board. Children given choice of what to add to map, and how, taking into account other children's contributions. Teacher uses &quot;we&quot; and &quot;our&quot;: &quot;Now, what I would like to do - I would like to work on our map of our three islands, and see if we can include some of these things that we've talked about.&quot;</td>
<td>Listening and talking to rekindle experience of hearing story, to organize content collectively. Use of varied media to add features; some labelling. Batteries, bulb, switch, wires; drawing and labelling experiment by Sean.</td>
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</tbody>
</table>

Electricity: Sean made and shares his electric circuit.
<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Field</th>
<th>Tenor</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 1/17 and 1/22</td>
<td>Individual maps begun: Each child to invent an imaginary island, with inhabitants, flag, customs, etc.</td>
<td></td>
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<tr>
<td>1/22</td>
<td>Puppets</td>
<td>Sean and friends</td>
<td>Play with their puppets brought to school.</td>
</tr>
<tr>
<td>8:40</td>
<td>Reading Conference Time</td>
<td>Sean and John together but restless.</td>
<td>Reading their own books.</td>
</tr>
<tr>
<td>9:05</td>
<td>Library Time</td>
<td></td>
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<tr>
<td>9:35</td>
<td>New sketch map posted, to be added to as the book continues to be read. Concepts of coastline, symbol developed in context of talk about children's islands. Review of previous map already started: what was on map? Who had made what on the map? Contributions of individuals recognized. Continued work on individual maps of children's own islands, or &quot;lands&quot;. Discussion of what to include, how to make islands.</td>
<td></td>
<td>Talk and listening.</td>
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<tr>
<td>&amp; Time</td>
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</table>
Worktime: island construction, other.
Betsy asks if she can write a story to go with her map, tells teacher about her story, makes a booklet for the story (two days before class thought rambling assignment).

The Little Island (G. MacDonald, Doubleday, 1946) filmstrip viewed once with record. Discussion about story. Viewed a second time without record. Discussion at higher level, where could island be? How could we tell? (inference); What was an island? (generalization)

Thought rambling time:
Purpose: "Silent writing time to think about island you have created. Write about your island. Some are lucky, have finished with their island (i.e., will know what to write about).

Many children write with their maps nearby.

Children choose what material to write on - thought rambling tablets, booklets, paper.

Children choose place, whether to be alone or with friends. Some write privately, holding hand over paper. Some interacting, help each other with spelling, read their writing to each other.

Teacher: "We'll correct spellings later for display."
<table>
<thead>
<tr>
<th>Time</th>
<th>Field</th>
<th>Tenor</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:26</td>
<td>Sean tells observer his plans for making a &quot;Martian Island,&quot; suspending birds over it. He hasn't done much on his island yet. My talk with him was followed by writing.</td>
<td>Time has been allowed for children to get started, settled, involved.</td>
<td>Writing, soft talking continues. Everyone in a place.</td>
</tr>
<tr>
<td>9:35</td>
<td>Those stories which were finished were shared, along with islands. &quot;Point out the things in your story (on your map).</td>
<td>Teacher hears, reads children's finished island stories.</td>
<td>Teacher has transcribed Cleo's story for her, invites her to copy it on good paper for hall display.</td>
</tr>
<tr>
<td>10:00</td>
<td>Teacher reads Wump World (Bill Peet, Houghton-Mifflin, 1970). Refers by words, intonation to past, present, future experiences of children: flag, plant the flag, referring to their islands, to Star Spangled Banner.</td>
<td>Rugtime sharing situation.</td>
<td>Reading, listening, looking at islands talking.</td>
</tr>
<tr>
<td>10:15</td>
<td>Rugtime listening.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td>Field</td>
<td>Tenor</td>
<td>Mode</td>
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<tr>
<td>11:00</td>
<td>Sean's interest in Saturn.</td>
<td>Read island story to observer and friend; showed island construction</td>
<td></td>
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<tr>
<td></td>
<td>Sean's island story:</td>
<td>Using language about concrete object. Writing and talk functions to describe construction, to narrate evolving story, to plan for rest of construction.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New features of map, story had been added over week's time. This was true of other children's as well. Sean had changed from Martian to animal theme.</td>
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</tbody>
</table>

Figure 9. Analysis of the Context of Sean's Island Story: A history
(Source: participant-observation notes and transcribed audiotapes)
Sean's texts, content and form

Content. Sean's ideas are represented through all three modes - oral, written, and through the non-verbal mode of art and construction. Several comments can be made on the basis of informal examination.

First, it can be noted that each mode is partial. No one mode says it all. Even though the oral text is longer, it does not re-capitulate the setting, as represented by the actual island under construction, nor the inhabitants of the island, as listed in the writing.

Second, both texts change over time. Initial plans for a Martian island (1/24/80) evolved into an animal island (2/7/80). The oral text reflects ideas that are still changing and being improvised. The dynamic quality of the interaction between the island construction and Sean's chipmunk and lion is in his oral narrative is striking. It is as if his island and characters became materials which supported Sean's imaginary construction through dramatic play. With their support, he is able to take another point of view. The expression of the content of this play was brought about by the presence of a listening though not collaborating audience, as this was solo discourse.

Form. A comparison of the formal characteristics of these two texts shows the written to be briefer, more concise and syntactically more complex and more explicit. (No comment can be made about the conventions of writing, since Sean's written text was transcribed from audiotape).

The oral text is much longer than the written. It probably could have continued being developed as more action was improvised.
The oral text is simpler syntactically, consisting of many clauses conjoined with and, though Sean has used some complex forms, among them: "most of the time," "which is under the bridge," "I pretend like there is ..." "where he can go over to." In his written text, however, he has conjoined the names of the animals, and he has used several clauses to modify the idea "I like to go on the path." Because of this more complex syntax, his writing is more concise and dense than is his talk.

The written text is much more explicit than the oral text, although Sean does not give the background for his island story, nor does he explain who Robin is. During the oral text, however, Sean uses the island itself to make meanings clear, for example pointing to clarify the referents of "here" and "there." In Figure 10, the content of these two texts and of the non-verbal representation is analyzed, with the view that all approximate a totally explicit text.
### Non-verbal representation

Island construction, partially finished, supplying background for action - river, paths, caves, ocean, bridge, which did not need to be explained as a whole, but could be assumed and referred to.

### Written text

<table>
<thead>
<tr>
<th>My name is Robin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like to go to Animals' Island.</td>
</tr>
<tr>
<td>On this island I have a fox, an ox, an ape, an alligator, and a lion and a porcupine, a beaver, an armadillo,</td>
</tr>
<tr>
<td>And I like to go on the path through the mountains before supper.*</td>
</tr>
</tbody>
</table>

### Content analysis

- **Protagonist is named but not classified.**
- **Animals on island are named.**
- **Attributes of protagonist:** what he likes to do, where he likes to go and when

### Oral text

<table>
<thead>
<tr>
<th>Obs: So what kind of a creature is Robin?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S:</strong> Robin is a ...</td>
</tr>
<tr>
<td><strong>Obs:</strong> ... human being?</td>
</tr>
<tr>
<td><strong>S:</strong> No, it's just a, it's the chipmunk.</td>
</tr>
<tr>
<td><strong>Obs:</strong> Oh, it's the chipmunk. I see.</td>
</tr>
<tr>
<td><strong>S:</strong> He hides in the cave most of the time, and then he comes out here to get grass, water, and, um, then he comes over to here - he goes over to here and then he sneaks over - he goes over this bridge. The lion guards the bridge and then goes through the pathes (sic) and then he comes back but then goes over this way and gets a drink of water, there, and then he comes over, sneaks over and then he goes back to his cave. Sometimes he comes out and goes under a lion so - sometimes I pretend like the lion is in the water, which is under the bridge and he has to sneak over the bridge. And then this is the flag and you can see it - it's the other side, that side, see that's an animal on the other side of the flag...</td>
</tr>
</tbody>
</table>

- **Protagonist is named and classified.**
- **Attributes of Protagonist:** hides in cave, goes out to get grass, water where he goes and what happens elaboration of his actions
- **Only one other animal named, i.e., the lion.**
Oral text

Obs: Oh, animals, yes.
S: (Sigh) See, since I had to have some, I pretend like there is some streams going around over to like that - I'm going to paint some more right here, to make. Also, I'm going to make a path going over to that bridge - and then attach to that bridge.
J: (waiting to read his island story)
We don't have all day, you know.
Obs: But he has lots of ideas about his island.
S: And, I don't know, this is just like a secret pond where he can go over to from his cave. He can also swim. He is a special kind. This little pond where he plays with his other friends and lots of other guys.

Content analysis

Figure 10. Sean's text: approximation of content
(*Sean's written text was transcribed from audiotape.
Sources: participant-observation notes and transcribed audiotapes.)
Summary comment: the context for Sean's texts

In Figure 11, the contrast between the familiar and new aspects of the context is marked. There are many familiar contextual characteristics in both past and present. These support the new characteristics of Sean's oral and written language.

**Familiar aspects of the context**

<table>
<thead>
<tr>
<th>Present context</th>
<th>Past context of shared experience, assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
<td><strong>Field</strong></td>
</tr>
<tr>
<td>Sean's purpose is to share as well as to elaborate his representation.</td>
<td>Shape study Elmer and the Dragon story and group maps.</td>
</tr>
<tr>
<td>Concrete referent present to support his oral and written language, i.e., his island construction.</td>
<td>Island construction using these ideas. The Little Island filmstrip.</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td><strong>Tenor</strong></td>
</tr>
<tr>
<td>Audience of his friend John as well as the observer.</td>
<td>Whole class experience of discussions, collaborative projects. Individual choice in creating own island. Assumptions about rules: talking is taken for granted.</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td><strong>Mode</strong></td>
</tr>
<tr>
<td>Talk and gesture allowed to supplement his construction, his writing.</td>
<td>Assumptions about mode of representation: choice allowed; modes other than writing valued.</td>
</tr>
</tbody>
</table>
New aspects of the context

Present context

Field

Sean has had to invent his own island, and therefore his own subject to write about.

Tenor

The thought rambling writing was carried out independently, alone.

Mode

Solo oral language was sustained without a conversational partner.

Solo writing was required for the thought rambling; other modes of representation were not available.

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Figure 11. The context for Sean's oral and written texts; past and present, familiar and new: A summary

(Source: participant-observation notes and transcribed audiotapes.)

Newsletter writing: George's donkey article and the role of time. First grader George and his classmates went to Little People's Farm as part of a theme study of farms and farm animals. At the end of that week, he and two other boys volunteered to write about the trip for the newsletter. His part of this article constitutes the written text in this example. The emphasis in this case is on the history of the text, rather than on its other constituents, since the text did stand alone, especially when read by those who knew about the class's experience.

George's written text is given below. The context for this writing is discussed next, and then a more detailed contextual analysis
presented. Finally, George's text is analyzed and discussed, and the context, past and present, is summarized.

We Saw a donkey he had a Cross on his back because he Was the Cind fo donkey that Marry rod on Wen She Wus going to have her baby

(We saw a donkey. He had a cross on his back because he was the kind of donkey that Mary rode on when she was going to have her baby.)

George, grade 1
5/16/80

The context of George's donkey story

Like Sean's island story, George's donkey story reflects all dimensions of the context. There were differences, however, in both text and context. By its nature, George's text had to stand alone as a written communicative message to a distant, if familiar, parental audience. There was no complementary support from a concrete representation or from accompanying oral narrative. This was purely a language text. Its history was therefore especially important.

The context supported this new kind of representation, both through redundant and concrete experiences shared with classmates in the past, and through its continuing familiar tenor. The past context will be discussed first.

Past context of shared experience: field, tenor, and mode. This past was recent, and experiences had been direct, sensory, and active. They had been shared, with room for development of particular, individual meanings within larger social meaning. Thus, though the events of the farm trip had become images in mind, (with the exception of the captured toad), they were memorable, because they had been both concrete and social.
In addition, those past events which preceded the farm trip may also have contributed to its vividness. Previous classroom activities (as summarized above, p. 483), provided an experiential base for the development of concepts and vocabulary (field), for cooperative learning (tenor), and multi-modal representation (mode). Even though the farm itself wasn't in the classroom, there were concrete tokens of the interrelated themes of birth, growth, change, plants, and animals, tokens which included books as well as concrete materials.

Thus, the familiar aspects of the past context of shared experience could be said to support the more immediate context for George as he wrote his newsletter article. This immediate context will now be discussed.

The immediate context: field, tenor, and mode. The immediate context was less familiar and more demanding than the past context had been. This was especially true in the dimensions of field and mode.

Field and mode. The content George wrote about was removed in space and time, and his representation of this content confined to writing. Within this more remote field, George had a more formal, communicative purpose, which he accepted as his responsibility when he volunteered to contribute to the farm article. It might be speculated that this responsibility was leavened by the effect of his experience on him, by the way in which he was moved and touched in his feelings as well as his mind — an integrated emotional, social, and intellectual impact.

Tenor. With respect to tenor, the familiar social relationships of George's present context mitigated the more formal mode of writing
(as did the vivid nature of the farm experiences mitigate the fact that they were removed in space and time). First, the teacher was a collaborative partner for the class as they planned the content of the newsletter together, identifying main ideas and subordinate details, which she objectified for them on the board in an outline. George's part of this outline was small, but probably incorporated the most salient aspect of his donkey experience - the donkey having been the animal he petted.

Next, other children were supports for each other as they wrote their farm articles together (pp. 494-497 below). They could work out the topics to be written about in the farm article, not only what should be written about, but who should write. They could hypothesize spellings together. They could be audiences for each others' writing.

There were two sides to the interactional context, however, as a reading of the transcript (below, p. 499) reveals. Children were given a familiar, collaborative group within which the abstract process of composition could be made external through oral language. They were also placed in a more complex social situation, which gave them responsibility for working out conflicts cooperatively. Who would get to write about what, when and if work was to be illustrated, who knew how to spell, whose writing had anomalies, were a few of the issues that surfaced among children. The occasional atmosphere of competition and of "two against one," as second grader Sean sided first with one and then the other of the two first graders, did not overwhelm the situation. In fact, within this group of three, Sean, as the oldest, played a leadership role in bringing about a resolution and reconciliation, a role he did not usually play in the larger class group.
Finally, a familiar tenor was again present as the teacher was an audience for George's finished article. She listened and responded as has been said above, with great approval and warmth, both for form and content, expressing this verbally and non-verbally. Her response to Sam and Sean contrasted to this, in that she extended both their content and their form. However, she listened in each case to their words, and responded informatively. It was not simply a question of uninformative evaluation of children or of their work as good or bad.

To summarize, contextual elements which imposed new demands and those which helped meet them were found in both the present and the past. The present context for George's writing was mixed in its provision of familiar support and new demands. New demands for communicative writing about a past situation had to be worked out in a complex social situation. In this, George was supported by the present collaboration of the other children who helped each other verbalize their composing and transcribing processes. He was also helped by the past context of shared experiences and concrete representation, many of which were concretely present in the class environment, functioning as symbols of experiences and ideas.

Context as historical. The importance of time, thus, is illustrated by tracing the history of this one piece of writing. Nonetheless, it seems logical to try to understand the antecedents as well as the present conditions for writing. That is, even a partial recognition of some of these historical factors (as well as contemporaneous conditions) may suggest connections between George's text and the context from which it came.
For example, photographs document George gazing into the butterfly garden, an event of unknowable effect (5/23/80). It could be proposed that many such accessible experiences with related themes over time, gave George many sources on which he could draw, and from which he could take material to build his own meanings. Again, his productions probably did not fully or accurately index those meanings. Along the way, there may have been representations which were not authentic. Thus, the first thought rambling as reported under mode on p. 495, below, seems perfunctory. It was, however, one of a number of talking and writing experiences which may have helped George find and express his meaning in the newsletter article.

Even George's final text, as shown in the content analysis (p. 507) does not make explicit everything an unknown audience would need to be told. George has stated what was important to him, and has left unstated the taken-for-granted circumstances of the trip and the connection between the cross and Mary's baby. This was information shared by George's classmates, and conveyed in the finished newsletter article as edited by the teacher.

Thus his final text, still context-bound by adult standards needs to be seen in the light of his growth since the fall of this first grade year, when he was dictating thought ramblings to his teacher. This text is as explicit as it is because it rests on past and present concrete, dynamic experiences shared, processed, and represented with friends. This is not to deny the forces of growth within George (again, unknowable), but to emphasize the support they may have received from the context.
Figure 12 below reconstructs the history of George's donkey story. It will be followed by an excerpt from the transcript of the actual writing event.
<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Field: what was being studied</th>
<th>Tenor: relationships brought about by study; children's choices</th>
<th>Mode: language, other means of representation and communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/14/80 Morning</td>
<td>Trip to Little People's Farm in morning: Children were shown and told about machinery; drank and washed in well water; ate sack lunches in shed on bales of hay; played in field; saw, heard about, and petted animals - horse, donkey, sheep; saw pigs in mud; saw chicks in brood shed; climbed into hay loft George looked at machinery, and petted donkey (shown in slides taken)</td>
<td>More formal procedures: rules for bus, farm; going to farm with another class; guided in activity while at the farm much of the time, but free to interact.</td>
<td>Oral language: listening and talking Play George and other boys George and Cleo</td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td>Field</td>
<td>Tenor</td>
<td>Mode</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>5/14/80 Afternoon</td>
<td>Writing thought ramblings about trip to farm. (Process not observed, though writings collected)</td>
<td>(Observer not present)</td>
<td>George's thought rambling: We went to Little People's farm. They had a lot of farm animals, and I learned that a boy pig was called a boar.</td>
</tr>
<tr>
<td>5/15/80 8:30 Afternoon</td>
<td>Planning of farm projects; beginning to carry them out.</td>
<td>Some work alone, some with others.</td>
<td>Listing of possible modes of representation by teacher and children.</td>
</tr>
<tr>
<td>5/16/80</td>
<td>Farm vocabulary recorded on red paper barn picture. (Process not observed.)</td>
<td>Children contribute toy farm implements from home.</td>
<td>Farm animal chart now posted.</td>
</tr>
<tr>
<td></td>
<td>Trip to backyard garden over lunch time by small group, to check, measure seedlings.</td>
<td>Notes say: &quot;They had to watch where they walked because the rows were not easy to see,... Ted went ahead most confidently while George held back uncertainly.&quot;</td>
<td>Toy implements available for handling, play.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Children's farm pictures barn constructions displayed.</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Field</td>
<td>Tenor</td>
<td>Mode</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>9:00</td>
<td>Writing the farm newsletter article.</td>
<td>George, Sam, and Sean in art center together.</td>
<td>Oral language used to negotiate control of content, to get help in spelling.</td>
</tr>
<tr>
<td></td>
<td>(Excerpts from the tape recording of this writing event will follow this analysis.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:40</td>
<td>Reviewing of three farm trip articles by teacher with children.</td>
<td>George, Sam, Sean read their articles to the teacher.</td>
<td>Talk, reading, writing by children</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dictation taken by teacher when needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Selective revision:</td>
</tr>
</tbody>
</table>

George's text:

We saw a donkey he had a Cross on his back because he was the cross for donkey that Mary rode on. She was going to have her baby.

The teacher says to George: "Oh, that's excellent. That is beautiful. And not only is it nice what you said, but look at the ... That is beautiful. I think that is the nicest thing you ever ...."
<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Field</th>
<th>Tenor</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/16/80 9:40</td>
<td>Sam's text: We cawt a toad With the chamele We saw a boar and a horse named tarry and a goat</td>
<td>The teacher extends Sam's ideas and text by asking about the well water. How did the water taste? What did the water feel like? &quot;It tasted like regular water&quot; Sam said. The teacher added these sentences to his article by taking dictation: We tasted well water. &quot;It tasted like regular water to me,&quot; Sam said. &quot;It felt cold, too.</td>
<td>Sam, grade 1: extension of content, help through dictation.</td>
</tr>
<tr>
<td></td>
<td>Sean's text: Whin we got to Little pippies Frame We saw one of the machinies thay used. it was calld a maneuer sprader. A nther was calld a hay baler.</td>
<td>Her response to Sean: she accepted his text, though she reminded him there were all kinds of machinery on the farm. He had only mentioned two. She also asked him to add an introductory sentence which would make his story more understandable to outsiders. His first sentence had read: &quot;There were many kinds of machines.&quot; He changed it to say &quot;When we got to Little People's Farm, we saw one of the machines they used.&quot;</td>
<td>Sean, grade 2: most was expected in explicitness.</td>
</tr>
</tbody>
</table>

Figure 12. The context of George's donkey story: A history. (Source: participant-observation notes).
The newsletter writing event itself happened at 9:00 A.M. on 5/16/80. An annotated excerpt from this tape recorded event will now be given in the following figure, Figure 13.
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Children</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. George:</td>
<td>What should I write?</td>
<td>Negotiations and planning, 1-16</td>
</tr>
<tr>
<td></td>
<td>I'm writing about the toad.</td>
<td>1. George wants to write about the toad.</td>
</tr>
<tr>
<td>2. Sam:</td>
<td>I am. &quot;Toad.&quot; (said while writing)</td>
<td>2. So does Sam.</td>
</tr>
<tr>
<td>3. George:</td>
<td>Well, I'm drawing the picture of the toad.</td>
<td>3. George would settle for drawing the toad.</td>
</tr>
<tr>
<td></td>
<td>Right here.</td>
<td></td>
</tr>
<tr>
<td>4. Sam:</td>
<td>Do, don't draw a picture.</td>
<td>4. Sam says no.</td>
</tr>
<tr>
<td>5. Sean:</td>
<td>Let him, let him do it. He's doing it.</td>
<td>5. Sean takes lead in trying to negotiate.</td>
</tr>
<tr>
<td>6. Sam:</td>
<td>I'm going to tell.</td>
<td></td>
</tr>
<tr>
<td>7. George:</td>
<td>Tattle tale.</td>
<td></td>
</tr>
<tr>
<td>8. Sean:</td>
<td>George, let him.</td>
<td></td>
</tr>
<tr>
<td>9. Sam:</td>
<td>I'm doing that. Anyways, we're not supposed to,</td>
<td>9. Sam invokes a rule.</td>
</tr>
<tr>
<td></td>
<td>we're not supposed to draw the pictures yet ...</td>
<td></td>
</tr>
<tr>
<td>10. Sean:</td>
<td>... until we're done with all the articles. Which</td>
<td>10. Sean is planning number of articles.</td>
</tr>
<tr>
<td></td>
<td>is, you know how many? Twelve.</td>
<td></td>
</tr>
<tr>
<td>11. George:</td>
<td>But I'm drawing the picture.</td>
<td>11. George reasserts right to draw.</td>
</tr>
<tr>
<td>12. Sean:</td>
<td>... because we got to write about all the animals.</td>
<td>12. Sean plans content.</td>
</tr>
<tr>
<td>13. Sam:</td>
<td>O.K. But don't write it on that paper.</td>
<td>13. Sam concedes George's right to draw, but tries to control choice of paper.</td>
</tr>
<tr>
<td>15. George:</td>
<td>I know, I'll draw it on your paper.</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>16. Sean:</td>
<td>Draw it, when she's, when she's, before we copy it, before we copy all thirty-five of them</td>
<td>16. Sean tells George when to draw.</td>
</tr>
<tr>
<td>17. Sam:</td>
<td>You know, we're being taped.</td>
<td></td>
</tr>
<tr>
<td>18. Sean:</td>
<td>I know. O.K., George?</td>
<td></td>
</tr>
<tr>
<td>20. Sean:</td>
<td>This thing is taping everything that we say.</td>
<td></td>
</tr>
<tr>
<td>21. George:</td>
<td>What should I say? ... hm?</td>
<td></td>
</tr>
<tr>
<td>22. Sam:</td>
<td>&quot;We caught a toad&quot; (writing)</td>
<td>22. Sam reads what he has written.</td>
</tr>
<tr>
<td>23. George:</td>
<td>&quot;Hi, what are you doing? I'm George. I'm the shortest one in the class.&quot; (to the tape recorder)</td>
<td>23. George reveals self-image.</td>
</tr>
<tr>
<td></td>
<td>........ (pause)</td>
<td></td>
</tr>
<tr>
<td>24. George:</td>
<td>The tape recorder came back, didn't it?</td>
<td></td>
</tr>
<tr>
<td>25. Sean:</td>
<td>Shush ... (Pause) George, write something.</td>
<td></td>
</tr>
<tr>
<td>26. George:</td>
<td>(whispering) Let us be quiet (as if to defeat the tape recorder)</td>
<td>27. Sean asks about this spelling for interactional reasons rather than to get help.</td>
</tr>
<tr>
<td></td>
<td>........ (very long pause)</td>
<td></td>
</tr>
<tr>
<td>27. Sean:</td>
<td>How do you spell machinery?</td>
<td></td>
</tr>
<tr>
<td>28. George:</td>
<td>C H</td>
<td></td>
</tr>
</tbody>
</table>
29. Sean: No.
30. George: Why, do you have it down already?
31. Sean: Yes.
32. George: I give up.
34. George: How do you know that's right?
35. Sean: I looked up on the board.
36. Sam: You make your dots funny. I'm going to put your dot right there.
37. George: How do you spell soft?
            Soft, aw, aw ...
            ....... (pause)
39. George: Oh, this is boring, isn't it?
            ....... (pause)
40. Sam: I said "boar," "Terry," "and a horse, and a horse"
41. George: Oh, that's nice.
42. Sean: We've got eleven or twelve articles. Not twelve articles but twelve things.
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Children</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. George:</td>
<td>If each of us make five, that would be fifteen articles.</td>
<td>43. Sean and George come at a and</td>
</tr>
<tr>
<td>44. Sean:</td>
<td>Each of us has to write two - that's only six - we'll do, we'll each do two.</td>
<td>44. division problem via multiplication.</td>
</tr>
<tr>
<td>45. George:</td>
<td>&quot;Yankee Doodle went to town, ariding on a pony, stuck a feather in his hat etc.&quot;</td>
<td></td>
</tr>
<tr>
<td>46. Sam:</td>
<td>How do you spell named? N ...</td>
<td>46. Sam asks for help with spelling named. Sean helps him, spelling,</td>
</tr>
<tr>
<td>47. Sean:</td>
<td>N-A, na ...</td>
<td>sounding, correcting, confirming over the next five turns.</td>
</tr>
<tr>
<td>48. Sam:</td>
<td>M?</td>
<td></td>
</tr>
<tr>
<td>49. Sean:</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>50. Sam:</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>51. Sean:</td>
<td>M, N-A-M-E-D. Do you know how to spell it? (i.e., Terry)</td>
<td>51. Sean offers a needed spelling which he &quot;knows&quot; - Tarry for Terry.</td>
</tr>
<tr>
<td>52. Sam:</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>53. Sean:</td>
<td>T-A-RR-Y.</td>
<td></td>
</tr>
<tr>
<td>54. George:</td>
<td>I'm going to get you! (singing)</td>
<td></td>
</tr>
<tr>
<td>55. Sean:</td>
<td>T-A-R-R-Y. It is just T-A-R-R-Y (coughs and clears throat) Every time it comes down from my nose into my mouth, not this way, but ...</td>
<td></td>
</tr>
<tr>
<td>56. George:</td>
<td>You know why I'm writing about the donkey? Cause I said ... (unintelligible) word.</td>
<td>56. George reveals his topic choice, and his reason (inaudible).</td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>57. Sam:</td>
<td>How do you spell donkey? Then, how do you spell donkey, button?</td>
<td>57. Sam challenges George's ability to spell donkey.</td>
</tr>
<tr>
<td>58. George:</td>
<td>Did you spell donkey already?</td>
<td></td>
</tr>
<tr>
<td>59. Sean:</td>
<td>Stop.</td>
<td></td>
</tr>
<tr>
<td>60. George:</td>
<td>How do you spell donkey?</td>
<td></td>
</tr>
<tr>
<td>61. Sam:</td>
<td>Don't tell him, don't tell him.</td>
<td></td>
</tr>
<tr>
<td>62. Sean:</td>
<td>It's easy. It says up there.</td>
<td></td>
</tr>
<tr>
<td>63. Sam:</td>
<td>Don't. Just let him find out for himself... Tell him to go up to the board.</td>
<td>63. George wants spelling help. Sam doesn't want Sean to help him.</td>
</tr>
<tr>
<td>64. Sean:</td>
<td>&quot;... a horse named Terry and goat&quot; (reading Sam's story) George, he writes &quot;a horse named Terry and goat.&quot;</td>
<td>64. Sean reads Sam's story, notices Sam's omission of an article before goat.</td>
</tr>
<tr>
<td>66. Sean:</td>
<td>No, he isn't. He's not writing &quot;machines&quot;.</td>
<td>66. Sean shows George has exaggerated.</td>
</tr>
<tr>
<td>67. George:</td>
<td>Well, if he writes &quot;donkey&quot; ....</td>
<td>67. George seems to restate his claim to the donkey topic.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>68. When you're done with your work, would you do me a favor?</td>
<td></td>
<td>68. The teacher comes over to Sean with a request.</td>
</tr>
<tr>
<td>69. (Sean) What?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70. Salli's money is coming in after school today ... (Asks Sean to pack up Salli's things)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71. (Sean) Oh-kay.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>72. (Sam) George is saying donkey, and I did ...</td>
<td></td>
<td>72. Sam complains to the teacher about George.</td>
</tr>
<tr>
<td>73. (George) Mrs. Bridges, he is writing donkey, too, and I already wrote it.</td>
<td></td>
<td>73. George complains to the teacher about Sam.</td>
</tr>
<tr>
<td>74. O.K. I'll proofread them when I type them.</td>
<td></td>
<td>74. The teacher closes discussion of these complaints.</td>
</tr>
</tbody>
</table>

Figure 13. Collaborative talk within the newsletter writing event: George's donkey article.  
(Source: Transcript, pp. 93-95, 5/16/80)
The relationships between these interacting writing partners were both collaborative and competitive, as has been summarized above in the discussion of the immediate context. Problems were worked out without the teacher's intervention, and three separate and different newsletter articles were written.

These articles as edited by the teacher in the newsletter appear below. The information elicited from Sam in conversation with the teacher has been added:

Our Farm Trip

When we got to Little People's Farm, we saw one of the machines they used. It was called a manure spreader. Another was called a hay baler. We saw a donkey. He had a cross on his back, because he was the kind of donkey that Mary rode on when she was going to have her baby. We caught a toad and put him with the chameleon. We saw a boar and a horse named Terry and a goat. We tasted well water. "It tasted like regular water to me," Sam said. "It felt cold, too." We went in the hayloft and we went on a hayride.

By Sean ___, George ___, and Sam ___

Newsletter, May 16, 1980

George's text, form and content.

Form. George's story shown below is not long, though for him, it is substantial. It does consist of a topic and a comment about that topic, and so intuitively seems to be complete. George has expressed a complex thought in one compound complex sentence with two dependent clauses, modifying donkey. His first sentence is simple, and stands for the unexpressed circumstances of the trip. As the content is explicit, so also are the cohesive devices used to make semantic connections within the text, he and his referring to the donkey, and she and her referring to Mary.
George's control of surface conventions is mixed. In general, his letters are clear and uniform. He uses capital letters for the first word and for the proper name Marry (Mary), and also in other, unneeded places, for example, for all initial w's. He uses no punctuation. Some of his spelling is conventional, and some shows his own, logical but unconventional sound/letter correspondences: cind (kind), wus (was), rod (rode), and Marry (Mary). Some may be influenced by knowledge from reading: fo (of) and because (because).

Content. Since George has represented his experience in only one mode, written language, his text cannot depend upon talk or on non-verbal representation to fill out his meaning. It succeeds in stating the content or focus of his experience, though it does not place this focus in the wider event of the class trip. Figure 14 compares the actual content of George's text with the unstated, implied content.
### Written text

#### Content Analysis

<table>
<thead>
<tr>
<th>Implied</th>
<th>Stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>who - our class and another</td>
<td>who - our class and another</td>
</tr>
<tr>
<td>what - went on a trip</td>
<td>what - went on a trip</td>
</tr>
<tr>
<td>where - to Little People's Farm</td>
<td>where - to Little People's Farm</td>
</tr>
<tr>
<td>how - by school bus</td>
<td>how - by school bus</td>
</tr>
<tr>
<td>what happened - people at the farm showed us things</td>
<td>what happened - people at the farm showed us things</td>
</tr>
<tr>
<td>We saw a donkey</td>
<td>we saw</td>
</tr>
<tr>
<td>we saw</td>
<td>we saw</td>
</tr>
<tr>
<td>He had a cross</td>
<td>animals</td>
</tr>
<tr>
<td>a donkey</td>
<td>a donkey</td>
</tr>
<tr>
<td>cross on his back</td>
<td>cross on his back</td>
</tr>
<tr>
<td>why?</td>
<td>why?</td>
</tr>
<tr>
<td>kind of donkey</td>
<td>kind of donkey</td>
</tr>
<tr>
<td>that Mary rode on</td>
<td>that carried</td>
</tr>
<tr>
<td>Mary when she was to have her baby, Jesus</td>
<td>Mary when she was to have her baby, Jesus</td>
</tr>
<tr>
<td>cross stands for Jesus</td>
<td>cross stands for Jesus</td>
</tr>
</tbody>
</table>

*We saw a donkey he had a Cross on his back because he Was the Cind fo donkey that Mary rod on Wen She Wus going to have her baby.*

Figure 14. George's text: approximation of content.  
(Sources: Transcripts, pp. 89-97, 5/16/80  
Notes, 5/14/80 - 5/15/80)
Summary comments: the context for George's text.

The following summary shows that many familiar aspects of the field, tenor, and mode of discourse, both in the past and during the writing, supported George's use of an unfamiliar mode. This writing mode was unfamiliar because both event and audience were removed from the present context, and explicitness was needed in order to communicate. Only written words could be used; there was no recourse to gesture, talk, or art. Figure 15 below summarizes the context, contrasting its familiar and new aspects in both past and present.

**Familiar aspects of the context**

<table>
<thead>
<tr>
<th>Present context</th>
<th>Past context of shared experience and assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
<td><strong>Field</strong></td>
</tr>
<tr>
<td>Each child has had personal experience at farm; which was still vivid.</td>
<td>Active, concrete experiences in classroom and at farm with plant, animal, farm themes. Assumption: hands on experience taken-for-granted.</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td><strong>Tenor</strong></td>
</tr>
<tr>
<td>Teacher helps in planning content. Two other children available for help in selecting content, in spelling, in acting as audience. Teacher is responsive audience. Teacher is editor and producer of text, making children's thoughts about their experience accessible to distant audience.</td>
<td>Collaborative experience. Assumptions: interaction was taken for granted.</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td><strong>Mode</strong></td>
</tr>
<tr>
<td>Children could use their own language, both ideas and form. Teacher helped structure and transcribe text through her scaffolding tenor (see above).</td>
<td>Construction, art, writing, talking. Assumptions about modes of representation: choice allowed, and modes other than writing also valued.</td>
</tr>
</tbody>
</table>
New aspects of the context

Field

Each child has volunteered to accept responsibility to contribute to newsletter to send home. 
There is no present concrete context. Each child has a particular, unshared experience to express.

Mode

Newsletter writing is a language event made of talking and writing.

Figure 15. The context for George's text, past and present, familiar and new: A summary. (Source: participant observation notes and transcribed audiotapes.)

Observation writing: mealworms, an observation embedded in action and social interaction. This final example describes a small group and their teacher gathered around a terrarium, watching the toad and the chameleon being fed mealworms. Excerpts from this observation have already been given above (p. 400) for other purposes. A more extensive sample will now be used to illustrate the most supportive, familiar contextual conditions for early writing — a field which was concretely, dynamically present, a tenor which was informal and interactive, and a mode which included extensive oral language use as well as writing.

The context, including this sample of oral language will be given first. The oral language sample will then be discussed in its various characteristics, including those of the teacher's language.
Finally, several written observations will be looked at for their contextual connections and their textual characteristics.

In this episode, children and their teacher were watching three different kinds of animals - a toad, a chameleon, and mealworms, each different in structure and in behavior. The feeding behavior of the toad as compared to the chameleon fascinated the children, as did the anatomy of all three when seen in action at close range. Most interest was first directed to the larger animals, but then children began to examine the mealworms closely, at which point, the teacher suggested, "Observe a mealworm!" (that is, write about the mealworm), and was echoed by Ted after several minutes.

The context for this talking and writing is analyzed below, and shows that each dimension of the context is familiar. The field of discourse involves active, sensory exploration of a here and now, dynamic environment. This active observing and talk merge gradually into writing, which takes place in or near this ongoing experience.

The tenor is similarly familiar. A small group along with their teacher were informally gathered around a common focus of interest. Their language was informal and conversational. Writing was also informal and collaborative, even though children wrote their own observations. Children and their teacher were audiences for each others' observations, which were read or told.

The mode was familiar too, as children used oral language for a variety of functions and audiences, often constructing conversations collaboratively. During writing, children chose their functions and
forms, having before selected what to observe and what to say about it. The only unfamiliar aspect of this observing and writing event was the fact that children were to write. These relationships are summarized below in Figure 16.

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Field</th>
<th>Tenor</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/20/80</td>
<td>Observing</td>
<td>Small group.</td>
<td>Joint construction of text through collaborative talk.</td>
</tr>
<tr>
<td>8:35</td>
<td>dynamic,</td>
<td>Children interact about a range of matters.</td>
<td>Interactive talk for many functions: to comment to express feelings to direct others' attention to regulate others' action to give or receive information to negotiate physical arrangements</td>
</tr>
<tr>
<td></td>
<td>concrete,</td>
<td>Teacher, children share common interest.</td>
<td>Talk for different audiences: friends, teacher, animals, self.</td>
</tr>
<tr>
<td></td>
<td>sensory</td>
<td>Children carry on many simultaneous conversations, interests.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>material.</td>
<td>Teacher relationship; to direct their attention to certain features, to lead them to compare.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action as well as visual observation feeding, holding, touching animals.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 9:00        | Writing in presence of ongoing experience, writing overlapping with experience. | Writing with others either interactively or side by side. Collaboration possible though each child wrote own observation. | Choice of topic, of what to observe. Choice of how to spell, what words, sentences structure to use. Mode was to be written, sketches optional. |

Figure 16. The context for observing, talking, and writing. (Source: Participant observation notes.)
Introduction to the sample of collaborative talk within experience.

The collaborative talk within the observing experience closely preceded and in some cases, overlapped writing. The initial four minutes of a 25 minute session is presented here, to convey the nature of this talk. The talk is divided into numbered "turns", unintelligible stretches are indicated by lines, ___, and pauses, by an ellipsis symbol, .... The teacher's talk is separated from the children's, and children are named when this is possible. Comments which interpret and classify aspects of this talk are based on inference and speculation, rather than systematic analysis. (For example, Halliday's scheme of functions has been drawn on freely.) These comments have been made in order to raise points of possible significance for further study. They will be elaborated after the excerpt. The connection between oral and written language will be made in the final section of this discussion.
Collaborative talk within this observing experience preceded or overlapped writing:

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Children</th>
<th>Comment</th>
</tr>
</thead>
</table>
| 1. Hold it for him ...  
 Hold it for him. | | |
<p>| 2. Oh, gosh, I hafta take this here ... | | |
| 3. He hasn't learned how to take it out of my hand yet. | | 3. Teacher's playful comment, as participant in observation; not an elicitation, nor an evaluation, nor a question (other typical functions of teachers' language). Teacher's language is exophoric; referring outside of text to situation: &quot;He&quot; refers to toad. |
| 4. (Ted) I don't like to hold these. | | |
| 5. Hold what? | | |
| 6. What, mealworms? | | |
| 7. I don't like to hold toads. They are - they pee on you and make you ... | | |
| 8. (Ted) Oh, sick! | | |
| 9. Gosh, look how long that one is! Don't you like to hold - you like to hold mealworms? | | |
| 10. So - I like the toad. | | 10. Informal register: simultaneous overlapping utterances. |</p>
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Children</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. (Cleo) Don't drop down in the dirt. (said to mealworm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Hey, will you save my place?</td>
<td>12. Interactional and regulatory function, in pragmatically appropriate form of question</td>
<td></td>
</tr>
<tr>
<td>13. (George) Will You ___?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Right there.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Ted, you save my place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. (Ted) Give' him to the frog ... And when he goes...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. The TOAD! (chanted)</td>
<td>17. Conveys enjoyment of word, and of its referent.</td>
<td></td>
</tr>
<tr>
<td>18. (Ted) Maybe I should do the toad.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Save my place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. (Ted) The chameleon... Can I start observing? Watch him, watch what he does. Are you going to give one to the frog - the toad? Watch this!</td>
<td>20. Function - to direct others' attention, to verbalize and share one's observations.</td>
<td></td>
</tr>
<tr>
<td>21. (George) Watch this!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. (Ted) It's really ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td></td>
<td>23. (George) He's going to go &quot;gump&quot; (Swallowing sound) just like that.</td>
<td>23. &quot;Gump&quot; - informal language allows sounds as well as words.</td>
</tr>
<tr>
<td></td>
<td>24. Now! (Sounds of excitement)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25. (More sounds of excitement)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27. (Ted) Did you see?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28. Oh, he caught 'em! (Sounds of excitement)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29. (Student Teacher) Oh, he got something else too.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30. He got some straw. (Laughter)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31. (Ted) I want to save that for my writing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32. Look at that chameleon, how...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>33. Look at that, oooh...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34. (Cleo) He's trying to get...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35. Trying to get the mealworms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36. (Ted) Is the chameleon eating the mealworm?</td>
<td>36. Function of language - request for information, clarification</td>
</tr>
<tr>
<td></td>
<td>37. (Cleo) He's looking at that bottle right there.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>38. (Ted) Look how long his tail is.</td>
<td>38. Function - verbalizing and sharing observation.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td>39. Ted, will you save this place?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. (Mary) Look how big those are, Look at that white ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. (Cleo) Yeah, that's making its cocoon to turn into a beetle.</td>
<td>A possible link to fall insect study. Cleo's larva and insect theme recurs in this taped language and appears in her writing.</td>
<td></td>
</tr>
<tr>
<td>42. I don't see no ... who ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. (Mary) They're white ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. See what they do?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. (Ted) They shred, right?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. They shed their skin, don't they?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. (Mary) Sh...ed, not shred. Shred. You said shred. Shed.</td>
<td>Mary's metalinguistic comment. She makes the contrast clear for Ted while pausing politely during teacher talk.</td>
<td></td>
</tr>
<tr>
<td>48. Now come on, your mealworm's up here. (said to chameleon)</td>
<td>Teacher gives feedback to content, not to formal error.</td>
<td></td>
</tr>
<tr>
<td>49. They look like little mealworms, don't they?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. He missed it, didn't he? Here toad.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51. (Ted) Toad ... (said to the toad)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52. Toad ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53. Toad ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54. He's about had three.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Teacher | Children | Comment
---|---|---
55. (Student teacher) I want to see if they'd like to live in this stuff. I wonder if they'd like it.
56. (to Student teacher) Why don't you... Oh, there he goes!
64. Where do you think the chameleon is when he's been eating? Hi chamee...
67. He's off the plants. That's the way. Now let's give you some ... (said to chameleon)
57. (Ted) Is he going to eat one?
58. Yeah, he got it.
59. He ate one.
60. He just ate it.
61. (Ted) Who, the chameleon?
62. (Several) No, the toad.
63. It's ____ when you feed him one.
65. Would you move?
66. 
68. Don ...
69. He's going to grab hold of his tail.
70. Don....
71. I know.
72. (George) hmmm.
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Children</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>75. (Student teacher) Oh, that's like a larva.</td>
<td>74. Why isn't he eating it?</td>
<td></td>
</tr>
<tr>
<td>76. What's a larva?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77. (Cleo) A larva is something that's going to turn into a harmless beetle.</td>
<td>77. Cleo answers with her own operational definition, developed over time in several contexts.</td>
<td></td>
</tr>
<tr>
<td>78. (Student teacher) That's right.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79. Toot toot, toot, toot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80. Move over, I can't see.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81. What, what</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82. No!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83. I can't see!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>84. The toad can't see it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85. I think some people need to get their tablets and their pencils.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>86. (several) Oh, yeah; (not to teacher's 85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87. I have mine, Mrs. Bridges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88. Oh ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89. Will somebody - if somebody will save my ... place ...</td>
<td>89. Evidence of a pragmatic rule for phrasing requests more softly</td>
<td></td>
</tr>
<tr>
<td>90. Can I pet the toad?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91. I'm not going to share ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92. Nobody will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
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<td>---------</td>
</tr>
</tbody>
</table>
| 93. Feel him.  
Watch, sweetie, there's a whole thing of water there...spill it on another person's project | 93. (Ted) take it. (i.e., the place) | 93. Teacher ignores chair conflict. |
<p>| 94. ooohh - | | |
| 95. (Ted) He's rough. | | |
| 96. He's puffing up. | | |
| 97. (Mary) The chameleon's walking away with the mealworm in his hand because he doesn't want the frog to go after it. | 97. Complex syntax; language used in a speculative function, hypothesizing an explanation. |
| 98. In his hand? | | |
| 99. Look at the chameleon. | | |
| 100. Oh, look at the chameleon. | | |
| 101. He has such small eyes. | 101. Feature of small eyes is discovered through observation, verbalized to friends |
| 102. (Mary) Yeah, hanging out of his mouth (to teacher's 98) | | |
| 103. | | |
| 104. Have you any ... | | |
| 105. Oh, he's got little teeth. | | |
| 106. I know. | | |
| 107. Has he got little teeth? | | |
| 108. Yeah, yeah. | | |
| 109. Steve, have you ____? | | |
| 110. Little teeth in there. | | |</p>
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Children</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>111. Have you noticed how the frog and the chameleon differ in the way they eat it?</td>
<td>112. (Ted) Oh, he does (i.e., have little teeth)</td>
<td>111. Teacher's question, with intonational emphasis on differ, to organize, direct children's observation to distinctive features of two animals.</td>
</tr>
<tr>
<td>113. (several) Ohhh!</td>
<td>114. (Ted) He eats it with the side of his mouth and it hangs out.</td>
<td>114. Complex syntax; describing with ordinary words used to express new information.</td>
</tr>
<tr>
<td>116. When the frog eats it, or the toad eats it, is there anything left hanging out?</td>
<td>115. (George) Oh, neat!</td>
<td>116. Teacher's yes/no questions; 118. direct attention to features. Are not really questions for information, nor are they to test children.</td>
</tr>
<tr>
<td>117. (several) No. He swallows it up. He's got a, got a huge mouth.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>118. When he gets it, does he go up to it, and bite it?</td>
<td>119. No.</td>
<td></td>
</tr>
<tr>
<td>120. He just goes...</td>
<td>121. (Ted) He just gets about this much away from it - and sticks his tongue out.</td>
<td>121. Using ordinary language to express quantitative relationships.</td>
</tr>
<tr>
<td>122. You save my place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>123. He's deadly, isn't he? Zap!</td>
<td></td>
<td>123. Zap! Teacher's informal comment made in her participant role.</td>
</tr>
<tr>
<td></td>
<td>124. (Ted) He just goes zoom.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>125. And then touch it.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>126. (Ted) Is it in his mouth when it does that, do you think?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>127. It's rough ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>128. Oh!</td>
<td></td>
</tr>
<tr>
<td>129. When it, when he rolls his tongue back in?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130. (Ted) It, well, of course...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>131. Probably starts going down and is digested.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>132. (Cleo) He's eating it now.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>133. It probably has to eat more slowly. He's a little more dainty about the way he eats.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>134. Where is he?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>135. (Cleo) The frog just slops all over the place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>136. (Ted) Can I pet the toad?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>137. Uh, huh (i.e., yes) You can feel him.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>138. Can I pet the chameleon?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>139. As long as it doesn't hurt it; just gently.</td>
<td>139. Teacher's values - important not to hurt animals</td>
<td></td>
</tr>
<tr>
<td>140. (Ted) Oh, he has little bumps on it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Children</td>
<td>Comment</td>
</tr>
<tr>
<td>---------</td>
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<td>---------</td>
</tr>
<tr>
<td></td>
<td>(Cleo) Oh, he's soft.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Ted) He's puffing up, like he did on the bus.</td>
<td>Ordinary words used in new situation - puffing up, bumps.</td>
</tr>
</tbody>
</table>

Figure 17. Collaborative Talk preceding and overlapping observation writing.

Source: Transcript, pp. 206-208, 5/20/80
Analysis and summary of the characteristics of collaborative talk within experience. Four main points will be made about these characteristics. The first two will concern the quantitative nature of the talk, the third its qualitative characteristics, and the fourth, the teacher's role within the situation.

First, this four minute sample is taken from a long session, lasting as has been said, twenty-five minutes. It is an example of an activity which sustained attention, though these attention behaviors of the children are as lively and changing as are the actions of the animals they are observing.

Second, the volume of teacher talk as compared to child talk is small. Turns for the portion given here were counted, and the teacher was found to have contributed 25 of 138 or about 18% of the total. Most of the other 113 came from 6 of 11 children, making each of their contributions about 14% of the total on the average. A casual scan of the sample shows in fact that children did do most of the talking, interweaving their various conversations with each other, and with their teacher.

Third, this recorded talk had certain qualitative characteristics: 1) It was informal and often exophoric (that is, context-dependent); 2) it was used for a range of purposes, in a range of functions; 3) and for a range of audiences; 4) it was sometimes formally complex, and 5) its content had links both to other themes and interests of the class, and to individual's personal interests. Each of these characteristics will be briefly elaborated.

1. The informality of this talk was shown by the number of utterances which were simultaneous or overlapping. Vernacular
expressions - *gosh, zoom* - as well as sounds - *gump* - and laughter occurred along with words. Many references were exophoric; the pronoun "he" could mean the toad, the chameleon, or the mealworm. Even on the scene, Ted was confused by "He just ate it." "Who, the chameleon?" "No, the toad" several answered (Turns 60-62). The language of this episode, including the teacher's comments, was context-specific.

2. This language was characterized by a range of functions. Children used language to regulate each others' behavior: "Save my place." (Turn 15), "Move over" (Turn 80). They worked out conflicts: "Nobody will take it" (i.e., your place), (Turns 92-93). They shared their own feelings "I don't like to hold these mealworms" (Turn 4); observations "Oh, he's got little teeth" (Turn 105); and generalizations "The frog just slops all over the place" compared to the chameleon (Turn 135). They anticipated and enjoyed action: "He's going to grab hold of his tail" (Turn 69), "Oh, neat!" (Turn 115).

Many of these correspond to Halliday's functions of language (1969) (as summarized in Chapter II above, p. 69). Other parts of the transcript furnish examples of other functions, for example of instrumental language: "Get me the tweezers" (Transcript, p. 211) and heuristic, "What do you think they eat?" (Transcript, p. 210).

Imaginative language is not present in the sense of extended invention, but could be said to be found in the playfulness of talk to animals: "Don't drop down in the dirt" (Turn 11), in the use of "he" to refer to the animals, and in the imputing of intention and human characteristics "... because the chameleon *doesn't want* the frog to go after the mealworm" (Turn 97). In other parts of this episode, children
used metaphor to describe what they saw. Thus Don talked about his mealworms being inside his spiral (Transcript, p. 210), and Ted echoed this, "Hey, go in my spiral, little mealworm, little mealworm. Don't crawl on me. I don't need you right now" (Transcript, p. 211), perhaps revealing the influence of folktales as well as a coming to terms with the squeamish feelings he revealed about mealworms in Turn 4. Still later, one child said that he had made steps for his mealworms, and was heard telling it to "Go down your steps" (Transcript, p. 314).

A final speculation could be made about the use of language to aid thought, or heuristic language. There seemed to be a progression from sensory observation of the dynamic events in the present to a stating of generalizations. Thus, the first pages of this sample show children anticipating and watching the action of the animals as they ate: "Watch him, watch what he does" (Turn 20). Then Ted and others talk about their observations: "Look how long his tail is" (Turn 38). "He's rough" (Turn 95). "He's puffing up" (Turn 96). "Little teeth in there" (Turn 110). After this experience of observing dynamic action and commenting on it, Ted generalizes about the two contrasting modes of eating: "The chameleon eats it with the side of his mouth and it hangs out" (Turn 114) and "The toad just gets about this much away from it - and sticks his tongue out" (Turn 121).

This sequence of attending to something dynamic and active, and then commenting on it, recalls the work on infant language learning. For example, Bruner (1975) noted early mother-child interactional patterns which served to gain children's attention so that adults could then comment on what both were attending to.
3. In addition to a range of functions, children used language with a variety of audiences. They talked playfully to the animals. They talked to the teacher, and they talked to each other. Talking to each other was not a simple matter, however, as talk helped to express many different relationships between children. They chose their audiences as well as the functions or purposes for their language use. Interaction was thus much more varied with respect to both audience and function than the typical teacher-elicit, child-respond, teacher-evaluate sequence as found by many researchers and summarized by Dillon and Searle (1981).

4. There were instances of syntactically complex utterances in which words were used to express complex relationships or to describe perceptually complex situations. Cleo's "Yeah, that's making its cocoon turn into a beetle" (Turn 41) has an embedded clause, as does her "A larva is something that's going to turn into a harmless beetle" (Turn 77). Mary's "The chameleon's walking away with the mealworm in his hand because he doesn't want the frog to go after it" (Turn 97) is a long compound sentence conjoined with "because". Ted's from a later section of the transcript illustrates both syntactic complexity and the use of ordinary words to describe an observed relationship: "His body hangs down while his legs are up there" (Transcript, p. 210).

The vocabulary children used was their own. They therefore labelled and described unconventionally, using familiar language to express their perceived experience. The example (quoted on p. 397 above) of Don and Ted collaboratively discovering the toad's "ears" illustrates their original use of familiar words for new ideas:

Don: Look at his ... Ted, look at his ears, on the side of his head.
Ted: They're little circles.

Don: They are just little things cut in.

Sean: Where, Don?

Don: See, look at that little, look at that little hole, in the side of his head. (Transcript, p. 208)

"Little circles," "things cut in," "little hole" are ordinary words used to formulate new experience. This contrasts with the teacher described by Dillon and Searle (1981) whose goal was to "expand vocabulary," aiming for a long list of words to substitute for familiar words, rather than for the use of these familiar words to express more complex thinking and experience.

These occasional uses of ordinary words to express complex ideas, and of complex syntax, occurred within talk which was predominantly informal and conversational, exophoric or context-bound, and formally incomplete. In the main, it served merely to accompany an active event and not to substitute for it.

5. The last qualitative characteristic of this mealworm talk is evidence of a speculative link between present content and past content, both for the group and for individuals. For many children, there were ties expressed between the mealworms and their insect study of the previous fall. Cleo particularly, but also Mary, George, Ted, and others seemed to relate mealworms to more general characteristics of insects.

This is the set of utterances and turns which concerns insects, as drawn from the transcript as a whole (with discontinuous sections separated by vertical arrows):

Cleo: Yeah, that's making its cocoon to turn into a beetle. (Turn 41)
Mary: Sh..ed, not shred. Shred. You said shred. Shed. (Turn 47)

Cleo: A larva is something that's going to turn into a harmless beetle. (Turn 77)

Teacher: Observe a mealworm!

Ted: He looks like a centipede, you know. He has so many legs.

Teacher: See how many legs he has.

Child: But he turns, but he turns into a beetle.

Ted: That's impossible. He doesn't have any in the back. He has only about six in the front.

Child: Six in the front. (Transcript, p. 208)

Child: It looks like a termite. It tickles. It looks like a termite. (Transcript, p. 209)

Child: Ooh, look at that white one.

Child: Oh, gross.

Child: Where is the white one?

Child: Here is the white one.

Child: Look, I'm holding a mealworm!

Child: See, that white one, right there?

Cleo: Oh, that's O.K. He's only turning into a beetle.

Ted: These are so neat!

Child: When is it going to turn into a beetle?

Cleo: Oh, ........ a few weeks or so I say.

Child: He doesn't have legs in the back - they just, drags...

George: That's because he is an insect. (almost singing)

Child: He has six legs in the front. (Transcript, p. 210)

Child: The white ones are larvae. (Transcript, p. 211)
Cleo: I've already got mealworms at home...
Well, I did until they turned all into beetles. (Transcript, p. 213)

Personal themes which seem suggested could probably be traced if the identity of the various speakers had been clear. As it is, Cleo's larva-beetle-insect interest is easily discernable, and the source of it finally revealed in the fact that she has kept mealworms at home.

The fourth and last characteristic of this collaborative talk to be discussed is the teacher's inconspicuous role. She was there, and she offered comments, suggestions, and at times, directions. The construction of the oral text, however, was not her responsibility alone. It was an interactional product of teacher and children together, relating to each other and to the bits of the world in the terrarium. Hence the characteristic of the teacher's language in many ways mirrored those of the children. It was informal, as she used vernacular expressions, and depended on the context to clarify exophoric reference: "He's deadly, isn't he? Zap!"

Within this small sample, and applying intuitive judgments, it could be suggested that the teacher used language for three major purposes: one, to participate in and comment on action; two, to direct children's attention, and three, to direct their action. There were four additional uses which will also be explained. These are summarized in this list, which gives frequencies:
TABLE 6
FUNCTIONS OF TEACHER'S LANGUAGE DURING MEALWORM OBSERVATION

<table>
<thead>
<tr>
<th>Function</th>
<th>Number of Turns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating, commenting on action</td>
<td>9</td>
</tr>
<tr>
<td>Directing children's attention</td>
<td>7</td>
</tr>
<tr>
<td>Directing children's action</td>
<td>4</td>
</tr>
<tr>
<td>Giving information</td>
<td>2</td>
</tr>
<tr>
<td>Asking for clarification</td>
<td>1</td>
</tr>
<tr>
<td>Directing attention to language</td>
<td>1</td>
</tr>
<tr>
<td>Confirming child's meaning</td>
<td>1</td>
</tr>
<tr>
<td>Total turns by teacher of 138 turns in all</td>
<td>25</td>
</tr>
</tbody>
</table>

Note: From Transcript, pp. 206-208, 5/20/80.

First, the teacher commented while participating with children in observing the action. "He missed it, didn't he!" (Turn 50), "Oh, there he goes!" (Turn 56), and "Hi, chamee!" (Turn 64) are examples.

Next, the teacher also directed children's attention to look at important features by questions and statements, often with tag endings: "Has he got little teeth?" (Turn 107), which built on a child's previous observation, "Oh, he's got little teeth" (Turn 105), and "The look like little mealworms, don't they?" (Turn 49). She asked questions that led children to compare and contrast: "Have you noticed how the frog and the chameleon differ in the way they eat it?" (Turn 111), followed by "When the frog eats it, or the toad eats it, is there anything left hanging out?" (Turn 116) and "When he gets it, does he go up to it, and bite it?" (Turn 118).
Third, the teacher used language to direct children's actions, for example, to caution against knocking over the pan of water (Turn 93), and to move children toward writing after the conflict over chairs and places (Turn 85).

Other less frequent but still possibly significant uses within this sample were her exchange with Ted, as she asked him to clarify his question (as to what happened to the mealworm inside the toad's mouth), and then suggested a probable answer:

Ted: Is it in his mouth ... when it does that, do you think?
Teacher: When it, when he rolls his tongue back in?
Ted: It, well, of course ...
Teacher: Probably starts going down and is digested.

(Turns 126-131)

She also confirmed Ted's meaning by restating his idea about the mealworm's shedding their skin, using the term *shed*, rather than directly correcting his *shred*, (which Mary did instead, *sotto voce* but definitely). The teacher used language to respond to the content rather than the form of Ted's language. She also questioned Mary to call her attention to the anomalous use of *hand* when talking about a chameleon, thereby directing her attention to language itself.

To summarize, the predominant function of the teacher's language as reflected in this small sample suggest that in this situation, the teacher was engaged along with the children in what was going on, while at the same time, teaching by drawing attention to features and contrasts which children could use in making their own observations and generalizations.
To complete the description of the teacher's language, in addition to informal, conversational language used for functions related both to her role as participant and as teacher, brief comments could be made about the audience for her language, its formal character, and its content.

The teacher's relationship to her audience reflected her asymmetrical role. She was, even though informal, friendly, and familiar, the underlying authority. Her questions were responded to. Looking at formal complexity, it could be said that the teacher's language exhibited a range, with some utterances more complex than others. Finally, the content of the teacher's language concerned the here and now events, rather than connections with previous content. This probably reflected her pedagogical purposes, that is, to provide a clearly structured and involving experience from which children could make their own generalizations.

Texts produced by participants in the mealworm observation, and their antecedents in collaborative talk. These "observations" were written during continued observing, with children beginning to write at different times. The content of this writing can often be traced back to talk, either to what the writers themselves have said, or to what others have said. Six pieces of writing will be given, with an extended analysis of the first, that by Ted. Ted's writing was chosen because his voice was the most easily discerned on the tape. He also began to write first, and talked about writing before, during, and after he wrote. His talk which relates to his writing is drawn from the sample and from the longer transcript (with numbers first referring to turns, and then pages of transcript, as indicated). Ted's language
relating to his observing experience is on the left, while that relating to his writing process is on the right.

Ted's text

the Toad gets
about 1 inch Bef-
fore he catches the
mealworm. The Cham-
eleon eats with The
Mealworm on the
side of his Mouth.

Ted, grade 2
5/20/80

Ted's oral language which relates to text

About content  About writing process

Part I: The toad and the chameleon

Turns:

4. I don't like to hold these mealworms

16. Give him to the frog ...
   And when he goes ...

17. Maybe I should do the toad.
   (i.e., write about the toad)
   Can I start observing?

20. The chameleon...
   Watch him, watch what he does.
   Are you going to give one to the
   frog - the toad? Watch this.

27. Did you see?

31. I want to save that (event
    I just saw which gave me an
    idea) for my writing.

36. Is the chameleon eating the
   mealworm?

38. Look how long his tail is.

45. They shred, right?

51. Toad... (to the toad)

57. Is he going to eat one?

61. Who, the chameleon?
95. He's rough.

112. Oh, he does (have little teeth).

114. He eats it with the side of his mouth and it hangs out.

121. He just gets about this much away from it - and sticks his tongue out.

124. He just goes zoom.

126. Is it in his mouth ... when it does that, do you think?

136. Can I pet the toad?

140. Oh, he has little bumps on it.

142. He's puffing up, like he did on the bus.

From the transcript:

208. He feels so rough.

Is this about one inch?
Is this about one inch?
Is he about one inch away from what he is going to eat?

Oooo, they're little circles.

Part II: Mealworms.

What are you trying to get, a mealworm? (to teacher)

Doesn't that hurt those things when you pick it up with that? (to teacher)

Are you going to put it back? (to teacher)

He looks like a centipede, you know. He has so many legs.

209. Mealworm, you can't climb up my fingernail. You'll split... He's going on, there he goes up my thumb. Look at that - he's look- on my - uh, he's crawling up.
He falls down off your hand.

Oh, he tickles.

210. These are so neat! (mealworms)

Observe a mealworm. (echoing teacher's previous phrase)

What do they eat?

Oh good, he is climbing up my arm.

Oh look, his body dragged over...
They drag over.

Look, look at, his body hangs down while his legs are up there. Look where it's flat ...

Oh, come on. Don't go up there.
No. (to mealworm)

212. Hey go in my spiral, little mealworm, little mealworm. Don't crawl on me. I don't need you right now.

You can have only one (mealworm) at a time.

This guy is long.

Oh, don't go off ... Oh, he's asleep or something. See what he does on this bump.

Get me the tweezers. Pick him up...
Come here, come on, mealworm. Oh, gosh, don't go on my tablet.

That does it. Either you get up...

Well, I have to get mine fixed up.

Should I say: "before he catches?"

Do you spell before b-e-f-o-r-e?
How do you spell mealworm? Mrs. Bridges, how do you spell mealworm? How do you spell meal, like the dinner meal? Who gives - w ...

I want to get a mealworm. Who has a mealworm?

You guys, you don't need to pick up with the tweezers. Look at these, there's babies everywhere! Look at those little things!

I need the tweezers. Give me the tweezers, Steve.

Are you going to pick him up with your hands?

Luke, you're only allowed to have one at a time. You missed him, Luke. Put him back - one of them back. Foul...How do you pick them up so good?

213. Oh, you have to dig into that stuff

You can't take him home.

Mrs. Bridges said what?

Well, then, you can't take him home.

He did. You can't.

I'm going to write.

Where did you buy them?

Well, I would just keep about five of them and let them crawl all over me all the time.

Ooh, it's cool. He got up on my pencil.

Um, I just let, hey, I want to write with him on my pencil.
214. I know. Too bad mealworm, you get eaten.

They tickle.

I'm going to let mine crawl on my tablet... Well, if it was the only thing you had to eat it would be OK.

(Student teacher: We'll be going to the library in a minute.)

Oh, I haven't finished. Gosh.

(Student teacher: We will be leaving for the library in a few minutes. So you should get wrapped up).

OK

(Student teacher: If you need more time after library, we'll give it to you, all right?)

You can't handle them too much or they will die.

216. It will die if you pick up the larvae.

If you pick them up really ...

Look, I'm picking one up.
Better put him back.
Pick him up, would you Luke?

I'm doing both of them (i.e., the toad and the chameleon)

How do you spell chameleon?
Where does it say chameleon?
Ted: Yeah. Friend: M-E.
Ted: What's after E?
Friend: L-E, O-N, O-N

Miss Julius, can we handle those mealworms? I like 'em.

How do you spell mouth?
Comments on Ted's observing and writing: Ted began early in the observing session to plan his writing, and talked about his own process throughout the rest of the session. The observations which appeared in his writing occurred early (see turns 114 and 121), although he continued to observe new events while in the process of writing about what he had already observed and formulated.

His process talk concerned composing as well as transcribing. He started with talk about his choice of topic, then asked for help in confirming his choice of a term to describe the distance between the toad and his prey. Then he wondered out loud about his wording "before he catches." His last comments deal with spelling, interspersed with a remark to himself that "I'm going to write," (rather than to continue to observe mealworms, presumably).

Ted's involvement with mealworms is striking. It is not reflected in his writing at all, but may have had other outcomes which were unretrievable. For example, there seemed to be a hidden agenda, as over the course of this experience, he came to terms with his feelings about handling mealworms. In the beginning he said "I don't like to hold those." During the talk, he showed ambivalence. Some talk may be bravado, e.g., "I would just keep about five of them and let them crawl all over me all the time." However, at another time, he asked first grade Luke to pick up the mealworms for him. At the end, he asked the student teacher for permission to handle the mealworm, declaring "I like 'em."

Ted therefore seems to have been able to focus almost simultaneously on several aspects of his experience which could correspond to field, tenor, and mode. He was absorbed in the sensory experience of
observing all of the animals - their structure and their behavior, as well as with his own feelings about them (field). He was also a member of a group, and related to others, commenting relevantly on their comments, working out the sharing of space and materials and helping organize their common life in this event by evoking rules of behavior (tenor). He carried along the thread of his own composing and transcribing process, finally completing his writing (mode).

Field: What in this situation has helped Ted with his writing? In terms of field, the purpose for his writing was in front of him, not only concretely present, but also dynamically changing and therefore attention-getting and interest-sustaining. It was possible because of the structuring of space, materials, and time for him to experience actively and directly, over an extended period, so that redundancy or patterns in events could be seen, and so that with in-depth observation, questions could be formulated. Out of many observations of what happened, each with its slightly varied details, could be generalized what happens (Moffett, 1965, 1968).

Tenor: The tenor of Ted's experience was informal and intimate, as familiar relationships continued to sustain language use and thought. As a good friend, Don shared and formulated discoveries with him (for instance, the "ears" of the toad). George, on the other hand, was Ted's satellite, and frequently echoed what Ted said. Ted and the teacher had a dialogue at several points, as they mutually considered a speculative question. In general, then, these familiar and particular relationships could be said to have enabled Ted and his friends to construct their experience together, just as they constructed the accompanying oral text.
Mode: In relation to the mode of writing, this familiar, collaborative tenor, and active, dynamic, yet redundant field operated to support the abstraction from the event which was required. Ted had to select, transform and represent elements of this experience. He had to embody chosen content in words, and finally to transcribe those words into conventional orthographic symbols. Ted’s verbalizing of this writing process could be interpreted as seeking assistance, as indeed it seemed to function in connection with the spelling episodes. But it could also be interpreted as speech for himself, as he talked and thought out loud to try out his choices of content and wording.

The tenor of the context which allowed and assumed familiar kinds of interaction could be said to bring about this talk so that Ted, though not really needing others’ responses, would be more likely to externalize his thinking, and so to see it objectively, and to control it. Ted’s writing, thus, does not "index" the total meaning of his experience, although it represents part of it well. It was, however, enabled by this experience, which was broader and more complex than that which eventually appeared in Ted’s text.

Other children’s texts in context. Following this interpretation of children’s writing in context, other children’s writing will be presented and commented on. Suggestions of relationships will be made between their texts and the oral context which preceded. Characteristics of the texts themselves will be noted.

Cleo’s text

A menl Worm has
6 Lagss

Cleo, grade 1
5/20/80
Comments. Cleo's preoccupation with the mealworm theme and with metamorphosis has already been mentioned (p.529), and can be seen in Turns 11, 41, and 77 as well as throughout the rest of the transcript (e.g., "Oh, that's OK, he's already turning into a harmless beetle"). The writing which comes out of her active participation in this talk is minimal but complete and salient for her. Cleo was a first grader, and when entering first grade that fall, her writing was either dictated, or written with disregard for word boundaries, in upper case letters, using invented spelling and symbols for words. This mealworm writing uses both lower and upper case letters (A MealWorm), and has spaces left between words.

John's text

The chameleon is a lite green. The chameleon ate a meal worm right now. The chameleon is very guik. it also is very still. and is aways moving away from the meal worm.

John, grade 2
5/20/80

Comments. John's text is notable for the emphasis on the visual aspect of its presentation, and the visual experience it reflects. John liked to draw, and has here shaped his writing around a sketch of the chameleon, with the word mealworms written in a curled form.

John centered his observation on the chameleon - its color, eating, and style of locomotion. There is an immediacy in his use of "right now" which suggests that he was writing in the midst of observing. He was successful in conveying the almost contradictory thought of the chameleon's quickness and stillness. Finally, his observation that
"the chameleon is always moving away from the mealworms" is so specific and detailed that it suggests close, personal observation over time rather than a textbook paraphrase or even an echo of what other children were noticing and saying. Unfortunately, there is little retrievable from the tape that can clearly be attributed to John, though his ideas did appear in others' talk. One child did say "Look how fast he goes," referring to the chameleon, in the midst of children's primary preoccupation with the mealworms (Transcript, p. 212). And of course, the first minutes of observation did center on the eating habits of both the toad and the chameleon.

With general control of the conventions of writing, John was inconsistent in capitalization and in use of final periods. He also used a logical but incorrect spelling for light. He was, however, able to integrate his text with his visual representation.

**Don's text**

The Chameleon Puts his head sideways before he attacks. then he Puts his head foward and open's his Mouth and gets him. then he leaves half out of his mouth the half he chews up and he swallows the chewed up part and sucks the rest and swallows it.

Don, grade 2
5/20/80

**Comments.** Like John, Don wrote about the chameleon. He had observed in a detailed way the changes in the chameleon's body as the chameleon approached, attacked, and ate his prey. His writing is a narrative of these observations, phrased as generalizations about what the chameleon usually does. His syntax reflects the sequential nature of the content. The first sentence contains a subordinate clause
"before he attacks" to indicate a temporal relationship. The second sentence is a series of three phrases conjoined with and, with nominal deletions: "Then he puts his head forward and opens his mouth and gets him." The next to the last sentence is really a series of sentences, though not so punctuated. It begins with what could have been an independent clause "the half he chews," i.e., he chews up the half (which is not hanging out of his mouth), "And he chews up and he swallows the chewed up part" is the third meaning element of this sentence, expressed syntactically as a compound sentence. The last meaning unit "and sucks the rest and swallows it" refers to the half left out of the mouth, this reference made clear by the use of the lexical item rest which contrasts with the phrase chewed up part which has gone before.

This informal analysis of syntax and of cohesive elements in Don's text is given in order to suggest the complexity of relationships Don was struggling to represent in words. Not only was there a temporal sequence to convey, but there was the difference between what happened to the two halves of the mealworm to keep separate in reference.

Don's use of conventions of orthography lags somewhat behind his use of syntax and semantic elements to make these relationships clear. Periods correctly indicate three sentences. Capitals are omitted, except for the first The, and Chameleon which is perhaps capitalized as a name. Commas, which could have clarified clauses within the third sentence, are not used. Spellings are conventional, except for two logical miscues: foward and attacks. His open's indicates over-generalization of the rule for use of the apostrophe.
The sources of this content are not identifiably retrievable from the transcript, although since it was known that Ted and Don observed together, Don probably watched the feeding process with as intense interest as was indicated by Ted's comments. Like John, however, Don may not have verbalized all of his observations, such as the subtleties of the chameleon's head being put sideways before attacking, and his head being put forward as he opened his mouth.

This example has been discussed in its different aspects in an attempt to suggest connections between the quality of concrete, interactive experience, and the use of language which resulted. The possibility that a sustained observation of interesting and detailed, authentic phenomena in the company of friends, before whom and with whom one could use language freely, enabled and supported this written text. The text itself represents the rather precise and explicit embodiment of complex ideas and relationships. The immature aspects of the text are those which are closer to the surface. More fundamentally, Don has transformed his experience into words, which approach unambiguous explicitness.

Deborah's text

When the toad ate the mealworm it looked like he just gulped it down, and when the chameleon ate a mealworm he chews it in little bites. The toad feels lumpy and the chameleon feels smooth.

Deborah, grade 1
5/20/80

Comments. Deborah's writing is the most complex syntactically of these texts, even more so than Don's. She has conjoined the two contrasting ideas - the different manner of eating of the toad and the mealworm - into one compound complex sentence, that is, with a
dependent clause in each conjoined main clause. In addition, she has added a comparative statement about the skin textures of the two animals, again in a compound sentence.

Deborah's participation in the talk which preceded this writing is not detectable, except at one point. After some negotiation for space and chairs, her friend Betsy suggested, "Deborah, let's work somewhere else" and Deborah was heard to say, "No, I'd like to observe...". Although the ideas which appeared in her writing were not traceable to her talk, they did appear in the transcript, not only in Ted's words, but as verbalized by other children.

Deborah's writing is mature, not only in its structure but in its control of orthographic convention. With the exception of a lack of paragraph identification and an incorrect hyphenation, the mechanics of this piece are conventional. Deborah was a first grader, and was described as precocious or exceptionally advanced, especially in her language abilities.

Duncan's text

I thingk that it Takes 2 seckinsc
For the toad to aet, and the
chameleon 30 sec
Duncan, Grade 1
5/20/80

Duncan, also a first grader, has compared the eating time of the toad and the chameleon, and has quantified the difference. He may have meant it as an intuitive estimate, when he said "I think...", or this quantitative statement may have been the outcome of an actual attempt to time these differences. (Contextual information is lacking here.) The children had studied time and had engaged in timing activities to the second and minute a few months before. Perhaps
Duncan was applying his understandings from this study to his new experience.

Duncan's voice is not identifiable on the tape, and so oral antecedents can't be traced for this writing. However, others expressed the idea that the toad ate faster than the chameleon, and he saw it happen.

Duncan has compressed his observations into one complex sentence, with the information expressed in a dependent clause beginning with "I think that ..." The second part of the sentence, "and the chameleon 30 secs" is the outcome of two deletions, "that it takes" and "to eat": [I think that it takes] the chameleon 30 seconds [to eat]. Thus, this is a compact expression of an observation and a comparison.

The rendition into conventional written text is marked with invented spellings which show the influence of print exposure: aet for eat as well as the logic of sound correspondences: thingk for think and seckincs for seconds. Duncan's use of capitals is unstable, and suggests he was not sure of the rule for capitals yet. He used them for I, which occurs at the beginning of the sentence, so should be capitalized on two counts. However the reason for his capitalizing Takes and For is not clear. He used a period to separate the two meaning units of his writing. He also used one period at the end, where if he intended to abbreviate seconds to sec., he would have needed another as well to end the sentence.

Duncan's experiences, both his previous timing activities and his present observation could be said to have led to his formulation of these relationships, and his use of language to do so. He was able to represent these ideas explicitly enough to be understood,
especially if the reader knows in general what his experience had been.

**Summary of the analysis of the mealworm texts-in-context.** Although the children's texts varied in their degree of explicitness and elaboration, all of them, even the most sophisticated, were context-bound to some extent. They all rested on a body of common history and experience which did not need to be recapitulated in their texts. They began with what they saw, without first setting the scene for the reader. Within the familiar, understood situation, then, children could venture into individual efforts which were their own, though supported by the larger, unstated "text" of understood meaning - of who and where they were, and of what they were doing.

Individuals, with this support, abstracted their own personal meanings and embodied them in print to their own degree of approximation. Thus children varied in the complexity of thoughts they tried to express (which in any case could not be assumed to define the complexity of thought they were capable of). They varied in the syntactic complexity they controlled. They varied in their use of cohesive devices to link semantically related parts of the text together (Halliday & Hasan, 1976). And finally, they varied in their understanding of and ability to use conventional "concepts of print" (Clay, 1975) or orthographic and other conventions of written text.

The variation among children was accommodated within this observing and writing experience, because individuals were not constrained to fit their productions to standard models of content or form, within set periods of time. Most of the choices children made were theirs, both those concerning the text and those concerning the context.
Within their texts, they chose the ideas they would write about. That is, they chose their particular bit of the selected bits of the world "put in their way" by the teacher. They chose the words to express these ideas, and decided how to represent these words in print. Within the context, they chose among a varied but finite number of possibilities to observe, with whom they would work and to whom they would talk, when to begin their actual writing, and how they would work out questions of shared space and materials.

However, they did not in this event choose which writing materials to use, as observations were conventionally written in thought rambling tablets. They also did not have the choice of whether to observe or whether to write. Both were requirements, taken-for-granted routines. Observing and writing were regular events which the teacher planned, but which children both accepted as requirements and "took on" as ways of fulfilling their own purposes.

Summary of the chapter: text in context, evidence of meaning.

The purpose of this chapter has been to describe specific contexts or "writing events" which gave rise to writing, and to look at the texts which were produced in their connections to these contexts. This description has rested on the earlier account of the teacher's use of the resources of space, materials, and time to shape the dimensions of field, tenor, and mode of discourse. These dimensions as shaped by the teacher were said to provide children with the security of the familiar, while opening to them the possibilities of new, wider experience. The teacher's contextual shaping presented children with clearly structured experiences, and allowed them to draw
personal meaning from these experiences, and to express or represent their meaning in their own, approximate way.

**Specific contexts.** Three different writing events were described: a thought rambling produced in conjunction with a construction project; an article written cooperatively for the weekly newsletter; and observations, written during and after observation, of a group of animals.

All of the contexts described shared the common characteristic of providing familiar aspects in each major dimension of the context, which could be said to support new, more individual ventures into writing. In each case, there was a history of many, redundant, yet varying experiences with content (field). Children had participated actively with friends in these shared experiences over time, making many of their own choices. These experiences became part of the group's common history, which enabled children's individual, often implicit talk and writing to be understood (tenor). Finally, these contexts at some time allowed opportunity for representation and communication in non-verbal as well as verbal modes and in talk as well as writing. In each case, the shaping of one dimension was seen to affect the other two. It is in these interactive relationships that each writing event differed.

**Sean's island story.** Sean invented and structured his island story, without the present support of an item to be observed (like a mealworm), or a past experience to be described (like the donkey). This unfamiliar aspect of the mode of discourse was balanced by two familiar aspects: the many and redundant content experiences in the past which led up to his island invention, and the island construction
itself which embodied his thoughts non-verbally. The unfamiliar aspect of mode was also supported by a familiar tenor, that is, the memory of these shared content experiences within which he and his friends had chosen and carried out their own activities together, and the presence during his oral composition of his good friend John. Finally, the new aspect of mode was also supported by the familiar mode of oral language. It was through the use of oral language, and in conjunction with his island construction, that Sean extended and elaborated his island composition beyond his rather static written text. This elaborated story never was incorporated in the written text, but may have helped give Sean experience in structuring solo narrative (as opposed to collaborative, conversational discourse), an ability required by writing.

George's donkey article. Unlike Sean, George wrote for a distant audience (tenor) about an out-of-sight subject for a formal, communicative purpose (field). Non-verbal modes were not available to support him during his writing nor as a substitute for it or supplement to it.

The potential abstractness of this article writing responsibility was, however, lessened in every dimension of the past and present context. The article itself was but one experience in a series of related experiences about the farm study, and more broadly, of birth and growth. George had had a chance to process this redundant content through active experiences and through talk. He and others had already represented these experiences non-verbally, so that there were pictures, constructions, and toy implements for dramatic play available in the room within which he did his writing. George's
farm trip experience itself, though now only in his mind, seems to have been of a quality of intensity which may have given him a personal purpose and drive to represent it in writing.

These familiar aspects of field were joined by the familiar collaborative tenor of the small group jointly charged with this writing responsibility. A familiar tenor also left many choices to George, while requiring the article to be written. Finally, the unfamiliar dimensions of mode were also mitigated by the familiar mode of oral language, as used by the children during the writing process, and by the teacher in leading and recording the newsletter planning discussion. This latter activity made the structure of content accessible to children, and so related to field; it exemplified the teacher's scaffolding relationship, and so related to tenor. The teacher was also a responsive audience for George's writing. Through this scaffolding relationship (tenor) she supplied the elements needed in using written discourse (mode).

Mealworm observations. This observation constituted the least demanding writing situation for children, as familiar aspects of all dimensions were present. The field of discourse was concretely in front of children, and was characterized by repetition with variation. It was backed by many previous experiences with these and other animals and growing things, which had been jointly experienced by children and resided in their shared memories. The tenor of discourse was the most familiar and informal of the spectrum of tenors observed in the classroom, as a small group and their teacher gathered on the floor around an arena of mutual and engrossing interest. The mode of discourse was therefore marked by interactional language between
intimates, in a concrete situation, and was therefore implicit and context-bound. The new aspect of the mode of discourse which arose built on the presence of interesting, complex phenomena under observation (field), and the presence of interacting friends (tenor). These conditions pressed children to use their language in new ways, with the collaborative support of others who joined in constructing meaning and text. Some of these complex new language uses were reflected in children's writing.

Texts. Within these writing events, varied texts were produced. Some were pale shadows of the meanings which had appeared in children's oral language - Cleo's "A mealworm has six legs", for example, and Sean's brief text compared to his long, oral narrative about Robin the chipmunk. In Sean's case, it was hard to tell where text began and oral context ended. Children's texts leaned not only on oral language but on the physical presence of an object - an island construction, or the animals in the terrarium - which constituted an implicit topic for children, who then wrote their comments.

This contrast in implicitness could be made between children's writing and mature, adult writing. It could also be seen within these examples. Duncan's text "I think it takes 2 seconds for the toad to eat, and the chameleon 30 seconds" is certainly less explicitly detailed than is Don's elaborated description of the chameleon's eating. However, implicitness is hard to estimate. For example, each piece of mealworm writing has a different intent and focus - catching behaviors, swallowing and chewing behaviors, motor behaviors - and so while they all concern a common topic, the content of their comments
is different and therefore not comparable. Each therefore could be said to be quite self-explanatory of its own focus.

These independent ventures into the formulation and expression of personal meaning were supported by a body of shared experience. No one piece of writing said it all, either in the sense of recapitulating the total situation so that a distant stranger would understand, nor in the sense of capturing all the possibilities of content or focus inherent in the activities. However, each piece of writing contributed to the whole, and was so received, as part of a "collective enterprise," by which many formulated for themselves aspects of knowledge based on their own experience, and thereby actively and cooperatively "created culture" (Bruner, 1982).

Meaning. It can be assumed that neither children's oral nor their written texts revealed children's total meaning, and in general that personal significance will always be publicly unknowable. Sometimes, glimmers appeared in children's oral language, conveyed through the quality of their speech as well as through their words. On the other hand, a fullness sometimes appeared in their writing that had not been observed before in their talk. A "formula" such as the following can do no more than suggest a broader interpretation of the sources and indications of that meaning:

Meaning = written text + spoken text + concrete setting + non-verbal representations (gesture, dance, drama, art, music) + implicit, unstated shared background of experiences and assumptions
Yet, in spite of the difficulties of knowing the sources and representations of personal meaning, it may well be that the shaping of the context enables children to develop personal meaning which they are then moved to express. This development of personal meaning may thus be the key to motivating children's transition into new experiences, ideas, and ways of representation, including their transition to written literacy.
CHAPTER VI

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Introduction to the Chapter

Chapter Six will review the nature, purpose, rationale, and methodology of this study of the context of children’s writing. Themes and generalizations which have been made in the study will be summarized, and a theoretical framework proposed. Finally, implications for ways in which this framework might be applied will be suggested, along with suggestions for research.

The Nature and Purpose of this Study

This descriptive, naturalistic study of writing-in-context, was carried out in a first and second grade family-grouped informal classroom. Materials were gathered over forty-five days of participant-observation, from the spring of one year through the spring of the second. The focus of interest was writing, and its connection and place within the life of this classroom. Therefore, everything within the classroom—things, people and events—was of potential relevance. It was not, however, a question of inventorying and cataloguing all of these things, people, and events, but of finding out how they related to each other. Where, in this network of relationships, did writing fit, both from the point of view of the outside observer and as seen by the children and their teacher? Or, to broaden the question, what was of importance to children and their teacher in this classroom? What did they care about? And what did they think about writing?

The emphasis was thus on the ties which writing might have had with
the context, rather than on the written products themselves, or on writing processes of individuals, except as these products and processes related to that context.

Thus, the goal was to describe the context within which writing took place, and to explore possible relationships between the context and these written texts. Ultimately, the question concerned meaning: what meanings were developed through the shaping of this particular context, and how did children represent this meaning? What was the role of writing in their representations of meaning?

Relevance and Significance of a Study of Writing

Both from a practical and a theoretical point of view, a study of early school writing is relevant at this time. Writing is a topic of public concern, as performance levels dissatisfy educators, employers, and taxpayers, and as causes of the problem are sought.

However, attitudes differ toward the purposes of writing education. For while functional levels of literacy are commonly agreed upon as minimal goals, others see writing from a broader perspective. Minimum levels of writing abilities, while necessary for individuals to meet requirements of society, do not make the potentially greater power of writing available to its users. Many believe that writing can do what speech cannot, as writing enables people to represent their experience objectively to themselves, discovering their meanings through the process of writing. Thus people are able to examine this meaning, and so transform it. This use of writing as a tool of thought could be construed as essential to an educated citizenry, one which controls their societal institutions rather than being controlled by them.

While some question the claim that writing uniquely enables this kind
of thinking, there is consensus that the power of written literacy is considerable, both in thinking and in communication. Written ideas can be independent of the limitations of space and time, and this can have a different kind of influence than that of ephemeral speech.

The recent concern for inadequacy in writing abilities has led to atheoretical attempts to raise standards and spur achievement through competency testing, and to ensure learning by teaching testable, isolated elements of the writing system out of context of use, through a "back to the basics" approach. Hence, while it now appears that early language is learned through interactive use in familiar social and physical contexts, with all their complexities and lack of control of scope and sequence, these understandings are not usually extrapolated to school programs for language learning.

This study, therefore, has looked at an area in which there is a commonly acknowledged need for improvement, both in narrowly conceived goals of functional writing and in more broadly conceived abilities of writing in order to create, formulate, and transform meaning. Writing is also an area in which what is known about language learning, and about language itself, is not yet reflected in institutional provision for theory-based practice.

Research Base for This Study

There is a growing body of research which can furnish a base for studies of writing in context. Research within several areas did indeed shape this study.

The writing process. First, there is a more complete understanding of the writing process itself. We now have a greater appreciation for the many and complex decisions which must be made simultaneously
by authors as they write, from the marks they make on the page to the thoughts they embody in inner speech and then transform to speech or writing for others (Vygotsky, 1934/1962; Moffett, 1979).

Development of writing. Next, there is research which bears on the development of this writing process by children. Most generally, development of language processes are now seen to be accomplished by children themselves, who construct their own language systems on the basis of regularities they intuitively perceive in what they hear. Their constructions are then modified as they revise these systems, gradually bringing them into closer approximation to an adult model. The work of the sixties documented the details of children's learning of the forms of their language (Brown, 1973). The seventies carried this work forward by broadening it to explore children's development of the functions of language - how they learned to use language for an increasing range of purposes (Halliday, 1975), in ways appropriate to various contexts (as summarized by DeStefano, 1978, pp. 104-106). The seventies also saw advances in our understanding of children's construction of their own writing systems, as they moved from a global awareness of the functions of print (Harste, Burke, and Woodward, in press), to a progressively refined control of print features, and as shown by their spontaneous practice of principles of English writing conventions (Clay, 1975) and their invention of ways to spell English words (Read, 1975).

Context-dependence. This emphasis on function leading development of form has led to an increasing recognition of the dependence of this constructive process on the context. The context is, of course, linguistic, as children infer characteristics of their native
language, from the speech and print they see and hear, practicing and revising their hypotheses with further contextual information. However, context is now expanded beyond language to include paralinguistic features of pitch, stress, and juncture, and non-verbal means of expression (Cook-Gumperz, 1975). It also includes familiar activities in here and now settings, shared with familiar people. The combination of social interaction and interaction with the physical environment develops meanings which the child uses to interpret others' messages. These meanings also give rise to children's own messages, as they create their own forms, and then take on forms from the adult language to express their meaning (Halliday, 1975).

The role of the adult. This view of the language learning process-in-context emphasized the role of the adult in enabling children to construct these oral and written language systems, so that by school age, they have basic control of the forms and functions of spoken and written English. Studies of early language development detailed the provision of shared, practical activity (Wells & Nicholls, in press), and collaborative text-building, or scaffolding (Ratner & Bruner, 1977). More generally, the theories of Vygotsky (1978) also suggested the support for individual, cognitive learning that comes from culturally developed tools within a scaffolding "zone of proximal development".

The question arose as to whether the process of written composition might be similarly scaffolded by adults for young children. Did teachers bring about experiences which led to the development of shared meaning? Did they assist children in processing and representing this experience, scaffolding their efforts to verbalize and transcribe their ideas in print? How were children helped to become independent
writers, using writing for a range of purposes and addressing a range of audiences?

These questions might be illuminated by looking for parallels between the events of early language learning and those of learning to write in school. The new view of early writers emphasized their powers to construct and progressively refine their own systems within contexts which gave those systems purpose. It is because a study of those contexts would seem to be appropriate that this research has taken a broad approach to writing.

Developments in linguistics. The focus on writing in its context is related not only to the work on early language learning, but also to the change in the field of linguistics itself. Linguistics had gone beyond a focus on form - phonology, syntax, and semantics - to include a focus on use - pragmatics within social contexts - sociolinguistics. It had moved beyond the sentence level to levels of structure in connected discourse, and had asked how speech acts and events which make up this discourse functioned in the setting. It had moved beyond a search for dependable correspondences between formal structures and referential meaning, to a more complex understanding of the relationships between what is said and what is meant. It also now recognized a wider range of communicative resources which people use to formulate and interpret meaning, that is, the non-verbal as well as verbal modes of communication.

This expansion of the content of linguistics placed new importance on the contexts of language use, as an essential part of the language-using process. The contexts for speaking and writing have increasingly been understood as affecting the character of the language produced
within them (Halliday, 1974, Hymes, 1972). Those culturally predictable relationships have been described systematically by sociolinguists, using concepts such as register to specify major contextual dimensions of the activity (field), the role relationships (tenor), and the language communication channel (mode) (Halliday, 1974). Language was seen to vary not only from one region or social group to another, but within individuals, according to situations of their language use. Thus registers varied, for example along dimensions of informality, or implicitness, according to the roles of the participants, the nature of the event, and the role of language in the whole situation. Language choices made by speakers responded intuitively to these register characteristics of the context.

A language theory large enough to include the context in a constitutive way was called for by Hymes (1972) and Halliday (1974), among others. The stress on contextual meaning was also found in Bernstein's work, as he held that social meanings inherent in certain contexts would call for certain kinds of language use (1971). The classroom context, therefore - its role relationships, its activities and experiences, and its available means of expression, was seen to develop certain meanings, and call for certain kinds of language. Children abstract rules for these classroom contexts (Cook-Gumperz & Gumperz, 1978, Green & Wallat, 1979), and apply them to actual events, using interpretive procedures and information from several, non-verbal sources to construct interaction (Cook-Gumperz, 1977). Their learning of these social meanings and of language goes on simultaneously. For example, the communication network, as shaped by the teacher, influenced the meanings children would learn (Barnes, 1976). Similarly,
it was found that children frequently set aside their own knowledge and experience in order to help the teacher fulfill his or her agenda of predetermined content (Edwards and Furlong, 1978). The control of meaning through the teacher's use of power (tenor) thus affected the content learned (field) as well as the text produced.

Home contexts and school contexts. With an understanding of the sensitivity of language to total situation came concern that within the new school situation, children would be unable to use their familiar, practiced language, and would find different meanings than those of their home context. This would be particularly true when home and school cultures and language variety were also different (Cazden, John, and Hymes, 1972). The ultimate responsibility of the school was to move children to the point of using language out of particular contexts (Cook-Gumperz, 1977). However, the immediate challenge was to honor the culture and language of children, while helping them make the transition to the new culture and language of school and society (Bernstein, 1971, Hymes, 1972). This balance between familiar links and new opportunities is stressed by the Rosens' (1973) description of British primary school practice.

Recent research in writing has reflected these developments in linguistics, especially in their new emphasis on functions (Britton, et al., 1975; Harste, Burke, and Woodward, in press). There is also growing interest in the context for writing. For example, studies have identified audience and function as important contextual characteristics which could be linked to the production of meaningful writing within a classroom community (Florio, 1978; Florio & Clark, in press). Thus, the emphasis is on the contextual characteristics giving rise to
communicative language rather than language used to learn. D. Graves (1981) has called for more research on the context of writing, but seems to maintain a focus on the writing child, while searching for related and detailed information about the process and circumstances of the child's writing, including the lines of communication in and beyond the classroom. His view of context is different from that of this report, which has attempted a comprehensive characterization of the meaning underlying the classroom community, with writing in the perspective of the whole.

The purpose of this study has been thus to describe the place of children's language, and particularly their writing in the classroom context, as shaped by the teacher's decisions. The first goal was, therefore, to describe the context - the underlying meanings which characterized the classroom community, as expressed in dimensions of field, tenor, and mode of discourse.

Rationale for Methodology

Because the rationale which guided this study saw context as informative rather than as an enemy (Mishler, 1979), the research intention was to observe writing in its context, undisturbed. The methodology chosen was a naturalistic one, which sought to minimize intervention and artificial elicitation. Thus, children's usual way of life was not unduly disrupted. By studying the class naturally, the perceptions and meanings, as well as the actions of children and teacher could be observed by gathering and comparing information from several sources, over a period of time.

Ethnographic methods borrowed for this study fell into a sequence of overlapping phases, beginning with the articulation of the research
question. This articulation process continued throughout the research. The gathering of materials by the researcher was concomitant with their analysis, as inductive observations interacted with pre-study theoretical biases. In this way, themes or categories for organizing materials were "caught" (Overholt and Stallings, 1976), and were modified with further observation and analysis.

The Study

Duration. This descriptive study of an informal, family-grouped first and second grade classroom took over three years, from the initial selection of the setting to the completion of the report. Within this period, participant observation was carried out for 45 days during parts of two school years.

Selection. The classroom, one of a group of informal classrooms offered as an option to parents within an affluent suburb, was selected for several reasons. First and second graders were still in the beginning stages of literacy learning, and would exhibit a range of development, especially in this family-grouped organization. There would be no striking cultural differences between school and home to obscure this development. It was known ahead of time that children in this classroom did use productive language - both speaking and writing - as a matter of course, and so there would be natural phenomena to observe.

Entry and establishment of role. The researcher was able to become a participant observer with ease, building on a familiarity with that kind of setting, from past experience as a school child, then as a teacher, and finally as a graduate student and teaching associate. Once established in the classroom, she was not an object of great
interest to the children, nor did she stand in the way of the teacher and student teacher, who were cooperative and interested, but went about their own responsibilities in a natural manner.

Collection of materials. Primary reliance was placed upon notes which were made in the course of observing, and then later typed, and in the process, clarified, amplified, and reflected upon. These notes ultimately became the materials of the report, but they also were used to work out both research plans and analytical categories.

Photographs were taken and were used as a basis for conversation with children about their classroom. They also were used in analysis, as they formed a record of 242 photographs which could be surveyed to discover typical groupings of children and their teacher.

Audiotapes were used for interviewing and for recording whole and small group events. Children's conversation about photographs was audiotaped, as were many teacher interviews. Whole group, teacher-led events were taped, as were small group events with and without their teacher. These latter were the most difficult to transcribe, but were also the most informative.

Other, unrecorded interviews were held with both teachers and children. For example, children went through and explained the contents of their "dishtubs". They were also asked what they liked to do in their classroom.

Finally, collected materials included children's writing which was borrowed for photocopying and immediately returned, as well as donated original and group charts. Also of importance were weekly newsletters, both children's drafts and the finished duplicated issue.
These were used to document the progression of theme studies from one year to the next.

**Analysis of material.** This analytical process began with entry into the field, and continued through the final writing of the report. Reflective comments were made in the notes as recurrences were noted and themes gradually identified. At the end of the first spring of observation, and analytical report was written; at the end of the second and final spring, an outline was drawn up. Following field work, the participant observation notes and audio transcripts were reviewed and the audiotape transcripts edited. Four photocopies were then made. These were cut apart and placed in 62 categories based on the outline. Though the relationship of these categories had to be revised in the process of analysis, the individual categories themselves continued to be used. Having multiple copies of the material permitted multiple categorizing, as any one item would often belong in more than one category. Assignment to these categories was a matter of the researcher's judgment.

In addition to the categorization of materials from the notes and transcripts into these 67 categories, there was some counting. Photographs were divided into groups according to whether they showed children alone or in groups, and close or distant from their teacher. Other counting was done in the process of interpretation and writing, to be described below.

**Interpretation and reporting of findings.** The process of writing was also one of continued analysis, as the categories were searched for examples which could illustrate major and minor relationships.

The first framework used, that of space, materials, and time had been
chosen intuitively, while the second—field, tenor, and mode of discourse, was borrowed from Halliday, 1974. There was no intention to account for all the data, so that selection had to be made of examples to fit generalizations at various levels. In the course of selecting, the materials were surveyed, and the overall analysis into these categories tested.

During this phase of interpretation and reporting, there was also some use of methods which did not rest so heavily on the researcher's judgment. First, a sampling of the first 12 of 41 mornings was analyzed for its pattern of schedules. Second, all instances of certain categories were surveyed—the photographs, the concrete experiences available, the mention of theme studies within newsletters, and the duration of all farm projects. Finally, there was some use of established category systems to characterize selected parts of the collected materials (Britton, 1970a, Halliday, 1969).

The intention of this analysis had been to explore possible ways of looking at the talk and writing in schools, along with the other, substantive goal of description. Hence, the analysis is characterized by a variety of devised and adapted methods, rather than by a consistently applied method in its pure form. The primary method was intuitive, as categories were designed and then filled by application of the researcher's judgment. Through the process of writing, itself an analytical process, relationships between categories were clarified and adjusted.

Themes and Generalizations

This study has sought to describe the context for writing in order to explore these two questions, as asked at the end of Chapter 1:
1. What are the contextual characteristics which create meaning in this classroom, and thereby support children as they begin to structure their thought into spoken and written language?

2. What are the contextual characteristics which support children in their development of more explicit, less context-dependent language?

In other words, how does the context assist children's development in language use and writing? Themes and generalizations which were formulated and exemplified in the course of analysis will now be presented, as a summary of a framework of relationships which is being proposed as a way of describing the context of this classroom.

The first group of themes relates to the teacher's use of space and materials, and of time. The second group of generalizations summarizes her shaping of the dimensions of field, tenor, and mode of discourse, including their interaction. The third group will concern text-context relationships.

I. The teacher's use of space and materials, and of time.

The teacher's use of these physical resources of space, materials, and time put into effect her decisions about the field, tenor, and mode of discourse - the content, the relationships, and the available channels of communication and representation. Thus, the meanings of the context, as embodied in the dimensions of field, tenor, and mode, were expressed in tangible ways through the shaping and provision of space, and the use of time. The use of these resources thus did not determine, but allowed and promoted a certain kind of life and language use.

A. Four themes for space and materials.

Description of the classroom setting. The classroom space had been shaped into small, specialized areas by means of conventional and
improvised furnishings, domestic as well as institutional. Appropriate materials were available for independent use in these areas. Plants, animals, and children's work were especially evident. This use of space and provisioning of materials was related to children's classroom experience in the following ways:

Theme 1. A family-like way of living, and intimate, rather than distant relationships with people were encouraged by this particular use of space.

The family-like way of living encouraged by this use of space included closeness between children, and between children and their teacher. It encouraged and allowed children to work together in pairs and small groups, within which it was natural to talk together. These small areas provided a variety of kinds of working places which children could choose, and gave reasons for children to move about the room, selecting materials and activities from specialized areas. Since this space was divided into many small areas, and provisioned with many accessible materials, the choice of where to be and what to do was left to each child, within the understood limits of appropriateness. Thus, many decisions were of necessity in children's hands within this physical arrangement.

Theme 2. This use and provisioning of space allowed and promoted an experience-based curriculum, in which children selected, acted on, and interpreted their environment.

Within this environment, the teacher had provided interesting objects and creatures which children could experience directly. She organized their activities so that they had opportunity to re-experience, to talk and think about experiences, and then to represent them using a variety of materials. The teacher influenced children's experience with content by the kinds of activities she planned as
allowed by this shaping and provisioning of space. Within the activities themselves, however, children's experience with the objects and creatures of their environment was direct and personal.

Theme 3. **The organization of space and materials was clear and understandable, enabling independent use by children.**

The teacher had developed a differentiated environment through her use of space and provision of materials. Areas themselves were specialized, and contrasted with each other in the nature of their furnishings and provisioning, both of which suggested their function. Materials within areas were not only accessible, but they were organized in a way which reflected the relationships of parts to wholes. It is suggested that this clear organization not only helped children act independently, it also helped them to develop classification schemes of materials, activities, and ultimately, domains of knowledge.

Theme 4. **The nature of space and furnishings was adaptable, allowing flexible use by teacher and children.**

Although this classroom had been clearly organized into differentiated areas, these areas and the furnishings in them were adaptable, and were in fact used flexibly within limits by both teacher and children. Specialized areas had a range of actual uses beyond those they were designed for. Unspecialized areas such as the rug were naturally versatile in function. Flexibility was as important as clarity, allowing adaptation of the physical environment in response to changing needs of the children and their teacher.

B. **Four themes for time.**

Description of events. The ordinary, recurring morning events were arrival, rugtime, worktime, recess, clean-up, and lunchtime.
Within rugtime and worktime were events which involved reading and writing: reading conferences, newsletter planning and writing, writing evaluations, writing thought ramblings, and observing and writing observations. Each of these events had its own familiar set of characteristics. In spite of variation in the position of these events during the day or week, and in their actual content, children recognized these familiar characteristics which guided their appropriate participation.

Theme 1. A family-like way of living, in which individuals set their own rhythms and mode of activity, was allowed by provision of large amounts of time.

The provision of large, flexible amounts of time for all events, and especially for worktime, allowed children to regulate their own use of time, within overall teacher-determined limits. They alternated rest and activity, solitude and sociability, and involvement and disengagement, according to their own needs. As in the case of space and materials, these many decisions about the uses of time were delegated to children.

Theme 2. The provision of large amounts of time allowed and promoted an experience-based curriculum, in which children had time to act on, process, and represent their experience.

The large amounts of time provided for worktime and other events made possible an experience-based curriculum, with its three, overlapping phases of experience, processing, and representation. Experiences over time could be concretely encountered by each child personally; they could be dynamic since there was time for them to develop. There was also time for processing through talk, writing, further experience, and play, both independently and under the teacher's guidance. Finally, there was time for children to plan and carry out
representations of their own meaning, solving their own problems and making their own choices.

**Theme 3.** The characteristic features of various events were clear, enabling independent, appropriate participation by children.

Repeated events, or "contexts of situation," were observed to have characteristic clusters of features which children recognized as belonging with that event. Externally observed interactions, acts, places, and objects had inner reality as roles, routines, settings, and paraphernalia (Frake, 1964) as evidenced by children's observed appropriate behavior in these different events. In spite of differences in the form and content of these repeated events from time to time, invariant features were recognized. Worktime, thus, was marked by self-directed roles, by varied routines, by dispersed settings, and by varied, self-chosen paraphernalia. Rugtime, on the other hand, was marked by teacher-directed roles, by teacher-selected routines and paraphernalia, and by concentrated, rather than dispersed setting.

**Theme 4.** Clearly-structured events were carried out flexibly, with variation in position in the day, in duration, in content and form, and with flexible transitions between events, allowing flexibility in children's behavior.

The familiar, clearly structured events which recurred within this classroom were not identical, but varied in position in the day and week, in duration, and in form and content. Furthermore, there was variation between the events themselves, as transitions from one to the next were flexible, differing for each child. These variations in the events themselves did not prevent children from recognizing and participating independently and appropriately in them. The flexibility between events allowed approximation by children as they fit their own rhythms to that of the group.
Summary of themes for space and materials, and for time.

There are certain parallels to be noted when comparing these two sets of themes. The first themes both emphasize aspects of the physical context which are familiar to young children - small areas, domestic furnishings, accessible materials, and large time segments, flexibly linked. Within these familiar characteristics, children made their own, self-regulating choices. The second themes both described an experience-based curriculum which was enabled by materials directly experienced over time. The third themes characterized the organization of space, materials, and the events of time as distinctively clear, enabling children's direct, independent use. The fourth themes noted the flexibility of actual use of space, materials, and time by both teacher and children, as the rhythms and needs of individuals and occasions were accommodated.

II. The teacher's shaping of the dimensions of field, tenor, and mode of discourse

The teacher used these resources of space, materials, and time to implement the decisions she made, both long-range and immediate, both conscious and intuitive. Her decisions were analyzed using Halliday's (1974) terms, field, tenor, and mode of discourse. They concerned the curriculum - the teacher's selection of content, and of ways in which children would experience it. Field of discourse was used for this kind of decision. Other kinds of decisions concerned interpersonal relationships within the classroom community - the teacher's use and sharing of power, and the degree of intimacy and informality she established, or the tenor of discourse. Finally, decisions were made which affected the ways in which children could use language and other
means of expression, non-verbal as well as verbal. These determined the mode of discourse. Taken together, these decisions created a context which was characterized by certain meanings, and their meanings in turn had consequences for the language produced.

Each dimension of the context was analyzed to identify aspects which were homelike and familiar, and those which were new to young children, introducing them to unfamiliar content, more complex social relationships, and more abstract; independent ways of representing meaning. These three aspects were formulated by a process of inference which combined observation of the people in their setting with interpretation of what they said to each other and to the researcher. The distinctions between familiar and new aspects of each dimension of the context will be used now to organize the generalizations which this analysis produced beginning with the dimension of field.

A. Generalizations about the teacher's shaping of the field of discourse.

1. Familiar characteristics of the field of discourse: Content was familiar and was experienced in familiar ways.

   a) Content was concretely present in time and space.

      Content was directly accessible to children, and could be actively experienced through sensory modes.

   b) Content was redundant.

      Themes were repeated from year to year, and were linked to other themes within the year. Many, varied experiences with the same content were provided within themes. Content was also experienced in routine ways. This redundancy of content and process enabled children
to abstract ideas and relationships because they were predictable.

c) Content was integrated.

Content was drawn from many subject matter fields, and involved the use of several language and mathematical processes. Children encountered content more nearly as it occurred in the world, as they had in early childhood.

d) Content was encountered actively and purposefully.

Children explored content actively, as they had in early childhood, for their own purposes or those they had "taken on" from the teacher. The teacher predicted those content experiences which children would take on as their own, and arranged space, materials, and time to allow this. Children's involvement showed both in their required and voluntary activity.

2. New characteristics of the field of discourse: The teacher extended children's experiences toward the new, while keeping connections with what was familiar.

a) Here and now content was extended toward more remote times and places.

The teacher introduced content which was more abstract in its removal from present time and space, as well as conceptually more abstract. She connected this new experience to familiar past content, and to children's present concrete activities, thereby scaffolding the creation of overall coherence of content for children.
b) **There was variation and change within redundancy and repetition of content.**

While there was redundancy and repetition in experiences, each was unique. In this novelty within similarity, there were elements of unpredictability. Events of growth and change were naturally suspenseful as they unfolded. Themes were not repeated in literal exactness, but varied in detail from year to year. Within years, themes were also different from each other, even though linked by common strands. The structure of story as experienced through literature was inherently suspenseful, as were many routines of classroom life. Through interaction, the teacher build on the curiosity children had to know who was going to do what.

c) **There was a trend toward formal organization of content.**

Children increasingly encountered the world in terms of formal categories of knowledge, as they attended directly to processes such as handwriting, spelling and mathematics (while also applying them in the context of theme studies). Categories of knowledge were marked by signs over specialized areas, and themes such as "magnets and electricity" were named, suggesting that the world could be examined from one point of view at a time. Children's language showed this awareness, while maintaining a strong interest in activities and friends.
d) More abstract, less physical ways of learning supplemented active, direct, sensory learning.

Children encountered content less directly, through hearing and reading more language. They were helped to process and analyze it more systematically through the use of language. They used language and especially writing as a new way of representing this experience. This introduction of new ways of learning was supported by the continuation of familiar ways - by the provision of related concrete experiences and objects, and by the making of connections with familiar, past shared experiences.

B. Generalizations about the teacher's shaping of the tenor of discourse.

1. Familiar characteristics of the tenor of discourse: Children related to their teacher and to each other in familiar, homelike ways.

   a) The institutional organization of this classroom was familial in that it included both first and second graders.

   The range in ages meant that there were always children with more experience who could be resources within the whole class. Over the two year period, the teacher had opportunity to know children well, and children to learn from this setting.

   b) The teacher's many roles were quasi-parental.

   The teacher was like a parent because she provided security both by being the authority in charge, and by being the intimate support or "scaffolder" of children. Her authority was seen when unspoken rules were broken, and children were held to clear consequences.
It was seen in the many, unilateral decisions she made about content, learning process, schedules, and children's requirements. This authority was expressed and softened through the paralinguistic qualities of her voice, and the tag question form of her requests, as she seemed to invite children to join in an enterprise, rather than simply directing them to a task.

The teacher was also an intimate supporter and scaffolder of children. She shared their experiences and helped them express their meanings which grew out of these experiences. She supported them in their relationship to the larger school institution. She introduced them to new content and new ways of learning, often through her words. At the same time, she gave nonverbal support, by her closeness and by the quality of her voice, which could be interpreted as conveying security while encouraging new kinds of learning, such as writing reports and articles.

c) The teacher's beliefs and expectations were quasi-parental.
The teacher accepted personality differences among children, and believed that their rate, manner of development and performance level varied. She thought these young children were not yet capable of abstract thinking.

Thus the teacher had different expectations for different children, for the class at the beginning of the year, and for each class as compared with those of other years. She made provisions for these differences
through multi-grouped instruction in math, spelling, and handwriting, and an individualized reading program. She also planned for a breadth of choice within each theme study. She adjusted the amount of responsibility given to groups and individuals according to what she thought they could manage.

d) **The teacher encouraged the development of a family-like sense of community through long-range actions and actions in the immediate situation.**

1) **The teacher planned for varied forms of cooperative relationships.**

These forms included instructional groups, groups called for special purposes or events, specific cooperative activities organized and required by the teacher as part of theme studies; cooperative activities children were invited to participate in; group activities children voluntarily engaged in; and groups of children helping each other. Thus they ranged from required to voluntary. Through these varied, cooperative associations, children had ties with many others, as membership of pairs and small groups changed and overlapped.

2) **The teacher provided social as well as active, concrete experiences which became part of the shared, taken-for-granted history of the group.**

Children's new experiences with content occurred in interactive settings, so that these experiences became part of the common memory or history of pairs, groups, and the whole class. Children's language use could build on this shared understanding,
without re-creating the body of meaning on which their language rested. Their group experience and their individual experience within the group became the content for their language use, as it was discussed, written about, and thus remembered, understood, and extended.

Evidence for the importance to children of their past shared experiences appeared in their response to the people and activities in photographs. It was also shown by the value placed on children's work by teacher and children.

3) The teacher made verbal connections to past experiences and ideas of individuals and of the group.

The teacher's discussion with children about their past experience helped them remember it in more vividness and detail. Her mention of individuals' part in the experience, and of their ideas, gave them recognition as a part of the group. Her reference to children's ideas showed that these ideas could be built upon by others, while at the same time, making new content personal. In general, these verbal connections made during her interaction with children helped to develop a network of related ideas and a sense of community.

e) Children accepted the teacher's underlying authority.

Evidence that children took the teacher's authority for granted came from their participation in classroom life
as she had organized it. This also showed in their comments, citing her authority as the source of classroom rules and requirements.

f) **Children regulated their own activity.**

Within the limits as set by the teacher, children were free to decide the details of their own activity, especially during worktime. Their choices and the resulting approximations were acceptable, though not institutionally uniform.

1) **Choosing what to do, which to do, or whether to do it was often children's choice.**

Some activities were required, but allowed choices within them. Some activities were suggested, particularly those that related to theme studies, and could be chosen. Some seemed wholly initiated by children. In every case, children's own ideas and words were allowed.

2) **How to work was often (though not always) a choice.**

Children decided how to plan and carry out work. They were responsible for representing their own experiences, drawing on earlier, teacher provided experiences with materials and techniques. They were given more direct guidance within certain new experiences in which procedures were important, such as weighing eggs.
3) **When to do an activity was usually children's choice.**

Within worktime, the ordering of activities was basically a responsibility of children. However, certain kinds of work were required to be finished first, especially writing which had been started in rugtime planning or observing, or specific work which individuals needed to finish. In practice, the details of each child's accommodation to these requirements varied, as flexibility in conformity was allowed.

4) **Where to work was usually children's choice.**

Children could find their own working places, using areas and furnishings in the room flexibly, within limits of appropriateness. They were also free to move about during an activity.

5) **With whom to work was also children's choice most of the time.**

Children could usually choose whether to work alone or with others. The teacher did decide on or at least oversee children's social organization for the purpose of certain experiences, such as newsletter article writing. She also did intervene in instances when children lacked control to manage their own choices of social situation.

2. **New characteristics of the tenor of discourse: Children related to their teacher and to each other in new and different ways.**

a) **The school was a larger, more complex institution than the home or the classroom.**
As members of this class, children were also part of a school, and participated with others in activities beyond their own classroom group. Thus they also had to conform to schoolwide regulations and policies.

b) The teacher's roles were different from that of a parent. The teacher did not act with parental intimacy. Instead while maintaining quasi-parental support, she extended her range of behaviors to include more formal roles.

c) The teacher's beliefs were different from that of a parent. The teacher, like parents, stressed responsibility while providing security. The teacher, however, may have been ahead of parents in the level of her expectations for children's independent, responsible behavior. She believed that the development of independence and responsibility was an important goal. She expected children to be responsible for choosing activities and materials, to work out interpersonal relationships, and in general to take responsibility for their actions. In this, they were expected to act with reference to the group, rather than only to their own, inner demands.

d) The teacher extended children's sense of community through long-range actions and actions in the immediate situation.

1) Cooperative ways of working were used within a larger, more diverse and complex setting than a family.

Within the familiar organization of pairs and small groups, children had practice in relating to others, sharing space and materials, coordinating their use
of time, and coping with their own conflicts. In addition, through management systems, children were enabled to take responsibility for many routines of classroom life.

2) The teacher's provision of shared experience supported representations by individuals of their own, particular experience.

Individual meaning was built upon the meaning of larger, commonly understood meaning. Expressing this meaning individually, especially through writing, was a new kind of social experience (tenor), and involved new content (field) and new uses of language (mode).

3) The teacher's interactions with children encouraged them to take responsibility within a larger, more complex community.

The teacher rarely intervened in disputes, but was heard to give children the responsibility in working these out. She also encouraged them to take the initiative in solving problems and remembering their responsibilities.

e) Children experienced the wider authority of school and group.

Children had to learn appropriate social and verbal behavior to use in relating to others within the larger school community. They had to learn how to manage within expectations which were sometimes different from those of their own classroom. Within this classroom they also had to learn to behave with respect to the authority of the group. They were expected to take responsibility
for maintenance of group standards as the "way things are done", rather than to rely on the teacher's enforcement of these tacit rules.

f) **Children had increased responsibility for their own behavior in relationship to the group.**

Children had to adapt their behavior to external demands of others. This contrasts to the self-regulation and approximation permitted by the flexible nature of the context. New, unfamiliar constraints were felt through the larger and more diverse nature of the group, with whom resources had to be shared, and the teacher's expectation of responsible, independent choice and of cooperative behavior within groups.

C. **Generalizations about the teacher's shaping of the mode of discourse.**

1. **Familiar characteristics of the mode of discourse:** The mode of discourse was like that used in preschool years.

   a) **The functions or purposes for children's expression were familiar to them.**

   1) **Language was embedded in the concrete situation.**

      Some of children's language referred implicitly to what was going on in the setting which would have to be known in order to understand this language. Children's language also was embedded in the sense that it was close to its concrete referents. This seemed to enable children to overcome the abstractness of talking and writing.

   2) **Language was mixed in function.**

      Like language of early childhood, children used language for their own purposes, and thus did not
follow requirements for specialized types of writing. Their writing thus contained both transactional language, or language to get things done, at various levels of generalization, as well as elements of poetic language which showed an intuitive interest in form. In addition, expressive elements often appeared, and indicated the importance of the individuals' role in and feelings about their experience. At a more global level, children often seemed to use language for its own sake, in order to make something or for the "de-light of utterance," rather than for communicative purposes.

b) The audiences for children's expression were also familiar.

1) There were audiences for children's talk, writing, and other representations.

Familiar audiences - friends, teachers and other school staff, and parents - were available as audiences for children's talk and for their writing, during and after the composition process.

2) Audiences collaborated with children in constructing their text.

As in a conversation, the teacher and other children contributed to construction of the child's text. This was possible because they had shared experiences with the child. They collaborated in construction of oral texts, during the writing process, during
the sharing of oral and written composition, and in the contributing to group charts.

c) The teacher responded to children's work supportively and flexibly.

1) The teacher and the children shared an interest in children's work.

The teacher and children both focused on the "it" of the discourse triangle (Moffett, 1965, 1968), that is, on the content of children's language, rather than evaluatively on the child as performer. Children's ideas were built on, as contributing to a jointly constructed study. When the teacher focused on the form of children's writing, the form could be considered as content, and the comments informative rather than evaluative.

2) The teacher collaborated in helping children express their meaning.

The teacher took dictation from children, often at the beginning of the year, sometimes leaving room for them to copy her writing underneath. She also talked with them to help them develop their ideas and express them in words.

3) The teacher's display and use of children's work was evidence of her focus on content of common interest.

She valued children's work - their reports, stories, charts, and art work - this indicated a valuing of the class's common experience, and children's work as linked to this shared content.
4) **The teacher had flexible expectations of the work of individuals.**

The teacher accepted the childlike character of children's work - its informal, implicit, expressive nature. She also accepted differences between children's work.

d) **Channels available for children's expression of their purposes to audiences were varied.**

1) **Available channels were broader than words alone.**

Art and construction were natural means for representation, as enabled by the teacher's organization and provisioning of space. Drama and play occurred spontaneously and were also brought about by teacher planning. Writing was thus one of several modes for representing experience.

2) **Talk was also considered valid.**

Talk was accepted as a way of representing experience and contributing to projects. Along with non-verbal modes, it was considered a valid means of sharing meaning with others. Talk ranged from cooperatively structured conversation to instances of solo discourse. It was often only understandable to those who shared its context, but was more explicit in situations which brought about this need.

3) **Writing was also available to children.**

Writing was available to children because they were allowed choices within every aspect of the process.
They selected their own ideas or meanings, wordings, spellings, even invented their own symbols for words or letters, and planned their own page arrangements. They wrote in forms determined by their own purposes. These choices and lack of constraints made writing available and familiar.

2. New characteristics of the mode of discourse: the mode of discourse was different from that used in preschool years.

a) The functions or purposes for children's expression were new.

1) Purposes for language use were more abstract.
Children used language to talk about what happened in the past, what would happen in the future and what would happen at a distance. They also wrote about what was conceptually more abstract.

2) Uses for children's oral and written language were more specialized and differentiated.
Children's writing began to be differentiated in function. They had heard and read many types of writing. Without explicit instruction, they gave evidence of having abstracted features of different types. Examples of types were "reports" and "information books," stories, retold and written; observations, evaluations, thought ramblings (Whose form and function could vary). These different types of writing were brought about by the situation for language use the teacher created.

In spite of the trend toward differentiation,
functions within this writing were often still mixed.

3) **Another new function for children was the emphasis on communication.**

There was new opportunity to speak and write for those who did not share knowledge and background, and thus children were given practice in structuring self-explanatory language. This communicative function of writing placed greater demands on children's ability to structure discourse by themselves than did communicative talk which was conversationally scaffolded.

4) **There was new use of language as an aid in abstract thought.**

Both talk and writing were increasingly used to reflect on and organize experience. Interaction between children and with the teacher brought about language use and necessitated the formulation of thought into words. Among the activities which helped children examine experience were newsletter planning, listing and using theme-related vocabulary and concepts, charting variants of invariant characteristics to literary genre, recording experiments, explaining an unshared experience to others, and writing after various experiences.

b) **The audiences for children's language expression were new.**

1) **External audiences became distant in time, space, degree of intimacy, and extent of shared background.**
New audiences were distant in different respects while still close in others. Parents were physically distant but psychologically close, visitors had been physically present but were psychologically more distant. Often classmates who were psychologically close, had been physically distant from the experience children were sharing.

2) The internal audience of self became important as solo discourse was structured by inner dialogue instead of external collaboration. Children wrote and talked more by themselves, structuring and sustaining their own, extended discourse, and in essence, acting as their own, internal audiences. Certain occasions were required solo writing - thought ramblings, permission letters, observations, and evaluations - while other occasions allowed it - newsletter writing, theme story and report writing. Extended oral discourse was heard during sharing of observations and during folktale retellings. These occasions for solo discourse were supported by a here and now field of discourse, by a collaborative tenor and familiar mode, as there had been a common base of experience and there was help before and response after the writing.

c. The teacher's response, while continuing to be supportive and flexible, selectively encouraged greater attention to language itself.

The teacher selectively drew children's attention to questions of form, using her words and the paralinguistic
qualities of her voice to make rules for language conventions more easily abstractable or discoverable by children. She responded in this way to more fluent writers, often focusing on beginning writers' content. In both situations, her response was to form and content of work rather than to the worth of children themselves.

d) Among the channels available for children's expression, writing was increasingly expected, encouraged, and valued.

While varied non-verbal and oral modes of representation continued to be available to all children, (rather than being "outgrown"), writing was given special encouragement. First, every child had practice using writing to represent experience through required events of thought rambling, observation, evaluation, newsletter, and permission letter writing. Second, theme projects children chose to make were often "written objects" or other objects which included written captions or explanations. Last, written projects were honored by being displayed and read by others.

D. Generalizations about the interactions of field, tenor, and mode of discourse, as shaped by the teacher.

1. The three dimensions of field, tenor, and mode were interdependent, interacting dimensions of the context.

These three dimensions were separate contextual strands with no independent existence of their own. Rather they functioned together, affecting each other as well as the resultant text. In particular, familiar
aspects of one, two, or three dimensions could support new aspects of a third. Thus, for example, abstract content was experienced with others, informally and concretely.

2. Writing as a new mode of discourse was supported by a familiar field, familiar tenor, and/or by familiar aspects within mode itself.
   a) A familiar field of discourse supported children's writing.
      Concrete objects and vivid literary experiences embodied in books were characteristically present, over time, and therefore could be concretely re-experienced. For example, books read to children could be held and reread alone or with others. Various creatures (butterflies, brine shrimp) as well as inanimate objects could be felt, observed and talked about many times. Thus, the experiences which became the content of writing were present during that writing, and in this way supported the more abstract process of writing.
   b) A familiar tenor of interpersonal relationship supported new kinds of language use.
      Children's experience was largely shared, giving rise to interaction within experiences as well as creating a body of common history. Other children and the teacher collaborated during these shared experiences, and before, during and after writing about them, in constructing, transcribing, and responding to meaning.
   c) Familiar aspects of the mode of discourse supported those which were new.
      1. The function of language in the field of discourse was familiar.
Children used writing for familiar purposes, as revealed by the mixture of transactional, expressive, and poetic functions. Their "verbal objects" kept writing closely identified with concrete activities.

2) **The audience, or tenor of relationship was familiar.**

This relationship to children's hearer or reader was close and often collaborative or responsive. The teacher's use of planned and spontaneous small groups encouraged these close, responsive audience relationships.

3) **The teacher was a special audience.**

The teacher too collaborated and responded. She could make explicit shared meaning in order to scaffold children's expression, and could build on children's language, linking it to new meanings.

4) **Many channels were available for representing meaning, among them writing with its familiar aspects.**

Within these many channels, children choosing writing could select their own meanings, words, and methods of transcription.

d) **These new aspects of mode were supported by familiar aspects of field, tenor, and mode.**

1) **Functions of language in the field of discourse were new.**

Functions were more remote in space or time, or more abstract. They were more specialized in type. They served to communicate, and as an aid in thinking.
2) Audiences for language, or the tenor of discourse was new.

Audiences were more distant geographically or psychologically, or they lack shared background. Children became their own audiences, as they held internal dialogue with themselves in structuring discourse.

3) The teacher was a new kind of audience.

The teacher shifted her focus from content to form selectively. She continued to provide supportive and informative response to children's writing.

4) Writing was given a new emphasis.

Writing was both required, encouraged, and valued through use and display, even though other modes of representation continued to be important.

e) Examples of combinations of old and new aspects of field, tenor, and mode which supported new aspects of mode:

1) A small group observation: a familiar field, tenor, and mode a new mode

2) A report from the garden visit: a familiar field, tenor, mode a new mode

3) Little People's Farm thought ramblings: a familiar field, tenor a new mode

4) Permission letters: a familiar field, tenor, and mode a new field and mode

5) Thank you letters: a familiar tenor and mode a new field and mode
III. Relationships between text and context

A. Generalizations about connections with the context: writing events

1. Writing events were embedded in a supportive context which provided clarity and allowed approximation.

These writing events were part of the context of familiar events as shaped in their physical and relational aspects by the teacher. They were not isolated writing happenings. The teacher's role in shaping this context was to structure experiences and materials clearly, while allowing and encouraging children's own construction and approximation of meaning. She also balanced elements or aspects which were familiar with those which were new. Embedding of writing within events was an instance of linking the familiar and the new.

Thus, writing occurred within events which had both a social, interactional aspect and a concrete, content aspect. Within or around these writing events, there was also talk and opportunity for non-verbal representation. Individual writing within these events are supported by one or more familiar aspects in each dimension of the context, either in the past or within the present. These familiar aspects of field, tenor, and mode could be summarized as follows:

Field: Many concrete, related and redundant experiences, as "bits of the world" were directly and informally explored over time.

Tenor: Many social experiences with the teacher and with other children which led to verbal interaction and collaborative construction of oral and written text, and to the development of a shared history and a sense of community; self-regulation within these secure experiences, as shaped by the authority of the teacher.

Mode: Many familiar ways of representing ideas through non-verbal modes and talk as well as writing, in forms chosen by children for their own purposes, and shared with familiar, often collaborative audiences, including the teacher.
2. Writing events varied in their distinctive or invariant features which called for certain behaviors, certain functions of writing, and provided different kinds and amounts of support for writing.

Children learned to recognize the distinctive features of "roles, routines, settings, and paraphernalia." That is, they learned how individuals behaved during certain events, what they usually did, where they were, and what objects they used for each writing event — newsletter thought ramblings, evaluations, observations, and permission letters — in the normal course of interactively constructing these events.

Children also learned that each event tended to bring about certain language functions, which varied in degree of constraint. For example, communicative functions were required to be fulfilled by permission letters and newsletter articles, whereas observation writing allowed a variety of functions.

The amount of support each event provided also varied. Some writing events were more demanding of unfamiliar kinds of language use than were others. For example, writing newsletter articles to communicate to distant audiences about a past, out-of-sight event was more demanding than writing an observation in the often dynamic presence of the subject matter, to be shared collaboratively, orally as well as in writing, with the teacher and friends. Thus, when the writing process was relatively disembedded from the event, it was surrounded by other past, present, and future supportive dimensions of the context. Though all combinations cannot be abstractly summarized, it could be said that certain kinds of support were typical. Past, shared experiences with redundant content prepared for present, individual work, as did concrete objects present in the context which
stood for ideas and past experiences. A scaffolding tenor before and after if not during children's writing helped them order content and use appropriate form, and at times, extend and revise their writing. Interactive oral language was a familiar medium, within which this scaffolding took place.

B. **Generalizations about characteristics of written texts: texts as approximations**

1. **Children's written texts were partial indications of their personal meaning.**

Children selected from personal experience and embodied this selection in writing. Their abstraction from experience into writing was affected by many factors, their own transcription abilities among them. Therefore, their writing could only furnish an indication of their meaning.

2. **Children's written texts varied in the explicitness of their content, and in their formal characteristics.**

Content did not always recapitulate the circumstances surrounding the text, often leaving unstated the experience which other readers in the classroom group had shared, and would bring to the hearing or reading. Part of the content may also have been represented non-verbally or in talk.

Form varied with respect to syntax, spelling, and conventions of writing. It also varied in the use of cohesive devices to relate parts of the text to the whole.

C. **Generalizations about children's meaning: larger than text**

1. **Children's meanings could be assumed to be larger than that revealed by their written texts.**

Children's personal meanings were unknowable in any absolute sense. That part derived from the group's past shared experiences was
predictable and therefore was assumed rather than expressed. That part inherent in the present experience in the context was also assumed and unstated.

2. **Children's meanings were represented in non-verbal and oral ways as well as in writing.**

Children represented meanings in several ways. Human response to experience is broader than that enabled by language alone (Britton, 1970, pp. 278-279).

3. **Children's meanings were the source of their representations, even if the representations did not capture these meanings completely.**

What the teacher did to help children develop meanings gave them something to represent, and therefore something to write about. They selected what was salient for them from their experience, and represented it with means available to them.

**Text, context, and meaning: A chart.** The relationships expressed by the preceding three generalizations are summarized below in Figure 18. The chart as a whole stands for the totality of meaning (which admittedly is indeterminate). It is divided first between represented meaning and implied meaning. That meaning which is represented is considered to be the child's text, whether it is written, oral, or embodied in a non-verbal mode such as gesture, song, drama, construction, or art. That meaning which is implied rather than explicitly represented is considered to reside in the context. The context is viewed analytically in several ways, as it has been in this study. First, the context incorporates what happened in the past and has become the child's shared and assumed history, as well as what is happening in the present within which a meaning is being expressed.
Second, context is composed of three dimensions which together characterize it comprehensively. Field of discourse describes children's purpose or activity - their encounter with content. Tenor of discourse describes the nature of interpersonal relationships - how children relate to each other and to the teacher, in terms of intimacy and of power, for example. Mode of discourse describes the means available to children for representing meaning, both verbal and non-verbal, and the nature of constraints on these means.

The teacher modulates these three dimensions so that the context provides links to the familiar as well as an impetus toward the new. Thus, the teacher's shaping of field, tenor, and mode of discourse in the past and in the present, scaffolds or supports children as they gradually move toward new uses of language.

The general nature of the teacher's shaping is characterized by clarity, which is seen as enabling children to abstract their own meanings from this context, and then to approximate these meanings. Hence, children's texts are called approximations.
## Location of Meaning

<table>
<thead>
<tr>
<th>Represented Meaning</th>
<th>Implied Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text: Approximation by child</td>
<td>Context: Clarity of shaping by teacher</td>
</tr>
<tr>
<td>Written Oral Non-verbal</td>
<td>Present writing event Past shared history</td>
</tr>
<tr>
<td>Field Tenor Mode Field Tenor Mode</td>
<td>Field Tenor Mode Field Tenor Mode</td>
</tr>
</tbody>
</table>

Figure 18. Location of meaning in text and context.
Conclusions: a proposed interpretation

The questions which were asked in Chapter One concerned the teacher's goal to give security to young children while also helping them to independence. First, what created meaning for children, and gave them security and support as they began to structure their thought in spoken and written language? Second, what encouraged them to become independent of this context and to develop more explicit, less context-dependent language?

A first insight into both of these questions came intuitively to the researcher early in participant observation. She discovered that what children really cared about was "doing things with friends", and that the teacher actively promoted the development of this intellectual and social meaning. She provided clarity and accepted approximation by nurturing the development of many systems of relationships, which linked people, ideas, and things to the world. She helped children connect concepts and content drawn from experiences. She also helped them develop ties with each other by requiring and promoting many, overlapping associations. These systems of relationships were developed and maintained over time. The meaning of this system of interrelated dimensions of field, tenor, and mode, as implemented by her use of space, materials, and time, resided in both past and ongoing shared experiences.

This first insight led to the understanding that children and teacher, doing things (field) with friends (tenor) over days, months and even years, were engaged in creating their own culture which they represented in varying verbal and non-verbal ways (mode). Their purposes were their own, or those they had taken on from the teacher.
There was a place for what each did in the texture of the whole, where it was given greater meaning because of its relationships to what others were doing and had done. These systems of relationships the teacher shaped were clear; they enabled children to construct their own approximations.

Children constructing their own approximations were not only helped by the clarity in the teacher's organization, they were also helped by her modulation of familiar and new aspects of contextual dimensions. She kept connections between what was familiar and what was new, scaffolding their new experiences so that they could achieve their own approximations of meaning. In this way, children in this classroom were able to develop personal meaning through their own experience, within the meaning of the whole, through what they did as they created culture together.

This understanding that children develop personal meaning through shared experience, and then create their culture jointly is in marked contrast to a transmission view of education. The latter view assumes children need only to receive and retain the content of culture, rather than to create (or recreate) it through active and interactive experience. Content is presented as formulated by authorities, in logical rather than psychological order, without regard for children's desire to learn alongside others, making and sharing discoveries.

Bruner (1982) discusses the importance of allowing for this joint recreation and reinterpretation of culture. Culture is neither a question of what is in the individual's mind, nor of external social rules, but rather of what people can agree upon through negotiation. Children should be invited to become an agent of knowledge in this
negotiatory, culture-making process. The earlier model of the child as mastering his or her world by representing it is now extended and completed by recognizing the importance of communal activity. That is, the child makes knowledge his own by sharing it with others, as children participate in joint culture creation. Bruner says:

> It is not just that the child must make his knowledge his own, but that he make it his own in a community of those who share his sense of belonging to a culture. It is this that leads me to emphasize not only discovery and invention, but the importance of negotiating and sharing — in a word, of joint culture creating as an object of schooling and as an appropriate run-up into becoming a member of the adult society in which he is to live out his life (1982, p. 16).

Where does writing fit in to this interpretation? Writing is only one way of representing the culture created by individuals within groups. The development of cultural meaning led to its representation through many means. The teacher ensured that writing was one means that was practiced, while continuing to value other means, and maintaining focus on meaning.

**Implications for theory, practice, and research**

These conclusions may possibly be a valid description of the classroom under study, but their automatic and literal extension to other classrooms would certainly be unfounded. This is particularly true since this was an informal classroom, and as such, not typical of the organization or philosophy of most first or second grades. In addition, the classroom was located in a comfortable suburb, and there were no major cultural differences between home and school communities, raising further questions of relevance.

However, general implications may be drawn from this study for practice and institutional provision as well as for theory and research.
There are two reasons for this. First, these relationships between text, context, and meaning can be found in any setting, although their specific characteristics will vary. Second, this classroom seemed to be shaped in a way that was consonant with knowledge of human development, and thus provides an example of theory-based practice.

A proposed theory. The following statements are offered as a contribution toward a theory for the development of writing-in-context during early school years:

1. Language is learned within a context of meanings. The nature of the meanings of the context affects the nature of language learned, its functions and its forms.

2. Each classroom context can be described in terms of the field, tenor, and mode of discourse, that is, in terms of the way in which children experience content (field), relate to others (tenor), and represent meaning (mode).

3. The shaping of the context will provide familiar as well as new aspects within the dimensions of field, tenor, and mode of discourse. This balance between the familiar and the new will vary over time and among classrooms.

4. Within each context, children will construct their own systems of language use. Evidence of this construction will be found in children's oral and written language which approximates a mature form and function, and only partially represents their meaning.

5. The teacher can bring about a wider range of language uses for a wider range of audiences by shaping a context, that is, creating situations which require these uses and audiences.
Implications of this theory. This proposed theory could be applicable to any classroom context, since each context would be characterized by a unique shaping of field, tenor, and mode, and balance between familiar and new aspects. Children's learning would be revealed by their approximations, whose nature would be affected by the context within which they were produced.

Suggestions for practice.

1. Teachers interested in assisting language and writing development should give primary attention to the nature of the context in which language and writing are used. That is, they should focus on the quality of life of the classroom community - its experiences, relationships, and opportunities for representation (or its field, tenor, and mode of discourse). This life of "doing things with friends" will develop shared meanings which in turn can bring about varied language use.

2. Teachers can plan for continuity of experience between home and school allowing children to use familiar ways of learning about the world, relating to others, and representing meaning. At the same time, teachers can present wider opportunities in all three dimensions, thus supporting or scaffolding children as they make transitions to these new ways of learning, of relating to each other, and of representing meaning.

3. Teachers who provide clear models of concepts and procedures, of ways of relating to others, and of varied written and oral language use enable children to construct their own
understandings and systems independently. At the same time, teachers can accept what children do as approximations of these models and of their own meaning, while being ready for opportunities to assist and encourage children's gradual refinement of their approximations.

4. While keeping this focus on meaning, therefore, teachers can selectively draw attention to form, including matters of surface convention as well as of organization and style. Thus children can be helped to become objective about their own language.

5. Attitudes and processes which develop abilities to cooperate and collaborate should be encouraged. Individual growth occurs within a social situation of scaffolding, so that children do with others, including their teacher, what they could not accomplish alone (Vygotsky, 1978). Together, children and their teacher create a culture whose meanings are shared. Individual contributions take on significance as part of the whole. Thus cooperation, rather than competition could be said to assist intellectual growth and language development.

Suggestions for school systems.

1. In order to have a better understanding of the educational process, less emphasis could be placed on scores and products, and more emphasis on the kind of context in which learning occurs. This broader understanding would be of value to parents, citizens, taxpayers, elected officials, and school personnel.
2. Assessment and evaluation of children's language growth could be made less frequently than is often the case. It also could be based on a sampling of their natural language use in the context of the usual classroom situation, rather than out of that context and in a different, decontextualized testing situation. Over time, written work (and other naturalistic sampling in other areas of the curriculum, such as taped oral reading) would be chosen for a cumulative record, allowing the best to be selected and kept. Over the months and years this record could document the course of children's growth.

Suggestions for research.

1. This interpretive framework could be applied in other classroom settings, differing in organization and educational philosophy as well as in the nature of its population. Many small-scale studies are needed before critical variables are identified which might make sense to count. Such major concepts as the field, tenor, and mode of discourse would have to be examined in their many varying forms in different contexts.

2. Ways of studying contextual meaning (rather than contextual structure) should be explored. If the development of meaning is central, as giving rise to the development of language function and form, then the study of meaning would also seem important. Meanings of the context are conveyed in many subtle, unknowable ways. Similarly, meanings which children represent are only partially revealed. In spite of these
difficulties, the importance of the relationship between
the nature of the context (i.e., its meanings) and the mean­
ings children develop and represent would seem critical.
How could the meaning conveyed to children about their role
in making sense of experience (field), their responsibili­
ties in relating to others (tenor), and the value placed
on their own work (mode) be studied, from setting to setting?
How are the effects on children of the paralinguistic fea­
tures of the teacher's voice to be systematically examined?
Children do seem sensitive to the meanings of instructional
contexts, as evidenced by their learning of appropriate be­
havior. The question here is not how they learn (presumably
by inference of patterns of regularities), nor even what
they learn in terms of surface appropriateness as cued by
structural markers, but what the underlying meanings they
develop are, and the consequences of this for their learning
and language development.

3. Ways of describing the relationship between text and context
need to be developed. Even if this application of field,
tenor, and mode proves a useful way of describing the
context, there is still no principled way to relate this
description to features of the text. Which should be
examined? Should implied meaning be located in the text or
the context? Is there a line between the two, or is it a
continuum?

4. The interplay of psychological and social processes during
reflection upon experience should be studied. Experiences
are talked and thought about, ordered, and extended under the teacher's guidance. They are also reflected upon and explored through spontaneous play by children. Is this process of reflection and extension understood in a theoretical sense? Is it provided for by teachers, consciously and/or routinely? Is it institutionalized as the content of teacher education?

5. The interplay of social and psychological factors throughout learning should continue to be explored. If the social context is a constitutive part of linguistics, and enters into cognitive development (Vygotsky, 1978), these relationships should be systematically studied, as well as studied in small-scale, qualitative studies as they function in context. Interaction as a way of bringing about language use and externalizing thought preparatory to internal dialogue (Moffett, 1965, 1968) is a theoretical idea which could be used to inform observation. These ideas about the interplay of social and psychological factors, if verified, could form a radically different basis for practice.

Conclusion

These suggestions for research and practice have come out of observation of a classroom life in which writing had a secure but subordinate place. The shaping of this life was the result of the teacher's conscious and intuitive decision-making. In this context she created, what seemed to be important to children was "doing things with friends." The social life of shared experience, and the invisible
personal life of thinking and feeling that grew within this classroom community enabled language (and writing) to be developed through use.

Shared experiences was not, however, merely an instrumental device for bringing about this use. Rather, it had value in itself, as the involvement of children and their teacher in their common life indicates. Writing was embedded in this shared experience whose meanings led to use. These meanings supported its emergence as a means of communication and representation independent of the context. The nature of the context in which it was embedded and from which it was gradually freed, would therefore seem to be of prime importance to the development of writing.
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