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A CASE STUDY OF THE IMPLEMENTATION OF A NONGRADED, MULTIAGE
CONTINUOUS PROGRESS PRIMARY PROGRAM

DISSERTATION

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

By

Carrie Richele O'Connor, M.Ed.

*****

The Ohio State University
1996

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ABSTRACT

This qualitative study documented teacher perceptions during the implementation of a nongraded, multiage continuous progress program. The participants were six female teachers who varied in levels of experience and preparation. Through interviews, observations, and document review, the researcher determined: a) how teachers varied in their interpretation and application of their definition of nongradedness, b) challenges that emerged as a result of this process, and c) benefits that emerged as a result of the implementation of this nongraded program. Because of past problems with defining nongradedness, an operational definition that was based on the work of Robert Anderson and Barbara Pavan was used to guide data collection and analysis.

The perceived challenges that emerged were discussed according to eight different categories: administrative challenges; challenges with assessment; organizational challenges; curricular and instructional challenges; the need for more materials; challenges resulting from the complexity of nongradedness; increased preparation; and undesirable student behavior. The seven benefits that emerged were: a supportive classroom environment; learning various roles; development of students’ social and emotional aspects; time; knowledge of students; higher expectations; and variety and choice.
The results indicated that as teachers perceived various challenges and benefits while attempting to implement nongradedness, educators and policy makers can take measures to better prepare teachers that may attempt nongradedness. Results suggested that teacher education programs should prepare teachers with better classroom management strategies in order to avoid some of the organizational problems, such as grouping of students, problems with assessment and instructional challenges that these participants faced. The results of this study may inform those attempting educational reform. In this case, the need for more administrative support was a perception of the teachers that suggested implications for those instituting an innovation such as nongradedness.
Dedicated to Danny, D.J., and Caley.

In memory of Nana and Grandma.
ACKNOWLEDGMENTS

I wish to thank my committee members, Patricia Scharer, Donald Haefele, and Janet Hickman, for the kindness and patience they exhibited during this research process. I fully appreciate their expertise in the conducting of research as I feel that I have benefitted immensely from having them as my instructors.

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I hold the deepest amount of respect for the six teachers and principal at “Central” that allowed me to invade their lives in the pursuit of educational excellence. For their dedication and willingness to collaborate on this endeavor, I will be eternally grateful. They were a part of a staff of wonderful people that I feel lucky to have known during my time spent in a city that will always hold a special place in my heart, “Bellingham.”

I have a wonderful family whose love and pride kept me on track. I am lucky to have been raised in a close family that never learned the meaning of quit. My father-in-law
has also remained one of my most ardent supporters.

Lastly, I am blessed with a husband who has also been my best friend for almost 22 years. Together, we are raising two amazing children that have shared in the joys and sorrows of this dissertation process. I only pray that they will embrace the benefits and forget the challenges that occurred along the way.
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He who opens a school door, closes a prison.

--Victor Hugo

CHAPTER 1

INTRODUCTION

Nongraded, multiage classrooms date back to the dame schools of colonial times when children of varying ages were placed in the same classroom. The one-room schoolhouse of the 1800s, a time when schools were mostly in rural settings, was another example of a nongraded educational setting (Miller, 1991). Later, during the era of the industrial revolution, masses of families with children infiltrated urban areas. Educators saw the need for the graded school as a logical way to manage the large number of children. By 1860, the graded system had been adopted by most communities, especially in the cities (Goodlad & Anderson, 1987).

After World War II, some educators began to question graded schools as the best way to educate children. At this time, concern for the education of the individual was given the attention it rightfully deserved (Anderson & Pavan, 1993) as some prominent educators balked at arranging students in a graded, lock-step arrangement (Grant, 1994). Major events such as the Civil Rights Act of 1964, the withholding of federal dollars from
segregated schools, the Chapter One program, Head Start, and Public Law 94-142 have all made an impact on how educators view students (Anderson & Pavan). Interest in the nongraded philosophy has also been attributed to an outgrowth of the progressive movement in education (Chase & Doan, 1994).

Extensions of these benchmarks in educational history have included educational programs, such as nongradedness, which view the child in a different way. Programs of individualization were implemented in the 1960s as the quest for a more developmentally appropriate and less rigid approach to organizing children for instruction became a common cry of educators. The nongraded, multiage arrangement was also perceived as a more humanistic and desirable way to instruct children (Lewis, 1969; McLoughlin, 1969; Otto, 1969). Open education, which enjoyed a high level of popularity in the late 1960s and early 1970s, is another example of an innovation which was thought to be more humanistic (Goodlad & Anderson, 1987; Long, 1994; McDonald, 1993).

Presently, the nongraded, multiage approach is experiencing a resurgence in popularity (Gutloff, 1995). Nongraded, multiage programs have been studied and advocated by prominent educators for the last few decades (Anderson & Pavan, 1993; Gaustad, 1992; Goodlad & Anderson, 1987; Hillson, 1971; Hunter, 1992; Katz, Evangelou, & Hartman, 1990; Katz, 1992; Lodish, 1992; Lewis, 1969; McLoughlin, 1969 Otto, 1969). Recently, the states of Kentucky, Mississippi and Oregon have mandated nongraded, multiage programs while several other states have legislation pending (Lodish). In the province of British Columbia, Canada, primary units have replaced the early grades which have traditionally been categorized as grades kindergarten through
such mandates are clearly an attempt at educational restructuring with a focus on the nongraded, multiage approach as a way to improve teaching and learning during early school experiences. Miller (1991) observed, "The large-scale innovations of the 60s and 70s have virtually ended. But the multigrade classroom persists..." (p. 1).

As will be indicated in the following section and more completely in chapter two, research has revealed three problems associated with nongradedness. First, there have been problems with defining nongradedness. There is no common definition that has been accepted by all of the educators involved in some form of nongradedness. Secondly, researchers and educators have experienced challenges with documenting the effectiveness of nongradedness. Thirdly, those who have instituted nongradedness have identified implementation concerns which evolved from establishing nongraded programs.

Researchers have also identified benefits resulting from the implementation of a multiage, nongraded continuous progress program. The purpose of this study will be to examine the perceptions of teachers as they implement a nongraded program. Specifically, this study will document the teachers' interpretations and applications of the definition of nongradedness during this process. A collateral concern of this research is to identify the challenges and benefits, as perceived by the teachers, during the implementation of a multiage, nongraded program.

In the rest of this chapter, the background to the study and the problem statement will be presented first; the need for the study, the methodology, and overview of the study will follow.
Background to the Study

The purpose of this study is to document the perceptions of teachers during the implementation of a nongraded, multiage program. Past implementation and research efforts associated with nongraded, multiage programs have demonstrated that the concept of nongradedness is very complex and multidimensional. Issues surrounding nongradedness include the difficulties with defining nongradedness and with the research that attempted to document the effectiveness of nongradedness (McLoughlin, 1969; Otto, 1969). The implementation process has proven to be an issue and a challenge for educators (Miller, 1991). Studies have been published which document the importance of studying teacher perceptions during the change process (Englert, Tarrant, & Rozendal, 1993; Pace, 1992; Scharer, 1992a). The support for this study is organized under two main areas: issues surrounding nongradedness and teacher perceptions.

Issues Surrounding Nongradedness: Definition, Challenges, and Benefits

There are several concerns associated with nongradedness which will be addressed further in chapter two. In this section, the problematic nature of defining nongradedness will be examined. An operational definition of nongradedness will be used to guide this study. Then, the limitations surrounding studies on nongradedness will be discussed, as will studies which address implementation concerns. Finally, a brief section on studies which have addressed the benefits of nongradedness will follow.

Defining nongradedness. Programs which are nongraded have been called ungraded, multigraded and more recently, multiage. A nongraded, multiage arrangement is broadly defined as a system for grouping children in classes
without grade-level labels including children with more than a one-year age span. In a nongraded, multiage continuous progress program, a classroom of mixed-age children are taught using developmentally appropriate activities which enable them to progress at their own rates. These activities are not dictated by grade, but rather by the child’s needs and interests. Thus, “The true philosophy of nongradedness is the belief that individuals are unique and need different treatments to reach their maximum growth potential” (Anderson & Pavan, 1993, p. 43).

The identification of an operational definition of nongradedness has proven to be problematic. Lewis’s (1969) research revealed that very few educators could agree on a single definition of nongradedness and used organizational structures such as team teaching or homogeneous and ability grouping to define it. In Smith’s (1971) description of a nongraded reading program, students of the same ability and of varying ages were grouped together, thereby creating a homogeneous ability grouping of students. Demonstrating that heterogeneity is an important feature of nongradedness, Goodlad and Anderson (1987) emphasized in their 1963 edition of a book on nongradedness that the grouping for multiage classrooms should be based upon heterogeneous abilities of children.

With such problems existing in defining nongradedness, an operational definition is needed to guide this study. This definition will be a synthesis of the eight edicts that Anderson (1995) proposed and from the behavioral indicators which Anderson and Pavan (1993) offered in their explanation of the ideal nongraded school. Robert Anderson and Barbara Nelson Pavan serve as co-directors of the International Registry of Nongraded
Schools (IRONS). One of their overriding concerns has been that educators become aware of what is meant by authentic nongradedness. IRONS was formed as a response to the resurgence of nongradedness and serves as a clearinghouse of information for schools who wish to join the registry and receive publications regarding materials which benefit those implementing nongraded programs. Presently, there are registrants from 21 states and three foreign countries (Anderson, 1995).

A significant purpose of IRONS is to ensure that those who are practicing nongradedness do so using an authentic definition. Schools registering for membership in the IRONS project are required to describe their progress in achieving authentic nongradedness (Anderson, 1995). Authentic nongradedness can be identified by analyzing the main areas of Anderson and Pavan's ideal nongraded school: the goals of schooling, the organizational structure of teachers and students, curriculum, instruction, assessment, and use of materials (Anderson & Pavan, 1993).

Within the first area, goals of schooling, Anderson (1995) proposed the following:

1. All of the labels and mechanisms commonly used in the Graded School for identifying the status/standing of pupils have been officially changed to labels and terms appropriate to the concept of continuous progress and nongradedness.
2. Grade-related promotion, retention, and tracking practices have been abandoned and eliminated. (p. 1)

The goals of the nongraded school reflect a desire to educate students to be self-directing and autonomous. Children are encouraged to develop the skills necessary for productive and responsible membership in civic, social, and work groups (Anderson &
Pavan, 1993). In the pursuit of these goals, Anderson (1995) maintained that it is imperative for Boards of Education to support such goals and to assist “in providing waivers regarding requirements and practices from the State Department of Education” (p. 1).

The grouping of teachers and students is also a vital component of the operational definition of the authentic nongraded program. Teachers should be organized in teams to provide opportunities to interact and collaborate. Student teams include multiage groups of at least two age cohorts and are deliberately heterogeneous. Non-permanent grouping patterns of students are employed for instructional purposes and are sometimes homogeneous and often heterogeneous (Anderson, 1995; Anderson & Pavan, 1993).

The ideal nongraded curriculum is child centered and integrated. “As much as possible, the curriculum is presented through interdisciplinary themes or units,” maintained Anderson (1995, p. 1). Math, reading, writing, science, social studies, art, and music are often approached simultaneously. The curriculum in the nongraded school is based upon the child’s interests and needs. This includes the child’s unique abilities, learning rates, and learning styles (Anderson & Pavan, 1993).

Instruction in the ideal nongraded program includes the consideration of all phases of human growth, multiple learning styles, and challenging experiences that promote confidence and risk-taking behaviors. Teachers serve as facilitators of instruction rather than dispensers of information. “The process is more important than the product,” suggested Anderson and Pavan (1993, p. 83).
A variety of materials are needed to cover the wide ranges of abilities and interests in the ideal nongraded program. These include trade books, reference materials, manipulatives for math, microscopes, and many other materials for various content area centers the teacher sets up around the room. Children are allowed to explore in an environment in which “Learning is the result of the student’s interaction with the environment” (Anderson & Pavan, 1993, p. 87).

In terms of assessment, “Appropriate, essentially-noncompetitive mechanisms and procedures are in place for assessing pupil progress, for maintaining records of that progress, and for reporting progress to the concerned parties without the usage of ABCDEF and S-U designations” (Anderson, 1995, p. 1). Multiple sources of documentation are utilized and children’s work is assessed in terms of their own potential (Anderson & Pavan, 1993).

At the 1994 Society for Developmental Education’s National Conference on Multiage Continuous Progress Classrooms, practicing teachers explained how some of these practices that contribute to the authentic nongraded program were implemented during a regular school day. For example, teachers explained how blocks of time were arranged for reading and writing workshops, the use of hands-on math and science, and the integration of curriculum (Clason, Kohn, & Tillotson, 1994; Lehman, 1994; Thompson, 1994). In addition to literacy instruction, other topics included: cooperative learning, developmentally appropriate practices, conflict resolution, learning centers, and self-esteem (LaRoche, 1994).
As Lewis's (1969) and more recently Hoffmann's (1985) research have indicated, various definitions have been applied to nongradedness. Team teaching and ability grouping were definitions that have been linked to nongradedness in the past (Lewis). The intent of Hoffmann's study was to document the participants' definition and understanding of the nongraded school. The results showed that the definitions of parents, teachers, and principals had an effect on the degree to which nongradedness was practiced, thereby showing that perceptions of definition are important.

This study will proceed with the knowledge that the definition is a problematic one and that teachers may vary in their implementation of a nongraded, multiage program. With the realization that an authentic and legitimate definition is needed to guide this study, two of the above sources will be used: the aforementioned behavioral indicators (Anderson & Pavan, 1993); and Anderson's (1995) definition of nongradedness. While some researchers have argued that nongraded and multiage are different (Katz, Evangelou, and Hartman, 1990), for purposes of this study, the terms nongraded and multiage will be used interchangeably and synonymously.

Challenges with the implementation of nongradedness. Recent research has identified factors that promote and impede the implementation of a nongraded program. During the implementation of a nongraded program which required more individualization of instruction, class size became one of the factors which teachers felt made it more difficult to teach (Addington & Hinton, 1993). Time for preparation and insufficient teacher education also became pressing issues for the teachers (Aagaard, Coe, Moore & Kannapel, 1994; Miller, 1991). Additionally, the dissemination of information to the
teachers, administrators, parents, and the local community are factors which have represented challenges in the past (Goodlad & Anderson, 1987).

Another issue which has been raised in research on nongradedness has been the challenge of documenting its effectiveness. Using an experimental design, both Otto (1969) and McLoughlin (1969) conducted studies which failed to produce results which favored the nongraded program. Both of these comparative studies used standardized tests to measure the outcome, academic achievement. In their synthesis of research on nongradedness, Anderson and Pavan (1993) reported on studies that compared nongraded and graded schools published after 1968. Like the measures used by Otto and McLoughlin, these studies were primarily concerned with comparisons in achievement as measured by standardized tests. The limitations of using standardized tests to study nongradedness are that they fail to address the complex nature of nongradedness and the various criteria which define nongradedness. For example, as documented by Hoffmann (1985), the degree to which nongradedness was practiced had an impact on its effectiveness. In observing that more research on nongradedness is needed, Gutierrez and Slavin (1992) suggested that to overcome these limitations, a very careful and specific definition of nongradedness as the independent variable is imperative. This specific definition would encompass the various criteria that are embodied in the complex definition.

In the final analyses of their comparative studies, both Otto (1969) and McLoughlin (1969) acknowledged these limitations. The National Association for the Education of Young Children (NAEYC) cautions against using standardized tests on
young children, stating that "The potential psychological harm of testing is well-
documented" (NAEYC, 1988). Similarly, in their synthesis of research on standardized
testing, James and Tanner (1993), called for assessments which are developmentally
appropriate and help rather than intimidate and produce anxieties in young children.

Besides the fact that standardized tests may be inappropriate for measuring
differences among children, they also fail to provide information for studying the teachers'
and programs' interpretations of nongradedness. As they reflected on the insignificant
results their studies produced, Otto (1969) and McLoughlin (1969) both acknowledged
that their participants' interpretations of the nongraded definition required further
examination. McLoughlin stated that while the schools he researched did indeed place
children in multiage groupings, the teachers failed to improve on the instructional methods
they had employed as traditional classroom teachers. Otto reflected that if a nongraded
school is to fulfill its mission, "many related facets of the internal organization . . . must be
altered simultaneously" (p. 126). Both Otto (1969) and Miller (1991) contended that in
the study of nongradedness, researchers might examine how the components of the
nongraded program contributed to or detracted from its effectiveness.

Goodlad and Anderson (1987) have been studying nongradedness since the late
1950s and maintained that the study of nongradedness is "rarely accompanied by a
systematic scheme for evaluating the effectiveness" (p. 209). In a systematic scheme, Otto
(1969) proposed that variables such as grouping of pupils, appraising pupil progress,
reporting to parents, textbook management, library usage, principal's influence, the use of
special teachers, and assignment of special education pupils should be studied to determine
how they affect the program's outcomes, however they are defined. While stressing that nongradedness is not for the inexperienced or poorly trained teacher, Miller (1991) agreed that it is indeed a challenge to examine to what extent such experiences are part of preservice and inservice training. Miller elaborated further by stating that in the research of nongraded programs, the essential areas for investigation should be: organization of the classroom; discipline and classroom management; self-directed learning; peer tutoring; organization of curriculum and instruction; delivery of instruction; and grouping practices.

Benefits. One of the benefits incurred from nongradedness can be attributed to the additional time teachers spend with children (Gutloff, 1995). One-third to one-half of their classroom returns each year. "Loss of investment" is a term used to describe how teachers can feel in a graded setting when they are unable to continue with the development of rapport and progress with a child because it is time for them to enter the next grade (Goodlad & Anderson, 1987, p. 68). In contrast, teachers in a nongraded setting have the luxury of time as they maintain at least a two year relationship with each student. In addition, they do not have to spend as much time on establishing classroom routine as they did in a graded arrangement, and while teaching for continuous progress, learning begins right where it left off after each calendar break (Goodlad & Anderson, 1987; Hunter, 1992).

Other studies of nongradedness have indicated that one of the main benefits is improved learner satisfaction and social and emotional affect (Miller, 1990; Pratt, 1983; Way, 1981). Students in a nongraded atmosphere generally have more peer interaction.
They do not suffer from the fear of retention, a fear which can detract from their emotional well-being.

The teacher's role of teaching for continuous progress, an important part of the nongraded definition, benefits students as they are treated on an individual basis. Students do not feel pressured into finishing a set number of books before they enter second grade as the students are able to proceed at their own rate and have additional time to master the first grade curriculum. Conversely, there are no grade-level barriers in a nongraded classroom that might prevent students from engaging in learning experiences that extend beyond the first grade curriculum. Teachers maintained that the second grade curriculum is less demanding than the first grade curriculum so the expansion of time for students to complete first grade objectives does not interfere with the mastery of second grade objectives (Hime & Moore, 1995).

One reason advocates feel nongradedness benefits students is the individualized approach that facilitates teaching for continuous progress. Studies which indicate an increase in student achievement among at-risk populations (Pavan, 1992), among gifted students (Hafenstein, Jordan, & Tucker, 1993) and in reading achievement (Ricciotti & Soares, 1983) will be discussed in chapter two.

Teacher Perceptions

The perceptions of teachers during the implementation process are important for two reasons: (a) they are responsible for putting the innovation into practice and, (b) teachers' perceptions often serve as the binding force and impetus that reinforce lasting change and innovation (Englert et al., 1993; Pace, 1992). Researchers and theorists have
agreed that failing to require teachers to engage in thoughtful discussions during their participation in various educational programs has detracted from forming deeper understandings about the program (Englert et al., 1993; Haberman & Dill, 1993).

For example, as Scharer (1992a) studied teachers' perceptions during an innovation in literacy instruction, she encouraged teachers to discuss their perceptions as they participated. Resultant data indicated that teachers perceived many aspects of their roles differently in the areas of planning, use of materials, and evaluation methods. Additionally, the study found that teachers varied in their use of instructional methods and in their ability to change from previous practices.

Similarly, Pace (1992) identified tensions, or challenges, which evolved when teachers moved from a traditional approach to literacy to the implementation of whole-language literacy instruction. One of the challenges was attributed to the fact that teachers were following a new curriculum. It was concluded that these sources of tension served to provide a deeper understanding of both the change process and implications for staff development. Research on teachers' perceptions during an innovation has documented that staff development must begin with practical ideas that are promptly available in the classroom setting (Scharer, 1992a).

In Duffy's (1993) study of teacher perceptions, it was found that teachers were inhibited by prescriptions and were much more successful when they relied upon their own judgment. Richardson (1990) termed this judgment "warranted practice" (p. 10) as a practice which dictates the empowerment perspective. Warranted practice recognizes that "bottom-up, grass-roots change efforts . . . [which support] . . . teachers as decision
makers and change agents will play a major role in any successful, substantive, lasting change in schools" (Pace, 1992, p. 463). Teachers must be given opportunities to question their own practices throughout the innovation. By engaging in thoughtful deliberations during the implementation process, teacher perceptions which identify concerns about their practices and the innovation will be useful to other educators.

Statement of the Problem

The background for this study demonstrated that there are several issues surrounding nongradedness. In light of nongraded programs becoming more prevalent, there is limited research available informing the following question: What happens when a group of teachers implement a nongraded, multiage primary program?

In the previous section which addressed the issues surrounding nongradedness, relevant research which identified challenges and benefits were discussed. The definition of nongradedness, which has been problematic, was discussed and a definition which will guide this study was offered. This definition of the authentic nongraded program was categorized into six areas. Challenges included trying to document increases in student achievement and implementation concerns. Benefits included improved learner satisfaction among students in nongraded programs, time for teachers to teach for continuous progress, and gains in student achievement. The problem will be framed within three main questions.

The research questions are:

1. As the teachers attempt to apply their knowledge of the definition of a nongraded, multiage continuous progress program, do they vary in their implementation?
a) How do they vary according to their goals of schooling?
b) How do they vary according to the organization of teachers and students?
c) How do they vary according to their perceptions about the curriculum in a nongraded school?
d) How do they vary in their delivery of instruction?
e) How do they vary in their assessments and reporting practices?
f) How do they vary in their use of materials?

2. What are the perceived challenges which emerge when a nongraded, multiage continuous progress program is implemented?

3. What are the perceived benefits which emerge when a nongraded, multiage continuous progress program is implemented?

Need for the Study

In the introduction to this study of nongradedness, it was established that nongradedness has enjoyed a long history and that because of the changing definition of nongradedness, an operational definition was needed. Anderson's (1995) eight edicts and the behavioral indicators of Anderson and Pavan (1993) were synthesized in an attempt to meet that need. The quest for a comprehensive definition has been even more critical as the number of nongraded programs continued to grow. Kentucky, Mississippi and Oregon have mandated nongraded, multiage programs while several others have legislation pending (Lodish, 1992). In light of these developments, there are four concerns which provide a rationale for this inquiry.

First, the resultant data from this research can add to the growing body of literature that accumulates as more states and more elementary schools implement
nongraded programs (Gutloff, 1995; Lodish, 1992). In the background to the study, it was indicated that the interpretations of nongradedness have been problematic. As better instructional methods were developed, varying definitions were applied (Smith, 1971; Anderson & Pavan, 1993). Additionally, it was suggested that nongradedness is the sum of its parts; that is, its definition incorporates various components such as program goals, organization, curriculum, instruction, use of materials, and assessment. How teachers in this study vary during the implementation process will be useful information to other educators. For example, if problems with assessment are identified, those implementing their own nongraded program will be able to proceed with that knowledge and attempt to rectify the problems which were identified. The research community should be informed about any potential hazards with beginning nongradedness, a warning to others that this is a vexatious endeavor. This information will be useful to other researchers and program developers.

Second, as educators implement innovative programs, challenges are imminent (Pace, 1992). By studying the challenges which arise during the implementation of a nongraded program, those who wish to implement a nongraded program or those who need to weigh policy decisions on educational reform will be forewarned by the challenges which will be identified through this research.

Third, advocates of nongradedness have maintained that throughout the implementation of a nongraded program anticipated and unanticipated benefits will result (Hunter, 1992). The study of these benefits may support the efforts of teachers,
administrators, policy makers, and state legislators as they establish multiage, nongraded schools.

Four, there is a need to study the perceptions of teachers as they engage in an innovation because as the agents of change, they will be one of the main factors for assimilating an innovation into practice (Englert et al., 1993; Pace, 1992). The study of the perceptions of the teachers in this study will be valuable as they are the ones who have struggled with the development of their own definition of nongradedness, its challenges and benefits.

Methodology

The methodology chosen for this research is a qualitative design employing individual case studies and a cross-case analysis. The participants are six primary teachers, their principal and superintendent. Qualitative research was chosen for this study as it enables the voices of the teachers to be heard as they emerged during this implementation process. The information gleaned from this study will provide insight into nongradedness and the various components which contribute to its definition.

Teacher perceptions of their definition of nongradedness and perceptions of the benefits and challenges incurred during the implementation of a nongraded program will be obtained through the resultant data of interviews in a qualitative design. Interviews will provide comprehensive information about how teachers perceive and interpret their definition of nongradedness and its inherent challenges and benefits. The observations conducted throughout the year will provide topics for interviews, insight into how the
teachers vary in their interpretation of the legitimate nongraded definition, and opportunities for triangulation.

Additionally, this research will explore the application of criteria embodied in the definition of nongradedness. Specifically, these criteria were presented earlier in this chapter when Anderson and Pavan’s (1993) behavioral indicators and Anderson’s (1995) edicts for authentic nongradedness were discussed. For example, teachers will be interviewed and observed according to their grouping of students. How they vary in their uses of heterogeneous and homogeneous groupings of students will result in data which will be meaningful to other teachers who may attempt to group students in a nongraded setting.

Overview of Chapters Two Through Five

This study will be explained throughout five chapters. In chapter two, the review of research is organized around the historical background and definitions of nongraded, multiage programs. It will also include relevant research within the confines of how the research constituted either a challenge or a benefit. As a challenge, the review of research will address studies related to the complex nature of nongradedness and implementation concerns. As a benefit, nongradedness was viewed as enhancing teachers’ and learner satisfaction, giving teachers time to teach for continuous progress, and providing gains in student achievement.

Chapter three will discuss the study’s methodology. This includes the rationale for the selection of a qualitative design, the researcher’s history with the site and participants, a description of the participants and the site, the procedure for collection and analysis of
data, a description of the role of the researcher, and the researcher's attempts to enhance the credibility of the study. The limitations of the study will also be discussed in chapter three.

Chapter four reveals the accounts of the six teachers. How these accounts relate to the research questions will also be addressed. Also included is a cross-case analysis of the six case studies.

In Chapter five, the researcher will present a summary and discussion of the results of this study. The implications of this research and questions for further research will also be provided.

**Summary**

This investigation attempts to examine the perceptions of six teachers during the initial year of the implementation of a nongraded primary program. Of interest were the problems with which past definitions were applied to nongradedness; thus, a legitimate definition was offered to guide this study. Also of interest were the efforts of researchers who struggled with documenting the effectiveness of nongradedness. The need to study how teachers varied in their implementation, according to the criteria embodied in the legitimate definition of nongradedness, was explicated. While the majority of earlier research on nongradedness followed the experimental design, little documentation can be found which addresses the analysis of the criteria defining ideal nongradedness. As such, this qualitative design study will provide useful information for educators and policy makers who are considering nongradedness in their schools.
CHAPTER 2

REVIEW OF RELATED LITERATURE

The purpose of this study was to investigate the implementation process of a nongraded, multiage continuous progress program. In this study, the specific concerns of this implementation process were the definitions which were applied during this process and the perceived challenges and benefits. This review of literature will include the historical background of nongraded, multiage programs; a definition of a nongraded program; and an examination of research that is relevant to the study of nongradedness. Within the definition of a nongraded program, the criteria which contribute to the legitimate nongraded definition will be presented. These criteria are the goals, philosophy, and organization of nongradedness; curriculum and instruction; and use of materials and assessment (Anderson & Pavan, 1993). The relevant research on nongradedness is categorized as research that deals with both the challenges and benefits incurred when a nongraded, multiage program is implemented.

Historical Background

One focus of this study was to investigate how teachers defined nongradedness during the implementation process. The purpose for discussing the historical background of nongradedness in this review of literature is twofold: (a) to demonstrate previous
definitions of nongradedness, and (b) to document how the definitions of nongradedness have changed over the years.

Nongradedness has enjoyed a long history. Programs being described as nongraded date back to the dame schools of Colonial times. Miller (1991) reported that in 1918, 71% (200,000) of all public schools in the United States were nongraded, one-room schools. Presently, the United States has less than 1,000 one-room schools. The nongraded, multiage school was the dominant model of education until the arrival of the industrial revolution and urbanization (Veenman, 1995). From the time period of 1955 - 1975, nongraded programs never exceeded 1,500 to 2,000 (Anderson & Pavan, 1993).

Programs being described as nongraded or multiage are enjoying a resurgence in popularity. The states of Oregon and Kentucky have included multiage units as part of their reform acts (Gaustad, 1992) and while the state of Mississippi has mandated it, several other states have legislation pending (Lodish, 1992). At the 1994 Society for Developmental Education’s National Conference on Multiage Continuous Progress Classrooms, over 2,000 people from 42 states attended. This renewed interest in nongradedness may be attributed to three factors: it may be an outgrowth of the progressive movement in education; it enables educators to move toward a more developmentally appropriate program; and nongradedness provides a natural extension to the whole language approach to literacy and the problem solving approach in math (Chase & Doan, 1994).
Changing Definitions

The type of instruction provided by the dame school of colonial times and the one-room schoolhouse of the 1800s was dissimilar to the instruction advocated in today's ideal nongraded school. As will be presented later in this chapter, today's authentic nongraded school is characterized by a curriculum and instruction that were not part of the earlier nongraded schools.

The dame schools of colonial times were organized in a nongraded arrangement out of necessity, not by choice. Education in the schools at that time often took place in the community in which the family lived or in the church that family members attended. Usually a mature woman served as the dame who would instruct the multiage classes of local children (Urban, 1990).

Like the dame school, one-room schools served as another example of a multiage arrangement that was established out of convenience. One-room schools existed primarily in rural areas. The multiage characteristics were due to geography rather than any pedagogical motives.

The type of instruction in these early nongraded schools can be characterized by droning recitations, memorization and scant materials; a paddle-shaped hornbook often served as the only material. Even though texts, such as McGuffey Readers and Webster's The American Spelling Book, became available by the mid 1800s, the instruction still did not depart from the recitation-memorization format (Scharer, 1992b).

As mentioned previously in chapter one, the graded school became predominant during the time of the industrial revolution, a time when masses of children infiltrated the
schools. At this time, the children in the urban areas were being categorized according to age and grade, and nongraded schools existed primarily in rural areas (Miller, 1991).

The nongraded classroom, as a combination of two grades, resurfaced in the mid 1970s when it was deemed cost-effective. The term split classroom became known when, rather than hiring an additional teacher, administrators would instead form combination classes of two consecutive grade levels. The need for such cost-saving efforts was attributed to declining student enrollment and financial cuts (Veenman, 1995).

The type of instruction in combination classrooms has not been the type of instruction advocates of nongradedness describe. In combination classes, it has been found that teachers often divide their instruction between two or more groups, whereby one grade level is given independent work while the teacher instructs the other grade level. Students are not encouraged to learn from each other, and time on task suffers (Veenman, 1995).

Another example of varying definitions being applied to nongradedness was offered by Lewis (1969). Lewis found that the various definitions of nongraded programs were synonymous with team teaching, homogeneous grouping and ability grouping. Other impressions were that nongradedness implies not giving students letter grades. Katz, Evangelou, and Hartman (1990) maintained that the definition of a nongraded classroom was different from the multiage one. In fact, Gaustad (1992) reported that various names for nongradedness have been used to avoid an association with previous failures.

Katz, Evangelou, and Hartman (1990) supported the contention that some of the previous nongraded schools arranged students in homogeneous groups. The nongraded
reading program instituted by Smith (1971) provided evidence of this claim of homogeneous characteristics. Smith described his nongraded reading program as a homogeneous arrangement in which reading achievement served as the sole criteria for being included. Thus, it was a homogeneous arrangement for slow learners of varying ages of the same ability.

When Otto (1969) compared the achievement of nongraded versus graded students in the areas of reading, arithmetic, and spelling, there was no mention of the integration of language arts, process writing, or authentic assessment. These characteristics are indeed part of today's nongraded definition but were not applied to these former programs. For instance, Hillson (1971) referred to team teaching and pupil-team learning as approaches which held promise for implementation in a nongraded program. These approaches that were not part of the programs Hillson and Otto researched are part of today's ideal nongraded program.

While the nongraded programs of the past have been instituted for various reasons and using more traditional methods, the motivation for arranging students in today's nongraded programs are usually based on "pedagogical and didactic motives" (Veenman, 1995, p. 321). The type of instruction, as well as the motivation for instituting nongradedness, has illuminated the differences between nongraded programs of past use. Some of the educational reforms of the 1960s and 1970s affected the instruction that began to be offered in some multiage classrooms. Influential programs such as open education and individualized instruction were sometimes organized in conjunction with
multiage grouping, a factor which helped the multiage approach gain respect (Miller, 1991).

In today's ideal nongraded program, the major emphasis is that learning is structured to ensure that children of mixed ages and mixed abilities can intermingle and therefore learn and benefit from the diversity (Katz et al., 1990). Perhaps this is why the term multi-age, multi-ability was recently used to denote a nongraded program (Colwell-Cornett, Louderback-Gibson, Napier, 1995). In their 1963 second edition of their book on nongradedness, Goodlad and Anderson (1987) emphasized that the grouping for a multiage classroom should be based upon heterogeneous abilities of children.

Presently, long-time advocates of nongradedness, Robert Anderson and Barbara Nelson Pavan, maintained that because of a past in which various definitions have been applied, the need for an authentic definition exists. For this reason, their authentic definition has been used to guide this study. A synthesis of the six areas of Anderson and Pavan's (1993) behavioral indicators and Anderson's (1995) edicts for the ideal nongraded school was presented in chapter one as the legitimate nongraded definition that will guide this study. This guiding definition was presented in chapter one and will be developed further in this chapter.

As the next section in the review of literature will portray, approaches that were once considered promising by practitioners of nongradedness are now an important part of the nongraded, multiage definition. Today's nongraded, multiage definition includes alternative assessments, integrated thematic instruction, and a more individualized approach to literacy instruction which is based on the theory of continuous improvement.
(Gutlof, 1995). Recent developments, such as the whole language philosophy (Goodman, K., 1989; Goodman, Y., 1989) and Marie Clay’s Reading Recovery (1993), have been endorsed for nongraded programs because of the way in which the teacher is able to meet the needs of the individual (Anderson & Pavan, 1993).

So while the concern for the individual has guided nongraded instruction, the ways of implementing a nongraded, multiage program has changed as more have been learned about successful instructional methods. It is thereby the nature of the nongraded multiage concept to be ever changing and evolving. Goodlad and Anderson (1987) warned:

The nongraded school is not for those who would stop with a little organizational reshuffling. It is for those educators who would use present-day insights into individual differences, curriculum, and theories of personality, and who would commit themselves to a comprehensive revision of education. (p. 226)

**Definition**

As the definition of nongradedness is addressed, the following will be considered: a discussion of the graded school; the philosophy of nongradedness; and the teacher’s role in teaching for continuous progress in such an environment. While teaching for continuous progress, studies have shown how teachers make curricular, instructional, and organizational decisions about the learner. The teachers use of assessment and materials will also be clarified within this definition.

**The Graded School: A Solution for its Time**

In this section, the characteristics of the graded school will be presented first. Then, a brief contrasting view of the nongraded school will follow.
Graded schools were characterized by a grade-dominated curriculum, overt competitiveness, rigidity and inflexibility, and teachers existing in self-contained classrooms (Anderson & Pavan, 1993; Goodlad & Anderson, 1987; Hunter, 1992). These characteristics which researchers have attributed to graded structures are best understood in the context of the historical beginning of graded schools.

From the advent of the Quincy Grammar School in Massachusetts in the mid-1800s, the graded school was seen as an answer and solution to the needs of its time. For it “permitted the convenient classification of unprecedented numbers of pupils pouring into the schools during the second half of the century. It encouraged the division of knowledge into segments to be taught at the various grade levels” (Goodlad & Anderson, 1987, p. 204). Or, as stated by Anderson and Pavan (1993), “Out of what must have been chaos, it created order” (p. 2).

The type of preparation that teachers were receiving during that time contributed to the continuation of the graded school. Until the late 1940s, teachers received a limited, two-year preparation in which the technical aspects of teaching were emphasized (Cruickshank, 1985). Because of this emphasis on the technical aspects of teaching, the graded system made it easier for teachers to specialize at a particular grade level (Anderson & Pavan, 1993; Goodlad & Anderson, 1987). This problem was perpetuated by the fact that these ill-prepared teachers were part of the lot which later became teacher educators who taught “that teaching was merely a matter of knowing your subject matter and having your heart (ideology) in the right place” (Cruickshank, 1990, p. 2).
Conversely, some of today’s teachers receive a preparation that includes a five-year program and a strong liberal arts background (The Holmes Group, 1986).

Many teachers who taught in graded schools became caught up in what has been labeled a “lock-step” approach to teaching (Grant, 1994). The curriculum has been believed to be one which has grade-imposed ceilings and floors, thereby facilitating instruction which compromises the progress of individual, human potential (Hunter, 1992). Consequently, instruction is based on “things to teach in this grade” (Hunter, p. 4). The potential of individual students is compromised by graded standards in which the abilities of students were either stretched or cut to fit the standard of the middle, average learner (Goodlad & Anderson, 1987).

Teachers of graded schools often use grade-level textbooks. The teacher follows the text according to the grade level and most of the time, all students complete the same assignments (Hunter, 1992). Assessment is usually paper-and-pencil tests and the student’s grade is determined at the end of a text-driven sequence of learning (Hunter).

The graded school has also been characterized as increasing competitiveness among students. Through the use of a comparative marking system, threats of retention, and tracking by ability, graded schools impart an atmosphere which fosters competition (Goodlad & Anderson, 1987). In Pratt’s (1983) study of same-age grouping, it was concluded that this arrangement led to increased competition and aggression. Retention, another characteristic of gradedness, has long been viewed as being ineffective and harmful to children (Bracey, 1992; Glickman, 1991; Haberman & Dill, 1993).
The graded school organization once held promise for making it easier for teachers to teach the masses which invaded the schools. The emphasis on the technical aspects of teaching (Cruickshank, 1985) also perpetuated the graded school arrangement. Today, however, more is known on how to best prepare teachers (Cruickshank, 1990).

More is known today about the basic tenets which provide the foundation for the nongraded, multiage continuous progress philosophy. The views of human potential and human motivation are considered to be much more perceptive and complete in the 1990's (Anderson & Pavan, 1993; Clark & Astuto, 1994; Ramey & Ramey, 1994). Greater understanding in learning theory and motivation (Clark & Astuto), brain research (Caine & Caine, 1991) and intelligence (Gardner, 1990), and literacy (McCaslin, 1989) contribute to an authentic nongraded philosophy. Early childhood specialists agreed that the most salient learning experiences "occur in the context of informal interaction and activities rather than through formal group instruction" (Katz, 1992, p. 201). As this review of research will show, this is the same environment that authentic nongradedness creates.

In contrast to the traditional, graded school, nongradedness is a system for grouping children in classes without grade-level labels and with more than a one-year age span. This organization of students enables teachers to teach without grade-imposed restrictions. Researchers and theorists have described the nongraded classroom as follows: teachers are empowered to make decisions based on vertical and horizontal progress; sequencing of curriculum is flexible; competition is within the student rather than between the students; and instructional design is based upon a continuum of realistic goals.
(Anderson & Pavan, 1993; Goodlad & Anderson, 1987; Hunter, 1992). Each of these characteristics will be discussed further in the sections on the nongraded philosophy and teaching for continuous progress.

**Philosophy**

The graded school was once seen as a viable solution for handling the large number of students that infiltrated the schools. However, proponents of nongradedness have argued that the potential of the individual learner was sacrificed as a part of this movement (Goodlad & Anderson, 1987). In the previous section, a brief discussion of nongradedness implied that nongraded teachers emphasize the individual strengths and needs of the learner. The following discussion will offer a more complete discussion of the underlying philosophy of the nongraded, multiage program.

Multiage, nongraded programs are a way for the classroom to become more lifelike and informal, and therefore more of an application of motivational and learning theory (Katz, Evangelou and Hartman, 1990). The Department of Elementary-Kindergarten-Nursery Education National Education Association of the United States (1968) used the example of children in a neighborhood to justify a nongraded, multiage grouping:

Just as Jimmy's playmates are diverse, what he gains from them is equally diverse. At the heels of Randy, his nine-year-old friend, the world of nature has opened up for Jimmy. With Randy he's explored the woods, the field, the creek. He's hunted salamanders, frogs, and tadpoles and, at least for the present, developed a consuming interest in nature.

Randy's world is broader than Jimmy's. In this relationship Jimmy admires someone more able than he and accepts himself for
what he is able to do. Because Jimmy can participate in Randy's broader world, his horizons have been extended.

Jimmy's role with his younger sister and the little boy next door is different. With them he is usually in the dominant position. He learns to teach, to lead, to be patient and understanding, to have compassion for those less able. Certainly these are not finished characteristics in seven-year-old Jimmy, but in this setting these aspects of his personality are being shaped.

So Jimmy learns some things from the 'big kids' and teaches other things to 'little kids.' The diversity of age levels of the children to whom he has access serves as a great resource in his environment. (p. 2)

Similarly, Katz, Evangelou and Hartman (1990) stated that one of the main benefits of nongraded, multiage classrooms is that a "Mixed age grouping resembles family and neighborhood groupings, which throughout human history have informally provided much of children's socialization and education" (p. v). So to compensate for the changes in society, the nongraded classroom offers opportunities for "prosocial behavior . . . [and] current concepts of cognitive development - the 'zone of proximal development' and 'cognitive conflict'" to flourish (Katz et al., p. v).

Since a nongraded, multiage program is a system for grouping children in classes without grade-level labels and with more than a one-year age span, children are taught using developmentally appropriate practices which enable them to progress at their own rates. The curriculum and instruction are not dictated by grade, but rather by the child's needs and interests. Thus, "The true philosophy of nongradedness is the belief that individuals are unique and need different treatments to reach their maximum growth potential" (Anderson & Pavan, 1993, p. 43).
Humanism, and the individualization of instruction, is seen as a basic guiding principle for nongraded education (Lewis, 1969). Humanism includes the appreciation of children and the recognition of their unique personalities, needs, and quirks. Lewis (1969) questioned:

Are we being compassionate and concerned with the needs of each child when we punish a few because they do not absorb what we in our pristine podiums have decreed to be a necessary maximum of content at a certain age? (p. 27)

Otto (1969) stated that “The philosophy underlying the nongraded school program embodies several ideas about education which educators have championed for over 40 years” (Otto, 1969, p. 127). These ideas which educators still value today, such as a child-centered curriculum and the development of social skills, help to formulate the goals of the nongraded school.

At the 1994 Society for Developmental Education Conference on Nongradedness, Mazzuchi (1994) discussed the beliefs and values of the nongraded, multiage program. Some of the beliefs include the need to learn with hands-on activities, teacher expectations for children to take responsibility for their own learning, and teachers demonstrating strategies that are desirable for learning. Accompanying these beliefs are the description of an environment which values exploration, risk-taking, and reading and writing for real purposes.

The philosophy of nongradedness provides the foundation for how teachers and students are organized, which includes team teaching and the use of both homogeneous and heterogeneous grouping schemes for students (Anderson, 1995). Additionally, the
philosophy dictates an individualized approach to curriculum, instruction, and assessment. One of the most compelling reasons to support the nongraded program is that “children entering the first grade differ in mental age by approximately four full years” (Goodlad & Anderson, 1987, p. 6). With such stark differences amongst children of the same chronological age, changes in pedagogy are needed. Such changes include teaching for continuous progress which is explicated in the next section.

Anderson and Pavan (1993) summarized the philosophy of nongradedness into six major goals:

1. The ultimate school goal is to develop self-directing autonomous individuals.
2. The school seeks to develop individual potentialities to the maximum possible.
3. Each individual is unique and is accorded dignity and respect. Differences in people are valued. Therefore the school strives to increase the variability of individual differences rather than to stress conformity.
4. Development of the child is considered in many areas: aesthetic, physical, emotional, and social, as well as cognitive.
5. Each child needs to develop the skills for productive and responsible membership and leadership in civic, social, and work groups.
6. The school environment is designed so that children enjoy learning, experience work effort as rewarding, and develop positive self-concepts. (p. 76)

Because of this overriding concern for the individual, nongraded classrooms eliminate practices which are deemed inappropriate, such as unfair competition, tracking by ability, the comparative A,B,C,D reporting practices, grade level retention and social promotion (Grant, 1994). The emphasis on cooperation versus competition, the
acceptance of individual interests and abilities, and peer tutoring are significant
components of the nongraded program.

The Teacher's Role: Teaching for Continuous Progress

More is known today on how to prepare teachers as a result of research on teacher
effectiveness and effective educational practices (Cruickshank, 1990). This improved
preservice preparation and the inservice preparation today's teacher typically receives
provide support for teaching in a nongraded, continuous progress program.

The role of the teacher in today's school has shifted from that of technocrat to a
more reflective (Smith, 1990), empowered one (Edelsky, 1990). Empowered teachers
make teaching decisions on the basis of their own understanding, not on what a text or
experts dictate (Goodman, 1989). This changing view also includes an environment in
which "learning has become the constant. We believe all students can, and should,
accomplish stipulated kinds of learning to a satisfying degree. The variable, now, is the
amount of time necessary for each student's success" (Hunter, 1992, p. 2). This time
includes time for teachers to work with each student for more than the one year period
that is typically extended in the traditional, graded arrangement.

Within a nongraded setting, teachers now have more time to achieve their
curricular and instructional goals. This organization has strong appeal for teachers as less
time is wasted reviewing classroom procedures because only a part of the class is
unfamiliar with established routines. Multiage grouping enables older and/or more
responsible students to assume responsibility for less mature and less knowledgeable
students; they provide models for the others to emulate (Veenman, 1995). Children
become mentors and teachers (Larosa and Moon, 1995), and therefore the classroom teacher can spend more time on teaching toward individual concerns for the student.

Anderson's (1995) nongraded definition included the need for the establishment of instructional groups that were non-permanent. Through teachers' use of flexible grouping schemes, students reap benefits of learning in heterogeneous and homogeneous arrangements. As an "educational pharmacy of prescriptive alternatives" are available in this arrangement (Hunter, 1992, p. 6) the need for placing students in homogeneous groups is as necessary as grouping heterogeneously (Goodlad & Anderson, 1983).

The teacher's decisions for grouping are based on the needs of the child, needs which have been addressed through frequent assessments and observations. In a nongraded, multiage arrangement a greater potential exists for forming groups in which students may become teachers. Because of the wide range in age differences, the teacher can formulate groups in which older students serve as models for younger students. This example of a heterogeneous grouping can extend into the content area. For example, in exploring a particular science or social studies theme, students may be grouped with children of varying ages and abilities according to an interest or according to the teacher's desire to have groups of mixed ability for cooperative learning.

In keeping with the premise that non-permanent, flexible grouping schemes are used (Anderson, 1995), teachers might employ homogeneous groups for reading according to a particular need. Also, the same student might be placed in a heterogeneous group based on the child's interests. For example, children may be placed in
heterogeneous groups as they engage in a study of various reading genres or author studies.

The typical day of the nongraded classroom was explained by various practicing teachers at the 1994 Society for Developmental Education’s National Conference on Multiage Continuous Progress Classrooms. These practicing teachers explained how the typical day affords opportunities for natural, informal interactions. For instance, each day’s lesson plan is divided into blocks of time in a nongraded, multiage classroom. Within these time frames, the teacher acts as a facilitator, directing and supervising whole group, small group, ability grouped and heterogeneously grouped lessons which entail calendar and sharing time; writing and reading workshop times; math, with an emphasis on manipulatives; and activities related to the current theme which would include relevant science and social studies lessons which are often integrated with the math and language arts (Clason, Kohn, & Tillotson, 1994; Lehman, 1994; Thompson, 1994).

Also during the day, the teacher is conducting assessments, usually in the form of anecdotal records and checklists, helping students to manage their portfolios, and meeting with other teachers on the team to plan for thematic units and the grouping of students. Lolli’s (1994) case study revealed that the teachers in the schools which changed to multiage relied upon whole language and the writing process for literacy and the use of manipulatives for math. Team teaching was also vital in their attempts to incorporate thematic units for social studies and science.

In a classroom which mixes children from different ages, interests, and abilities, the teacher acts as a facilitator of learning, creating a natural environment for peer tutoring
A study was conducted to determine how mathematics is taught in a multiage, nongraded setting. The researchers identified three types of strategies that students utilized as they worked together: modeling, tutoring, and pairing/sharing (Dever, Zila & Manzano, 1994). Thus, achievement can be enhanced as students learn from each other.

Continuous progress is an important part of the nongraded philosophy and the defining term for how the teacher views assessment. Hunter (1992) explained that:

> With continuous progress, students are challenged appropriately, according to their ability to master intellectual, physical, emotional and social tasks at progressively more difficult levels. Continuous progress mandates that students should neither spend time on what they have already adequately achieved, nor proceed to more difficult tasks if they have not yet learned material or acquired skills essential to that new level of knowledge. (p. 1)

Assessments which properly address the types of evaluation that should occur in the nongraded classroom have been given some consideration. Joan Gaustad (1996) maintained that such assessments are needed because conventional assessments fail to address “important nonacademic areas of competence such as the abilities to work cooperatively with others, to make independent decisions, and to effectively self-evaluate” (p. 15). She stated further that these assessments should be authentic in that they assess truly important aspects of learning comprehensively, are responsive to the needs of individuals, and they positively affect instruction.

Such tools of authentic assessment, as summarized by Gaustad (1996), include the following: observations, anecdotal records, rating scales, systematic observational assessments, paper-and-pencil tests, frequent conversations with students, and portfolios.
Gaustad further explained that systematic observational assessments such as Marie Clay's (1993) Running Records provide the type of standardized information educators have sought since the 1930s. The use of clearly-stated, measurable goals that examine all aspects of children's' growth are imperative for assessing learning in the nongraded classroom. Such objectives, which might begin with “It is expected that students will . . .”, should also be clarified within concise and unbiased performance criteria (Gaustad, p. 25).

The teachers' view of curriculum in the nongraded classroom becomes longitudinal as the nongraded organization permits the teacher to guide the student through learning regardless of any ceilings which can be imposed by grade levels. For “concepts, skills, and values do not lend themselves to grade packaging any more than pupil realities do” (Goodlad & Anderson, 1987, p. 83).

To summarize, the teacher's role in teaching for continuous progress is best described as “facilitator” (Gillaspie, 1993). Thematic instruction, frequent assessments, and planning with other teachers are all part of the teacher's role in the nongraded classroom. This dynamic role leads to various challenges and benefits. In the following section, research which documents the challenges and the benefits which are incurred when nongradedness is instituted will be discussed.

Relevant Research on Nongradedness

Pursuant to the research questions explicated in chapter one, relevant research will be synthesized and presented within two domains: the challenges and the benefits that are perceived when a nongraded, multiage program is implemented.
Challenges

During any change process, it is reasonable to expect that problems and challenges will occur along the way (Fullan and Miles, 1992). One of the challenges previous researchers experienced was with documenting the effectiveness of nongraded programs. The complex nature of nongradedness was illuminated by the resultant conclusions that these researchers discussed. Therefore, this section will first address the complexities of studying nongradedness. Also included in this section will be the implementation concerns of those who have previously instituted nongradedness in their schools.

Nongradedness: A complexity requiring further analysis. As was shown in chapter one and within the section which defined nongradedness, nongradedness is complex and is more than an organizational arrangement for children. In a synthesis of research on programs that placed children of varying ages into the same classrooms, Veenman (1995) made a clear distinction between split, combination classrooms and nongraded arrangements. Veenman recognized that nongradedness is a philosophy that permeates the entire school organization and is therefore “more than a vertical grouping of students” (p. 325). For this reason, Veenman excluded studies of nongradedness from the synthesis of research. Because of this complexity surrounding the nongraded definition, Veenman stressed that “Future research should examine not only the effects of different forms of organizational grouping but also the processes by which these effects are brought about” (p. 370).

The problem with defining the processes or criteria that are attributed to nongradedness has also perpetuated a problem with attempting to document its
effectiveness. Studies have shown that in attempting to evaluate the effects of nongradedness, further analysis which looks beyond the mere end result is necessary.

Three studies will be presented which document the challenges encountered when conducting research on nongradedness. The studies which help to highlight such challenges are the research of Otto (1969), McLoughlin (1969), and Milburn (1981). In each case, the conclusions were that nongradedness does not provide for gains in academic achievement. Upon further analysis, however, each researcher reached conclusions that revealed the limitations of their studies and the complexities of studying nongradedness.

The first study, which was conducted by Otto (1969), compared a nongraded with a graded program. The results were found to be inconclusive. The data, which were gathered over a period of 17 months and consisted of measures of both academic achievement and mental health, tested 13 hypotheses and 18 sub-hypotheses. Of these, 14 supported nongradedness, 11 supported gradedness, and 11 failed to support either arrangement.

The limitations of Otto’s (1969) study were due to methodological flaws that existed within the study. Characteristics that existed in the experimental group also existed in the control group, criteria which are embodied within the ideal nongraded definition. Such criteria included the school’s efforts to individualize, eliminate a comparative marking system, and improve their reporting and conferencing procedures. Such practices therefore existed in both groups being studied, thereby rendering any true comparison between the two groups invalid.
In Otto's (1969) final analysis of his study, he summarized 40 previous studies and concluded that there are several challenges with analyzing the effects of nongradedness. Otto listed six issues which resulted from the analysis of his own and other research on nongradedness:

First, teachers differ widely in how they teach and how children become involved in the instructional program . . . Second, how teachers teach and how they work with children is more important than any single feature of organization. Third, the classroom practices of teachers are influenced by the scope and variety of resources available to them.

Fourth, if the resources are restricted one should not anticipate major advantages accruing to a nongraded program. Fifth, a nongraded program cannot be mandated . . . Sixth, if a nongraded program is to fulfill its mission, many related facets of the internal organization of the school must be altered simultaneously. (pp. 125 - 126)

These concerns Otto (1969) raised explain some of the complexities of studying nongradedness. Efforts to control for the potentially confounding effects of extraneous variables while researching nongradedness may be problematic.

Like Otto (1969), McLoughlin (1969) achieved insignificant results when he conducted a comparative study which evaluated the achievement of students in both graded and nongraded settings. The complexity of McLoughlin's study can be appreciated by realizing that it entailed 127 F tests, none of which achieved significance in the final analysis. McLoughlin attempted to not only find benefits for students but also for teachers and principals and, inversely, how variables describing students, teachers, and principals might relate to achievement and social adjustment.
McLoughlin (1969) was very critical of the nongraded schools he evaluated as he felt these schools made modifications in organizational patterns alone. McLoughlin felt that these teachers failed to devote the necessary time and energy to revising instructional practices that contribute to ideal nongradedness. The necessary changes in instruction did not accompany the organizational reshuffling of students. Rather, it was a change in name and structure only. In a caustic conclusion, McLoughlin (1969) remarked:

Somehow they seem convinced that these administrative arrangements will bring the right teacher face-to-face with the right group of children at the right time in the right learning environment and a truly marvelous educational experience will ensue. Perhaps, so. But at best this is an elusive formula and in truth probably a nonexistent one. Even if these events did transpire the ensuing benefits should be credited to propinquity rather than nongrading. (p. 175)

The challenge existed to make the necessary changes which went beyond simply placing students in a classroom with others of varying ages. Such changes were needed to demonstrate the effectiveness of a nongraded organization, changes which would lead to greater outcome variables.

In the study of nongradedness, an analysis which looks beyond the raw data of standardized tests is necessary. Gutierrez and Slavin (1992) synthesized the research on nongradedness using a comparison of effect sizes and found conflicting results. These researchers suggested that when utilizing the experimental design, a very careful and specific definition of nongradedness as the independent variable is imperative. In this description of the independent variable, a description of the various criteria which contribute to the nongraded definition would be warranted.
The third study, the research of Milburn (1981), also demonstrated that in the study of nongradedness, the way the researcher chooses to analyze the data will affect the results. The purpose of Milburn’s research was to determine the gains children experienced when placed in a multiage classroom. Two schools served as the experimental and control groups, and standardized reading and math tests were used to assess student achievement. The resultant data revealed little difference in basic skills achievement levels.

Upon further analysis, however, Milburn (1981) did find that the younger children within each multiage classroom outperformed their counterparts in the graded school. Additionally, when looking at reading subtest results, Milburn found that the multiage children performed significantly higher on the vocabulary section. While Milburn’s conclusion was to state that multiage grouping is not “the panacea for all educational ills,” children do benefit “from the tendency to emulate older youngsters” (p. 514).

Milburn’s (1981) research demonstrated that different ways of looking at the assessments used to measure outcome variables are needed. This research and method of data analysis illuminated the distinctive advantages of being in a multiage classroom, advantages that were not apparent from the initial analysis of standardized test scores.

In their reviews of research which considered academic achievement, Anderson and Pavan (1993) and Mazzuchi (1994) presented conflicting results. In Mazzuchi’s review of 13 studies, none showed statistical significance. In Anderson and Pavan’s 1968 through 1990 review of studies on student achievement, significant results which clearly favored nongraded programs were found 47% of the time. As the research on student
achievement as related to nongradedness demonstrated, proving that nongraded, multiage programs increase academic achievement is difficult. Katz, Evangelou, and Hartman (1990) explained that "Psychologists and educators do not fully understand how mixed-age interaction affects cognitive development" (p. 27).

In chapter one, the limitations of using standardized tests to document the efforts of children in nongraded classrooms were addressed. It was argued that the use of standardized tests may be inappropriate and invalid for addressing the differences which exist among children in nongraded and graded classrooms. In looking at the various criteria that contribute to an authentic nongraded classroom, differences or a lack of differences may be due to the existence or nonexistence of these components. The research of Otto (1969), McLoughlin (1969), and Milburn (1981) have shown that when looking at nongradedness, the complex nature of its definition represents a challenge to those who study it.

In conclusion, two main issues were presented in this section. One, differences in achievement between students in graded and nongraded programs may be confounded by overlapping characteristics which exist in both experimental and control groups. Secondly, the resultant analysis and conclusions are dependent on the data analysis researchers employ. The complexities surrounding nongradedness make it difficult to research utilizing a design which fails to address the criteria which may or may not contribute to its effectiveness. Past research has relied on the use of standardized tests, results which do not facilitate a complete analysis of the effects of nongradedness.
Therefore, a challenge exists that in the study of nongradedness, researchers will acknowledge these issues.

Implementation concerns. As many schools have instituted nongradedness, challenges and problems have arisen. These implementation concerns will be addressed within this section and will address these concerns as they relate to parents of nongraded students, teachers’ concerns, and the change process as related to nongradedness.

The Appalachia Educational Laboratory (AEL) and the Kentucky Education Association (KEA) compiled case studies of ten nongraded primary programs in Kentucky (1991). Lack of parental understanding and acceptance of the ungraded primary program was perceived as being the greatest challenge during the implementation process (AEL & KEA, p. 37). Similarly, the results of surveys of communities which experimented with nongraded programs indicated that providing understanding to parents was a challenge (Goodlad and Anderson, 1987). In one study, the parents of the older children in the multiage arrangement were most likely to be dissatisfied with the program (Hafenstein et al., 1993).

Because of this challenge with parent understanding, Goodlad and Anderson (1987) recommended taking the process slowly and to not rush into the change to nongradedness. They also suggested that parents should be educated before gaining consent and while developing a common philosophy. However, during the study of the implementation of Project Sail in Brooklyn, New York, it was revealed that although much effort was put into activities for promoting parent involvement, few parents complied (Jarvis, Zak, & Houtrides, 1990). In contrast, parent involvement was identified
as being a critical characteristic for making a successful transition during the implementation of a nongraded program which was mandated in the state of Kentucky (Aagaard, Coe, Moore & Kannapel, 1994).

The Kentucky Education Reform Act, K.E.R.A., mandated nongraded primary programs for the traditional K-3 student, and the 1992-1993 school year was the first year in which nongraded primary units functioned. A qualitative study (Aagaard et al., 1994) of eight rural schools concentrated on the findings which resulted during the first year of the change to nongradedness. Teachers in this study reported that the greatest challenges were teaching for continuous progress, insufficient teacher education, lack of planning time for teachers, and heavy work loads.

The same line of research concerning teachers' perceived challenges was documented by Addington and Hinton (1993). These researchers conducted a county-wide survey of nongraded teachers in the state of Kentucky of 37 teachers from 27 schools. The teachers' most pressing concerns were that the class size was too high for both whole group and small group instruction. Additionally, the teachers were not in agreement on the use of computers and other technology, and some felt this arrangement was more difficult than teaching in a traditional program.

The perceptions of teachers in ten nongraded primary programs in Kentucky documented more implementation concerns. The most frequently reported disadvantage was “increased time and effort on the part of the teachers” (AEL & KEA, 1991, p. 38). A lack of teacher understanding and acceptance of the nongraded primary program concept

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was perceived as being the greatest obstacle for implementing the nongraded program (AEL & KEA).

Project Sail (Jarvis et al., 1990) described the transformation of the primary grades at a Brooklyn, New York public school into a nongraded program. This venture was a collaborative project of the United Federation of Teachers and the New York City Board of Education. Resultant data indicated that the teachers were both frustrated and exhilarated during this transformation. One of the main challenges within the project centered around the teachers learning to collaborate. The struggle to create schedules for grouping children within the team-teaching format presented the other main challenge.

The surveys of Goodlad and Anderson (1987) resulted in data which revealed that the grade-level expectation habits of teachers presented a challenge during the implementation process. Teachers' traits as traditionalists who are reluctant "to try something different" also posed as a challenge during the implementation process (Goodlad & Anderson, p. 172). Hunter (1992) found that the metamorphosis from a graded to the ideal nongraded teacher did not happen overnight. Two teachers from the school where she served as principal left after the first year. In this case study, Hunter discovered that some teachers experienced difficulties with shedding the image of being the sole provider of learning. The transformation to a nongraded environment whereby students were taught and encouraged to be responsible for their own and each other's learning took time. Helping teachers guide students to work independently was a main focus in Hunter's book on changing to a nongraded school.
Teaching in a nongraded multiage setting does require advanced professional skills on the part of the teacher (Hunter, 1992; Miller, 1991). To master all of the criteria of the authentic nongraded definition can place demands on the teacher. Miller maintained:

A teacher cannot ignore developmental differences in students nor be ill-prepared for a day’s instruction. Demands on teacher time require well developed organizational skills. The multigrade classroom is not for the timid, inexperienced, or untrained teacher. (p. 3)

The multidimensional criteria of the nongraded definition and teacher skills which pose the greatest challenges to teachers have received some study. The case studies of Aagaard, Coe, Moore & Kannapel (1994) reported that it was a challenge to include certain critical characteristics for making a successful transition to nongradedness. These critical characteristics included teaching for continuous progress of students; developmentally appropriate instruction; authentic assessment; clear multiage and multi-ability compositions; qualitative reporting methods of pupil progress; professional teamwork; and parent involvement.

Another concern for teachers has been a lack of support from peripheral agencies for both preservice and practicing teachers. Gayfer (1991) reported that while 29% of the elementary schools in Canada have changed to multiage classrooms, other agencies do not appear to have caught up with the change. Gayfer maintained that by not recognizing the various needs of teachers and students in a multiage setting, curriculum directors and administrators, educational agencies, and universities have failed to provide the proper support. When realizing that the use of a single definition of nongradedness was an elusive one, Lewis (1969) theorized that universities’ failures to adequately present the
nongraded concept were perhaps the reason for the problem with definition. As most teachers have been trained to work in single-graded classrooms (Miller, 1991), many implementation concerns can be traced to a lack of proper support from both universities and educational agencies.

As is true for most any innovation, the change process is an inherent challenge (Brandt, 1995; Fullan & Miles, 1992; Sarason, 1990). Some of the implementation concerns stem from the fact that teachers and parents alike are resistant to change. In their research of an elementary school in Maine, the authors concluded that because many are unaccepting of change it was imperative that educators remain flexible and prepared for conflict (Bilodeau-Callan & Bossie, 1995).

In conclusion, there are many challenges which evolve during the implementation process. In this section, it was shown that parents resist the change and sometimes serve as obstacles if they are not brought along slowly. The implementation concerns of teachers included an increased work load which included time for preparation and planning, class size, and the inclusion of critical characteristics which define nongradedness. Finally, the change process represents a major challenge and is one that must be understood as other agencies take time to assimilate the change.

Benefits

Despite the inherent challenges and lack of overwhelming research to conclude that a nongraded, multiage continuous progress program leads to higher academic achievement, more and more schools are trying it, especially rural schools (Miller, 1991). Three states, Kentucky, Mississippi, and Oregon, have mandated nongraded, multiage
programs while several others have legislation pending (Lodish, 1992). Advocates for nongradedness cite many benefits of nongradedness to support the reasons for the innovation. In this section, the benefits will be addressed in three areas: how both teachers and students have been positively affected during the implementation of a multiage program; how the multiage arrangement affords teachers the luxury of time; and lastly, studies in which gains in student achievement were found.

**Teacher and student satisfaction.** Both teachers and students have been found to experience satisfaction with nongradedness. Many teachers in nongraded programs reported that the additional preparation was well worth their efforts. Besides attending in-service meetings and reading professional literature in preparation for the change, teachers of nongraded classrooms also reported a significant increase in the amount of time spent planning for each school day (Gillaspie, 1993). In Kentucky, where the Kentucky Educational Reform Act required nongraded primary classrooms, it was reported that the majority of teachers had accepted the mandate and were able to do so with proper support (Aagaard et al., 1994). Similarly, case studies of 37 teachers in the state of Kentucky revealed that teaching a developmentally appropriate curriculum was not too demanding and teachers enjoyed the environment of the nongraded classroom (Addington & Hinton, 1993). Although more demands are placed on the teacher, these studies have indicated that teachers have enjoyed the challenge.

As principal at the U.C.L.A. laboratory school where she served as principal when it converted to a nongraded school, Madeline Hunter found that teachers focused more on each student's needs, felt more like professionals, and "Though nongrading and team
teaching demand advanced professional skills, the satisfaction of accelerated growth for both students and teachers makes the outcomes well worth the effort" (Hunter, 1992, p. 72).

Overwhelming evidence suggests that the main strength of nongradedness is the improved student attitude of the children involved. Way (1981) found that while no significant differences could be found in the area of achievement in comparing graded to nongraded, nongraded classrooms experienced significantly higher scores in the area of happiness and satisfaction. This was corroborated by Pratt’s (1983) contention that the multiage arrangement improves children’s social and emotional well being. Additionally, Miller (1990) reviewed 21 studies which addressed student attitudes and social relationships and reported that multiage students outperformed single-graded students 81 percent of the time.

The study of Project Sail also has implications for understanding student satisfaction with nongradedness (Jarvis et al., 1990). Instituted in Brooklyn, New York, this entailed the transformation of the primary grades at a public school into a nongraded program. Results of Project Sail included significantly higher attendance rates when compared with the previous school year. Using Child Behavior Rating Scales, the children also demonstrated a statistically significant improvement in social skills (Jarvis et al.).

Similar benefits for student satisfaction were found in a study conducted in Kentucky. Teacher satisfaction was also a factor. In a survey of 37 teachers from 27 schools in Kentucky, the researchers concluded that both students and teachers found the atmosphere to be enjoyable (Addington & Hinton, 1993). The Appalachia Educational
Laboratory (AEL) and the Kentucky Education Association (KEA) compiled case studies of ten nongraded primary programs and reported that student motivation was a perceived benefit (AEL & KEA, 1991, p. 37).

Because they are no longer comparing themselves to same age children or contemplating retention or promotion to the next grade level, nongraded students are believed to feel less threatened. While it has been found that retention does not help students (Bracey, 1992; Glickman, 1991; Haberman & Dill, 1993), nongradedness offers an alternative for children whose developmental rates are less than their peers. Conversely, same-age grouping has been found to lead to increased competition and aggression (Pratt, 1983).

The emphasis of cooperation versus competition, individualized instruction, acceptance of individual interests and abilities, and peer tutoring are all reasons why children might feel more at ease in the nongraded program. The roles which a child may take on in their involvement in a nongraded program ranges from that of the leader, to follower, to enabler. In fact, it can be compared to the sibling ranking of family members, an attribute which remains constant throughout a person’s life and is irreversible. It is reversible in the nongraded setting; and as Hunter (1992) stated, to take on different roles “is impossible at home; but at school it is not only possible but highly desirable” (p. 20).

In a study of gifted children in a nongraded school, Hafenstein et al. (1993) reported that teachers felt that growth in students’ leadership skills had occurred as a result of the change to a nongraded, multiage program.
Mental health was one of the topics analyzed from a review of studies conducted on nongradedness between 1968 and 1990 (Pavan, 1992). The data reviewed measures of school anxiety and other attitudes toward school, self-esteem, and self-concept. Studies on mental health and school attitudes indicated that only five percent of the cases had negative findings for nongraded schools (Pavan, 1992). Pavan concluded that students in nongraded schools were more likely to have positive self-concepts, high self-esteem, and positive attitudes toward school than students in graded schools.

Time. One of the most compelling reasons to change to a nongraded program is that it provides time for children to develop at their own rates. Teachers in Austin, Texas reported that in one school year, 600 first graders had been retained; statewide, the retention rate was more than 10 percent (Hime & Moore, 1995). The main reasons that these Austin teachers began a nongraded program was in response to these appalling statistics and because they noticed “many first graders were not ready for the structured program that was in place” (Hime & Moore, p. 44). So when they devised a curriculum which combined the first and second grade’s traditional one, they found it allowed students time to become readers and plenty of time left for the remainder of the curriculum.

Hime and Moore (1995) used the term “kindergarten culture” to describe the new environment created by their implementation of nongradedness (p. 45). Within this new culture, they discovered:

Simply knowing we had two years instead of one with this new class lifted that awful pressure from teachers and students alike.
The two-year cycle allowed us to put our energies where they belonged—toward learning, at whatever pace. (p. 45)

Goodlad and Anderson (1987) reported on an elementary school in Englewood, Florida which experienced fluctuations in population and rapid growth. The staff chose nongradedness as the solution and teams of teachers worked together to make major curriculum revisions. Not only did it become clear that a single grade designation could never adequately describe the achievement level of either the class or each separate pupil, but it was also apparent to them that some children needed more than the allotted six years to achieve curriculum goals of the elementary program and "conversely some children needed less time" (Goodlad & Anderson, p. 72).

As Hunter (1992) contended "learning has become the constant. We believe all students can, and should, accomplish stipulated kinds of learning to a satisfying degree. The variable, now, is the amount of time necessary for each student’s success" (p. 2). The Appalachia Educational Laboratory (AEL) and the Kentucky Education Association (KEA) compiled case studies and reported that one of the benefits was that nongradedness provided the needed time for some students to gain desired achievement levels in reading and mathematics (AEL & KEA, 1991).

That children feel less threatened in this environment is due, in part, to the philosophy of continuous progress in the nongraded structure which makes adjustments to the variability of their needs. Children progress from easier to more difficult material at their own varying rates of speed, making continuous progress that the teacher carefully
monitors without considering any barriers imposed by grade level standards (Gaustad, 1992; Hunter, 1992).

Whether a teacher keeps a child for longer than the time intended would depend upon the continuous progress of the child and the options that are available within that existing school system. For example, at multiage program in Texas now houses, many options exist in the framework of K-1, 1-2, 2-3, and 4-5 multiage classes. In Victoria, Canada, a school where multiage grouping has been used for 20 years and includes the middle school years (Hime & Moore, 1995), even more options would be possible for student placement.

In making the decision of where to place the child, the needs of the whole child are considered. Hime and Moore (1995) reported that in at least four cases, parents of very bright children could have sent their first year students on to the next multiage classroom with traditional third and fourth graders. While the children possessed high academic abilities, the decision to keep them with the multiage first and second graders was based on their emotional maturity.

An obvious benefit of nongradedness is that teachers and students do spend more time together. In the previous chapter, the term "loss of investment" was used to describe how teachers sometimes feel when the year ends and they are therefore unable to continue with the progress they had made with the students (Goodlad & Anderson, 1987, p. 68). In comparing the graded to a nongraded, multiage situation, the minimal loss of invested time in a nongraded setting becomes an advantage. For the student, this gain is a secure knowledge in knowing the teacher (Veenman, 1995), classroom routines, and being able
to pick up where you left off before vacation halted the learning process (Hime & Moore, 1995).

Studies of student achievement. In the previous section which addressed the challenges with analyzing the effects of nongradedness, various studies were presented to demonstrate the issues with attempting to document gains in student achievement. In reviews of research which considered academic achievement of nongraded programs, mixed results were reported. In Anderson and Pavan’s (1993) 1968 through 1990 review of studies on student achievement, significant results which clearly favored nongraded programs were found 47% of the time. As the research on student achievement related to nongradedness demonstrated, proving that nongraded, multiage programs increase academic achievement is difficult. Katz, Evangelou, and Hartman (1990) explained that “Psychologists and educators do not fully understand how mixed-age interaction affects cognitive development” (p. 27).

Although the effects of student achievement in nongraded classrooms are not fully understood, studies which document gains in student achievement are presented to illuminate some of the perceived benefits of nongradedness. A study which compared the achievement of nongraded and graded elementary students in Tennessee revealed significant gains for the nongraded students (Nye, Cain, Zaharias, Tollet, & Fulton, 1995). The nongraded students outperformed the graded students on the grade two and three Tennessee Comprehensive Assessment Program (TCAP) and on the third and fourth grade Tennessee Holistic Writing Assessment. The areas of the TCAP in which the
multiage second and third graders outperformed the graded students were vocabulary, total reading, total language, and total math (Nye et al.).

The reading achievement of students in three different types of educational programs was compared to determine if their reading could be influenced by altering the traditional organizational structure (Ricciotti & Soares, 1983). Comparisons were made among a traditional program, an open space model, and a nongraded system of organization. The researchers used standardized tests and longitudinal data to conclude that students in schools with nontraditional designs do as well or better on reading achievement tests and that even greater benefits are realized if the amount of time in the innovative design is increased (Ricciotti & Soares).

Other studies exist that addressed the issue of student achievement. Resultant data from Project Sail in Brooklyn, New York, reported that more than 80 percent of the teachers involved in the projects maintained that both student achievement and attitude had improved (Jarvis et al., 1990). Individualized student progress was reported as the most frequently reported advantage in case studies of ten nongraded primary programs (AEL & KEA, 1991).

In a study conducted at a nongraded school for gifted children, Hafenstein et al. (1993) reported that teachers felt that these gifted children had experienced satisfactory amounts of growth in academic areas. The Appalachia Educational Laboratory (AEL) and the Kentucky Education Association (KEA) also reported that one program had done much to challenge gifted students (AEL & KEA, 1991).
An analysis of 18 studies on nongradedness was completed to determine how black students, underachievers, students of low socioeconomic status, and boys were affected as compared with their counterparts in graded schools (Pavan, 1992). The results of this analysis and research since 1968 are as follows:

1. Research studies comparing nongraded and graded schools provide a consistent pattern favoring nongradedness.
2. The nongraded groups performed better (58 percent) or as well as (33 percent) the graded groups on measures of academic achievement.
3. On mental health and school attitudes, 52 percent of the studies indicated nongraded schools as better for students, 43 percent similar. Only 5 percent showed nongraded as worse than graded schools.
4. The benefits to students of nongradedness increase as students have longer nongraded experiences.
5. Blacks, boys, low socioeconomic level students, and underachievers benefit from a nongraded program. (Pavan, 1992, p. 23)

In closing, the many benefits incurred when a nongraded, multiage classroom is implemented include higher degrees of student and teacher satisfaction; more time to teach to the individual and to teach for continuous progress; and gains in student achievement have also been documented.

Summary

One focus of this study was to determine the perceived benefits and challenges incurred when a nongraded, multiage continuous progress program is implemented. The other main focus of this study was to analyze the participants applied knowledge of their definition of a nongraded, multiage continuous progress program. This summary will demonstrate how this chapter reviewed the research relating to these research purposes.
During this implementation process, teachers may vary in their interpretation and application of the multiage definition, a definition which in the past has been problematic. The problematic nature of this definition stems from the fact that teachers once used terms such as ability grouping, homogeneous grouping, and team teaching to loosely define nongradedness. Because of these problems with defining nongradedness in the past, a definition to guide this study was offered in chapter one and explained further in this chapter.

This chapter has reviewed the literature in three areas to present the background and importance of the study. First, literature and research which described the historical background and changing definitions of nongradedness were highlighted. The second section looked at the definition of nongradedness and how it is supported by the philosophy and approach to the organization of teachers and students. For example, it has been suggested that teachers use team teaching and flexible grouping schemes for grouping students for instruction. In the subsection which presented the teacher's role in teaching for continuous progress, the ideal nongraded teacher's views on curriculum, instruction, and use of assessments and materials were stated.

The final section described relevant research which showed both the challenges and benefits incurred when a nongraded program is started. The challenges were classified into two areas: a) how the complexities of nongradedness require detailed analysis and b) implementation concerns. Several studies were highlighted that showed that nongraded schools did not outperform graded schools as measured by standardized tests. Studies have been conducted which indicate that when nongradedness is started, grade-level
expectations of both parents and teachers can be problematic. Similarly, insufficient
teacher education, heavy work loads, high class size, and the requirement of advanced
professional skills on the part of the teacher were some of the concerns which were found
when nongradedness has been attempted.

In this review of research, many benefits of nongradedness were also reported.
These benefits were presented in three areas: teacher and student satisfaction, extra time
which is afforded in this arrangement, and studies where gains in student achievement
were found. Research along these lines suggested that teachers and students alike enjoy
the nongraded arrangement and that students’ attitudes improve. Teachers also reported
that the additional time spent with students enables them to achieve curricular and
instructional goals. The gains in student achievement in different areas, such as reading,
math, at-risk students and gifted students, were also discussed. A synthesis of research
was offered which documented that gains in achievement and in mental health and student
attitudes occurred the majority of time when compared with graded schools.

Several important conclusions can be drawn from this review. Because of the
problematic nature and complexities of defining a nongraded, multiage program, any
attempt at research on nongradedness must examine the various criteria which contribute
to the authentic definition. Research which used standardized tests and the experimental
design were limited in that these approaches fail to address the various criteria, thereby
avoiding the issues which arise when a nongraded, multiage program is implemented.

As teachers begin teaching in a nongraded setting, this review indicated that they
will perceive various challenges and benefits. Additionally, because of the complex
definition, teachers will vary in their interpretation and application of the nongraded, multiage definition. That is, teachers may vary in their philosophy and goals, approaches to organization of teacher teams and student groupings, views on curriculum, instructional practices, and use of assessments and materials. How these teachers vary and struggle with the implementation of these various criteria in their first year of nongradedness will provide meaningful information to teachers and policy makers wanting more information on nongradedness.

Lastly, by noting the complexities of defining nongradedness and the limitations of using standardized tests and the experimental design to study nongradedness, a rationale for studying nongradedness using qualitative research methodology has been implied. This will be discussed further in chapter three.
CHAPTER 3

METHODOLOGY

The purpose of this study was to identify varying definitions, challenges, and benefits incurred during the implementation of a nongraded, multiage continuous progress program. Bogdan and Biklen (1992) stated that substantive theoretical questions provide the basis for generating formal theory. The formal theoretical question which arose was, “What happens when a nongraded, multiage continuous progress program is implemented?” This chapter will provide a description of the procedures used in pursuit of the specific research questions presented in chapter one. Specifically these queries were: As the teachers attempt to apply their knowledge of the definition of a nongraded, multiage continuous progress program, how do they vary in their implementation? What are the perceived challenges which emerge when a nongraded, multiage continuous progress program is implemented? What are the perceived benefits which emerge when a nongraded, multiage continuous progress program is implemented?

A qualitative design was the methodology chosen for this research including individual case studies and a cross-case analysis. Information pertaining to these questions was obtained through the use of interviews and observations of the six participants and
their primary classrooms. During this study, each participant was interviewed six times and observed on seven different occasions.

The interviews were designed to elicit teacher perceptions of their nongraded definition, challenges, and benefits which arose during the first year implementation of the nongraded, multiage program. The researcher also used the nongraded definition presented in chapter one to guide the end of school interview of phase three and to provide a basis for comparison among the participants. This operational definition was based on Anderson's (1995) eight edicts and the suggestions for the ideal nongraded school that were provided by Anderson and Pavan (1993). This definition was organized according to six main areas: the goals of schooling; organizational structures of students and teachers; curriculum; instruction; assessment and reporting practices; and the use and selection of materials (Anderson & Pavan).

In the rest of this chapter, the methodology will be explained by first discussing the rationale for using qualitative research. After that, the researcher's history with the site and a brief discussion of the participants will follow. Then, procedures for collecting and analyzing the data will be presented. Finally, a discussion of the role of the researcher, the researcher's attempts to enhance credibility and quality and the possible limitations of the study will be explained.

**Rationale for Research Methodology**

As stated in the introduction, the goal of this research was to gain an understanding of the implementation of this pilot program, specifically the teachers' perceptions of the benefits and challenges of nongradedness. In chapter one, previous
studies were included which demonstrated the importance of studying teacher perceptions during an innovation (Duffy, 1993; Englert et al., 1993; Pace, 1992; Scharer, 1992a).

Qualitative research in the form of case studies has been chosen because of "its usefulness in making human actions and interventions more effective and by its practical utility to decision makers, policy makers and others who have a stake in efforts to improve the world" (Patton, 1990, p. 12). Qualitative research best captures the voices of the teachers as they emerged during this implementation process.

For several decades, educational researchers have attempted to discover the most effective educational practices. Most often, they have tried to apply the practices of natural sciences to the social sciences, relying heavily upon the experimental method. Even in the case of research on nongradedness, the majority of past endeavors have been experimental. Anderson and Pavan (1993) compiled a listing of post-1967 published research studies which compared nongraded and graded schools. Each study used either an achievement test and/or a test of mental health as its outcome variable, demonstrating this reliance on the experimental method and the use of dependent variables.

Caine and Caine (1991) maintained that "One of the major recent developments in the world of science has been an appreciation of how complex, interactive, and open ended social systems are" (p. 18). Likewise, Goodman (1989) recognized the need to study the complex nature of learning and literacy and how the pieces relate to the whole. Caine and Caine suggested that more qualitative measures are desperately needed in education while Goodman proposed that the proper research methodology for studying
literacy would be in the form of either ethnographies or case studies as they would be “real-world, naturalistic” types of research (p. 217).

It is not realistic to believe that decision makers can be certain that a particular program, such as nongradedness, will be appropriate for their particular situation. Qualitative research may enable decision makers to look at an innovation and determine how applicable it is to their own situations. Ted Sizer, director of the Annenberg Institute for School Reform, suggested that this local decision making process “frustrates researchers who want to look at how this design works in practice, because each community does things in its own fashion. But we strongly believe that you have to look at reform school-by-school-by school” (O’Neil, 1995, p. 4). The qualitative design makes it easier for decision-makers to study school-by-school reforms. For example, in this study, the data provided on the definition of nongradedness and the challenges and benefits will benefit decision makers.

One of Halcolm’s Evaluation Laws is that “Qualitative inquiry cultivates the most useful of all human capacities - the capacity to learn from others” (cited in Patton, 1990, p. 7). For describing what goes on in a nongraded, multiage classroom and for answering this study's research questions, qualitative research, also known as naturalistic inquiry, was thought to be the appropriate form of research. The need for qualitative research was shown when Goodlad and Anderson (1987) compared a nongraded and graded school. As they examined the schools’ instructional practices they discovered that the graded school was engaging in programs which were atypical of graded schools while the nongraded school’s major change was simply to change its graded label! Thus, these
authors contended that "It is therefore highly important for researchers to examine the extent to which the essential features of nongradedness, as a system, are found within each environment being examined" (Goodlad & Anderson, p. xxii). This methodology will enable the researcher to examine the characteristics that distinguish nongradedness.

Mischler (1979) suggested that researchers have existed who, in their search for truth, have employed context-stripping methods, ignoring the dependence of meaning on context. Mischler maintained, "We tend to behave as if context were the enemy of understanding rather than the resource for understanding which it is in our everyday lives" (p. 2). Qualitative research enables the researcher to study an event in context and provide the researcher with a lens for viewing events as they unfold. Sparkes (1989) compared the naturalistic paradigm with the positivistic paradigm and stated that the nature of reality in the naturalistic paradigm is "multiple, constructed, holistic, internal & dynamic, nominalism" (p. 134). Thus, the description of this nongraded program will entail a view of the whole picture and how meaning from this experience is constructed jointly, from the various internal forces.

Qualitative research is dependent upon the use of exploration and inductive logic. In this study, this exploration entailed observations and interviews. The inductive analysis began with specific observations from which patterns and categories emerged. In qualitative research, inductive analysis begins with specific observations and interviews and builds toward the emergence of general patterns. These patterns become meaningful as the "evaluator comes to understand program patterns that exist in the empirical world under study" (Patton, 1990, p. 44).
Thomas Kuhn (1970) wrote that the question of scientific progress will be unexplainable until scientists and researchers seek a type of answer which is typified as being "psychological or sociological . . . a description of a value system, an ideology, together with an analysis of the institutions through which that system is transmitted and enforced" (p. 21). In this study of nongradedness, it is this type of descriptive answer which painfully strives to explain the empirical social world that distinguishes this methodology. This methodology will aid the researcher in discovering the participants' unique definitions, struggles, and perceived benefits.

Researcher's History with Site and Participants.

The researcher had been an eleven-year employee of the school district for the site chosen for this study. Central Elementary, in the city of Bellingham, will be the pseudonyms used to refer to the site. For the year prior to and during the implementation of the nongraded program, the researcher was employed as a morning kindergarten teacher at Central.

Central Elementary is a K-5 school situated in the predominantly low income sector of Bellingham, Ohio, a city of approximately 14,000 people. The district follows an open enrollment policy for transfers from other city schools and neighboring districts. Five children applied for and were granted permission to enroll for the 1994-1995 school year.

Roughly 69% of Central students qualified for free or reduced lunch rates, compared with percentages of 14%, 23%, and 27% at the other elementary schools in the city. Of the four elementary schools in Bellingham, Central ranks lowest in standardized
test scores and highest in number of students identified for special education services. While 79% of metropolitan housing units in Bellingham County are located in Bellingham, 63% of them are in Central's designated elementary school district. Seventy-one percent of the families which receive Aid to Dependent Children in the city of Bellingham are located in Central's district (Pendergast, 1994).

The researcher became interested in the nongraded program when the topic first arose at Central because it was possible that a kindergarten, first, and second grade class might have been formed. Even though the kindergarten classes were eventually excluded from the multiage arrangement, the researcher's curiosity continued. In fact, the researcher and five of the six nongraded teachers wrote a grant proposal for this program which fulfilled a requirement for part of the researcher's graduate studies.

As this proposal was written and preparations were made to present this nongraded program to the Board of Education, the researcher became an ally to the teachers and principals, someone who could provide sources and help prepare proposals. Of particular interest to the researcher was how nongradedness assimilated current research on curriculum, instruction, grouping patterns for students and teachers, motivation, and assessment into one educational program. Because the researcher played an important, supportive part in the development of the proposals, this program presented itself as a significant opportunity for conducting research. The researcher's familiarity with the school district and the participants also made it easier for the researcher to gain access to the research site.
At the spring Bellingham Board of Education meeting in which approval was granted to begin this program as a pilot project, the researcher was in attendance and joined the principal and teachers in speaking on the merits of nongradedness. When the Bellingham Board of Education provided funding for the principal and four of this study's participants to attend the 1994 Society for Developmental Education's National Conference on Multiage Continuous Progress Classrooms in Cincinnati, Ohio, the researcher was also allowed to attend.

The principal and teachers all agreed to volunteer as participants in this study after the board gave final approval to proceed. After the spring board meeting, the superintendent also agreed to allow this school to be studied. When a sixth teacher was added to the program, to allow class size to remain around 20, this teacher also agreed to participate in this research project.

Access to this site for this study was facilitated by the prior relationship the researcher enjoyed as a longstanding employee of the district and as a current employee of Central during the 1994 - 1995 school year. By working closely with the teachers as a colleague and then as an ally, the researcher knew that the participants would be involved in the inception of an educational program that would provide data concerning the research questions that guide this study.

Participants

In the spring of 1994, the superintendent and the Board of Education met to discuss the potential for implementing a nongraded, multiage continuous progress program at Central Elementary. At this meeting the principal, three of the participants,
and the researcher presented to the board a folder with related journal articles, and then each spoke on the merits of nongradedness. The board then unanimously voted to approve a pilot program at Central Elementary. The nature of the pilot program was to take traditional first and second graders and place them in a nongraded, multiage continuous progress program. It was decided that “Primary Unit” would be the new term given to identify the traditional first and second graders at Central Elementary.

The six classroom teachers that volunteered to participate in this study have been given pseudonyms. All six were asked to participate in the study and all six volunteered without hesitation. By gaining the perspectives of all multiage teachers at this site, the researcher attempted to gain a broader view of what happens when a multiage program is implemented.

All six teachers are women. They vary in years of teaching experience and levels of graduate school education. For example, while Nicole was a second year teacher, Dana had been teaching for 18 years at the time of the study. Both Renita and Roberta had earned Master’s degrees while Dana planned to finish her degree the following summer. Ruth went to college to earn her teaching degree after working in a factory and serving as a teacher’s aide. Anne is an experienced teacher who had previously worked in another state and then substitute taught for Bellingham schools before being hired full-time. Table 3.1 shows the varying characteristics of the six participants.
### Table 3.1: Description of the six participants.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Undergraduate Training</th>
<th>Years of Teaching Experience</th>
<th>Graduate-Level Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicole</td>
<td>Education Major, Psychology Minor</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>Dana</td>
<td>Dual major: special education and elementary education</td>
<td>19</td>
<td>Master's in the summer of 1995</td>
</tr>
<tr>
<td>Roberta</td>
<td>Elementary Education</td>
<td>15</td>
<td>Master's in whole language and children's literature in 1992</td>
</tr>
<tr>
<td>Anne</td>
<td>Elementary Education</td>
<td>12</td>
<td>Master's in education from 1986 from out of state; still taking courses to earn permanent Ohio teaching certificate</td>
</tr>
<tr>
<td>Renita</td>
<td>Elementary Education</td>
<td>6</td>
<td>Master's in whole language and children's literature in 1992</td>
</tr>
<tr>
<td>Ruth</td>
<td>Elementary Education</td>
<td>9</td>
<td>30 post-baccalaureate hours from three different institutions</td>
</tr>
</tbody>
</table>

As the focus of this study, all six teachers were observed and interviewed. To varying degrees, each teacher made on-site visitations to other programs around the state and attended workshops and conferences on nongraded programs. The preparation of each teacher will be reported in the individual case studies.

Although they were not the key participants in this study, the principal and superintendent were both interviewed at the beginning and at the end of the first year of the program. These interviews provided contextual data from which the researcher could gain a better understanding of the type of environment in which these teachers worked. Both administrators were very familiar with and supportive of nongradedness. The
principal had familiarized herself with the literature on nongradedness and had compiled pertinent articles for the primary staff. She also attended the Society for Developmental Education's 1994 conference on multiage. The superintendent was very knowledgeable about developmentally appropriate practices with young children and had taught in a school district in Iowa which had multiage classrooms. However, neither administrators were part of the program the entire second year. The principal eventually retired and the superintendent assumed a position in another state.

Procedure for Data Collection

For qualitative methods, Patton (1990) listed three kinds of data collection: “1) interviews; 2) direct observation; and 3) written documents” (p. 10). All three types are included in the explanation which follows.

The data were collected during four phases. The majority of data was collected during the 1994-1995 school year, the initial year of the implementation of the nongraded primary program. The study concluded with final meetings with each participant in the spring of 1996. Phase I commenced in October of 1994, Phase II began in January, and Phase III began after the Easter break in April of 1995. Phase IV represented the culmination of this study as the teacher met with each participant during April and May of 1996, after the researcher had completed the data analysis. During this final meeting, the participants aided in member checking as they reviewed their own case study. A discussion of member checking procedures will be discussed later in the section on credibility. The schedule of data collection was as follows:
**Phase I:** October - December of 1994

- Initial interview of all six teachers
- Interview with building principal
- Interview with district superintendent
- Second first-phase interview with all six teachers
- Group interview/observation with teacher teams

Observations: three per teacher

Document review: revised reporting system, and 3-ring binder of pertinent readings that principal had prepared for teachers

**Phase II:** January - March 1995

- Interview of all six teachers
- Group interview/observation with teacher teams

Observations: two per teacher

Document review: material from conference in Urbana, Ohio

**Phase III:** April - June 1995

- End-of-school-year interview of all six teachers
- Final interviews with superintendent and principal

Observations: two per teacher

Group presentation with Bellingham School Board

**Phase IV:** April - May 1996

Final interviews with all six teachers

Each interview was tape recorded and transcribed. Each classroom observation was scheduled during a time that was convenient for the teachers. During each observation, the researcher recorded field notes. Each observation lasted approximately

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one hour and efforts were made to observe and document a variety of content and instructional activities. These varying types of lessons that were included ranged from hands-on science, reading and math instruction, center time, and thematic lessons integrating science and social studies themes. Observations were also scheduled for mornings, afternoons, and during team meetings. Field notes were recorded and then shared with each participant after each observation. The role of the interviewer and the role of the observer will be explained further later in this chapter.

Cronbach (1982) and Patton (1990) maintained that qualitative research demands creativity, artistic interpretations, and judgments on the part of the researcher. Consequently, the areas which were addressed in each phase represented guidelines rather than a rigid format. For example, if the researcher knew of an occurrence that a participant would be willing to discuss, the researcher would begin the interview by asking the participant to address this issue. Also, if an observation could not be completed within the suggested time due to personal circumstances, the researcher rescheduled the observation. Such events are explained as they occurred. The following section is presented to explain the methodology for each phase.

The Four Phases of Data Collection

Based upon the operational definition of nongradedness that guided this study (Anderson and Pavan, 1993; Anderson, 1995), some parts of the interviews were designed to elicit responses in regard to the following characteristics of the ideal nongraded program: goals of schooling; organizational structures of students and teachers; curriculum; instruction; assessment and reporting practices; and the use and selection of
materials. While the discussions were not limited to just these areas, many challenges and benefits emerged from these areas. To complete this section, a thorough discussion of the data collection procedures for the four phases is provided.

**Phase I.** Initial interviews were conducted with the six participants to begin the study and before any observations were conducted. The following were asked at the time of this first interview: “Tell me about your training as an undergraduate.”, “If you could rate your preparation to begin this program, how would you rate yourself on a scale of 1 - 6?” or “Describe for me the type of environment in which a child learns best.” Follow-up questions were based upon the teacher’s responses. These three questions were then followed by more specific queries:

1. Please tell me how you feel about starting this new program.
2. What was it like the first week of school? How was it different from last year’s?
3. When I come to your room to observe, what will I see?
4. In this environment, what do you see the role of the teacher as being?
5. What is it about the program that is going well?
6. On the other hand, what do you perceive as being the greatest challenges?
7. Why do you think this pilot program gained approval from the board?
8. What indicators of success do you think teachers will look for to show success?
9. What else would you like to tell me about?

After the initial interview, first round observations were scheduled, and then another interview took place. In this second interview of the first phase, the discussion centered mostly upon strengths and challenges which the teachers felt had evolved since the previous discussion. As the researcher noticed patterns that emerged during
observations, these patterns became a topic for the subsequent interviews. For example, the researcher had noticed during the first round of observations that each teacher presented ideas to the children inductively, encouraging them to arrive at their own generalizations. During the second interview of the first phase, each teacher was asked to comment on the importance of this approach and they were also asked how teaching inductively fit into the multiage philosophy. During this second interview, the researcher also asked the teachers to describe a typical day in their classroom as well as their efforts to collaborate as a team.

The researcher also interviewed and observed the participants during a team meeting of both teams. Because it was difficult to schedule a common planning time for all six teachers, the principal had organized the participants into two teams of three. In order to gain a perspective on how the teachers planned and collaborated, the researcher gained access to one of their weekly planning session. These group meetings were tape recorded and transcribed.

During the first team meeting, the researcher asked questions about the teams’ attempts at team teaching. The question was also posed: Do you believe that one teacher is best for children? This was followed up with, Do you believe children should be exposed to different teaching styles? The next general topic centered around assessment, which the researcher pointed out had been identified as one of the greatest challenges during initial interviews. This led into a discussion regarding the new report card and checklist. The researcher inquired about parental and student reactions to these. The final
question of this meeting was, Did your switch to a new report card change your ideas about evaluation and curriculum?

During the first phase, document review consisted of the new report card and the 3-ring binder of readings that the principal had prepared the summer before the program began. These materials included copyrighted materials from Leanna Trail (1993), an educational consultant from New Zealand, a document entitled “Solving the Portfolio Puzzle” that the Reading Recovery teacher had obtained, a three-chapter document on nongradedness from the Oregon School Study Council, and a document from Hilliard City Schools entitled “The Paradigm Shift for the Model Elementary Program.”

A total of three observations in each of the six classrooms were completed before December 22, 1994.

Phase II. The researcher began the first Phase II interview by asking each participant about the new classroom management technique some of the teachers were using. This technique, known as menus, had become a topic of conversation after three of the teachers discovered them at the conference. Shortly after this conference, the principal had obtained other personnel, including the researcher, to cover the multiage teachers’ classes so that all six of them could discuss what had been learned at this conference. The researcher asked for reactions to this conference and the team meeting and how this compared with what they had been doing before. The teachers were then asked what about their preparation was most helpful to them as new multiage teachers. To conclude this interview, the researcher asked for teachers’ reactions to a comment made about multiage that it is just what any good teacher already does (Hunter, 1992).
To begin the second Phase II interview, the researcher encouraged the participants to begin by discussing their own immediate concerns, thereby enabling them to have a role in shaping the content of the interview (Bogdan & Biklen, 1992). Then the researcher asked the participants to respond to a list of phrases that she had found in the literature on nongradedness, an activity similar to a creative interviewing technique recommended by Patton (1990). The researcher asked the participants to explain how they felt the phrases applied to nongradedness and how the phrase related to their definition of nongradedness, the first research question of this study. The phrases had evolved out of the literature as being characteristic of ideal multiage classrooms. The phrases that were presented to the six teachers were: humanistic (Lewis, 1969); anxiety reducing, respect for the individual, sensible praise, impartiality, able to forget past unpleasant experiences, and better for motivating learning (Anderson & Pavan, 1993; Goodlad & Anderson, 1987).

During the second phase interviews and observations of the team meetings, the researcher invited the teachers to discuss topics that were pertinent to their immediate needs. Since these team meetings took place during the teachers' common planning time, the researcher did not want the participants to feel the researcher was dominating their important planning time. For example, during one team meeting the teachers spent their time assembling math packets for their students. Therefore, the teacher mostly observed and asked few questions. During the other team meeting, the researcher was able to ask focused questions as this team indicated they were free to be interviewed. The researcher tape recorded and transcribed both of these meetings. The questions asked during these team meetings were posed to elicit perceived challenges and benefits, pursuant to the
research questions of this study.

The researcher reviewed the material from the Urbana, Ohio conference in January that three of the six teachers attended. This document was provided at the presentation given by Bill Alsdurf and Susan Peterson from Washington, entitled *The Primary Non-Graded Multi-age Classroom*. Included were topics ranging from classroom management, goal sheets for students, portfolio assessment, jobs for students, and process writing to articles on intelligence and learner characteristics.

Two observations of most of the six participants were completed by April 6, 1995. Due to one teacher’s repeated illnesses and absences, the final observation of the second phase overlapped into the third phase.

**Phase III.** Each interview with the six participants began with the teacher’s review of preparations for year-end activities and assessments. After that, the researcher queried each teacher about their coping mechanisms for change in reference to an article about reform (see Fullan & Miles, 1992), an article that each teacher skimmed. During this interview, the six areas of Anderson and Pavan’s (1993) ideal nongraded program and its extensive list of “behavioral indicators” were presented to each teacher for comment (pp. 76-89). They were asked to note these definitions of the ideal nongraded program and then comment on the areas in which they felt they had obtained success and areas which were still problematic for them. The six areas which guided this interview were their perceptions of the goals of schooling; organization of schools for both teachers and students; curriculum; instruction; materials; and assessment (Anderson & Pavan).

Two observations of all but one of the teachers were completed during the third
phase. Due to one teacher’s repeated absences, she was only observed once during this phase. The final group meeting was held when most of the teachers assembled to present their multiage program at a school board meeting in May. The researcher tape recorded and transcribed this final group meeting.

**Phase IV.** The final interview for this study was conducted after the data from Phases I, II, and III were fully coded and analyzed and after the researcher had drafted each individual case study. For purposes of member checking, the teachers read their respective case study and verified its accuracy. At this last meeting with the researcher, held in April and May of 1996, each teacher was asked the open-ended question, “What can you tell me now that you’ve taught for almost two years in a nongraded, multiage continuous progress program?”

The data collection procedure for this study resulted in 355 pages of interviews and 263 pages of field notes for a total of 618 pages of data.

**Analysis of Data**

The data were gathered from interviews, observations, and document review. In conducting qualitative research, “Analysts have an obligation to monitor and report their own analytical procedures and processes as fully and truthfully as possible” (Patton, 1990, p. 372).

Six individual case studies and a cross-case analysis of the six teachers were completed through content analysis. Blumer (1970) claimed that sensitizing concepts may improve the content analysis guiding the data collection and analysis in qualitative research. The use of such concepts would therefore assist the researcher in attempting to
understand the distinctive characteristics of the nongraded classroom. In this study, the distinctive characteristics are represented by the six teachers’ perceptions during the implementation of nongradedness. The analysis in this study, which involved the coding of data and looking for patterns and categories, was guided by such sensitizing concepts.

Sensitizing concepts have been regarded by researchers as being useful for providing a focus to guide qualitative methods (Blumer, 1979; Denzin, 1989; Patton, 1990). The use of sensitizing concepts permits the researcher “to discover what is unique about each empirical instance of the concept while uncovering what it displays in common across many different settings” (Denzin, p. 15). Patton noted that while it is not possible to observe everything, “sensitizing concepts provide a basic framework highlighting the importance of certain kinds of events, activities, and behaviors” (p. 216). In this study, the researcher’s prescient knowledge of relevant research that included definitions of nongradedness and previous challenges and benefits incurred during the implementation of a nongraded program served as sensitizing concepts and influenced the emergence of some coding categories.

The use of a file card system, where coded data is transferred onto index cards, was used for the physical handling of the data (Bogdan & Biklen, 1992). As the interviews and observations were completed, transcripts and observations were reviewed and compared to generate codes and themes. This review began with the review of each individual case whereby codes and themes emerged as they related to the three main research questions. Then, the resultant data served as the basis for a cross-analysis as the
individual cases were compared with each other for similarities and differences (Patton, 1990).

Some of the categories were identified a priori while the other categories emerged during the data analysis. The coding of data pertained to the research questions relating to the participants' definition of nongradedness and their perceived benefits and challenges of this nongraded, multiage continuous progress program. The codes and sensitizing concepts were clarified by the review of literature and by teachers' comments in interviews. As the definition of the ideal, legitimate nongraded classroom was presented in chapters one and two, this definition served as a sensitizing concept. The teachers' responses during interviews and observations also served a similar purpose. As interviews served to provide a contextual background for the classroom observations, observations also provided substance for the ensuing interviews. As each phase evolved, the researcher compiled reflections which helped to direct the study for the following phase.

The preliminary coding of data was completed in reference to the three research questions and are labeled A, B, and C in the tables. Data relating to the criteria embodied in the nongraded definition and the participants' perceived challenges and benefits served as the substance of these three initial, general themes. This process is explained further in Table 3.2.
From these themes, the researcher organized the data into more specific categories. For example, remarks that reflected the participants’ unique definition of nongradedness, or category A in Table 3.2, were organized into the six main areas of the ideal nongraded definition:

1. What are the participant’s views on the goals of schooling?
2. What are the participant’s views on the organizational structuring of teacher teams and grouping of students?
3. What are the participant’s views on curriculum?
4. What are the participant’s views on instruction?
5. What are the participant’s views on assessment and reporting practices?
6. What are the participant’s views on the use of materials?
Whereas the notion of the ideal nongraded definition, category A, was an a priori consideration as this research began, the other themes emerged as the implementation process continued. For example, after data were coded as challenges, category B, the researcher reviewed these challenges to identify codes and themes. This process is explained further in Table 3.3.
<table>
<thead>
<tr>
<th>Category B: Challenges</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
<td>Any data referring to challenges resulting from grouping patterns of students or teachers.</td>
<td>&quot;It was hard to keep all groups balanced and moving along.&quot;</td>
</tr>
<tr>
<td>Curricular and Instructional</td>
<td>Any data referring to challenges stemming from the nongraded curriculum or instructional practices.</td>
<td>&quot;We wanted to have only five or six broad, thematic objectives.&quot;</td>
</tr>
<tr>
<td>Assessments</td>
<td>Any data referring to challenges that evolved from the assessments used in this program.</td>
<td>&quot;What criteria have to be met before being certain as to what actually constitutes mastery?&quot;</td>
</tr>
<tr>
<td>Materials</td>
<td>Data in which problems with materials were discussed.</td>
<td>&quot;I didn’t have any level three books.&quot;</td>
</tr>
<tr>
<td>Administrative</td>
<td>Data in which the participants felt the administration had caused problems.</td>
<td>&quot;It [standardized testing] was a bad experience to have to put them through.&quot;</td>
</tr>
<tr>
<td>Challenges resulting from the complexity of nongradedness</td>
<td>Data which implied that because nongradedness is complex, its various parts that define it must be given careful attention.</td>
<td>&quot;If we didn’t do any hands-on science, I don’t think it would be as motivating.&quot;</td>
</tr>
<tr>
<td>Increased preparation</td>
<td>Data in which the participants felt that, as a result of participating in this program, they had experienced an increase in time spent on preparation.</td>
<td>&quot;It’s just new, so there’s more preparation and planning.&quot;</td>
</tr>
<tr>
<td>Undesirable student behavior</td>
<td>Data in which the participants perceived that inappropriate behavior occurred as a result of nongradedness.</td>
<td>&quot;Sometimes [they] want to keep it [information] to themselves. They just want to get on with it and not be hindered by others bothering them.&quot;</td>
</tr>
</tbody>
</table>

Table 3.3: Coding categories for perceived challenges.
A similar process evolved as the researcher reviewed and classified data according to the participants' perceived benefits of nongradedness, category C. Data that were initially classified as benefits were then reviewed to identify emerging codes and themes. Table 3.4 shows how the benefits were further analyzed and coded.
<table>
<thead>
<tr>
<th>Category C: Benefits</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive Environment</td>
<td>Data which indicate that students are being supported by sources other than the teacher.</td>
<td>&quot;They can do these projects a lot easier. We’re making ornaments and . . . they’re helping each other.&quot;</td>
</tr>
<tr>
<td>Learning Various Roles</td>
<td>Data pertaining to students’ assimilation of specific roles, including students’ abilities to serve as role models for others.</td>
<td>&quot;They take it upon themselves to change them. I mean they see themselves as leaders.&quot;</td>
</tr>
<tr>
<td>Development of Students’ Social and Emotional Aspects</td>
<td>Data which indicate an acquisition of improved social or emotional aspects, i.e. positive feelings about self, respect, or being accepting and tolerant of others.</td>
<td>&quot;They’re used to sharing things and they’re not afraid of sharing things with each other.&quot;</td>
</tr>
<tr>
<td>Variety and Choice</td>
<td>Data relating to how the children have experience variety, choice, or have learned to become more involved in decision making and problem solving as a result of being in this program.</td>
<td>&quot;There is probably a total of like 30 books, at least, and they need to choose ten of those.&quot;</td>
</tr>
<tr>
<td>Time</td>
<td>Data describing benefits derived from being given more time with students.</td>
<td>&quot;I think staying with the same teacher is a big advantage . . . because that teacher knows those children so well.&quot;</td>
</tr>
<tr>
<td>Knowledge of Students</td>
<td>Data describing how the teacher and/or student has a greater knowledge of the students’ potential.</td>
<td>&quot;Teachers know where students have been and where they’re going.&quot;</td>
</tr>
<tr>
<td>High Expectations</td>
<td>Data describing how teachers have raised their expectations of students’ capabilities beyond what might be expected in a traditional classroom.</td>
<td>&quot;Multiage is good in that you present to the older ones and the younger ones are all listening and sometimes . . . they know things . . . She is getting things she would never have gotten in first grade.&quot;</td>
</tr>
</tbody>
</table>

Table 3.4 Coding of categories for perceived benefits.
For the cross-case analysis, the six cases were analyzed by looking for similarities and differences among the three themes represented by the three main research questions.

For the first theme corresponding to individual perceptions of definition, the data were analyzed and guided by the criteria which defined the legitimate nongraded classroom. Advocated by Goodlad and Anderson (1987), Otto (1969) and Miller (1991), this approach determined how the teachers varied in their interpretation and application of an authentic nongraded, multiage program. For example, teachers were interviewed on the topic of assessment. How they varied in their attempts to assess children will provide meaningful information to other teachers who will attempt assessment in a nongraded setting. A similar cross-case analysis was applied to the perceived challenges and benefits.

The Role of the Researcher

In qualitative research, the interviewer, or researcher, is the instrument and therefore validity is dependent upon the researcher’s skill and ability (Patton, 1990). Thus, the role of the researcher in such a design must be clear. In this particular study, the researcher enjoyed a prior relationship with the site and with the participants. Both the role of the observer and the role of the interviewer will be explained as they served as the main sources of data in this study.

Researcher’s Role as Observer

The role of the researcher in this study was that of participant as observer. Denzin (1989) identified four observer roles in which the researcher’s involvement in the interactions being studied varied widely. These four roles were: the complete participant, the participant as observer, the observer as participant, and the complete observer. As a
participant observer, the researcher's presence was established openly and the researcher attempted to establish relationships with the participants. As a participant observer, the researcher was not a member of the group being studied and did not participate fully in their experiences. Additionally, the relationship between participants and the researcher comprised of repeated and significant interactions with the participants to ensure an understanding of their perceptions and experiences. This was all consistent with Denzin's definition of the participant observer.

Participant observation is powerful in that "such a datum gives us more information about the event under study than data gathered by any other sociological method" (Becker and Geer, 1970, p. 133). The purpose of participant observation is to gain an understanding and thus an accurate description of occurring events. In this study, the observations helped the researcher identify unique characteristics of the participants as they applied their definition of nongradedness.

During each observation, the researcher attempted to describe what was happening in the classroom as it related to what was known about nongradedness. Field notes described what the teacher was saying and how the children were responding. For example, during observations, the researcher noted how the teacher conducted assessments, an indication of their unique definition of nongradedness. As children often worked in small groups, the researcher would circulate, noting their actions and words. Because the researcher was known to the students, there were times when the researcher offered guidance to students if they were experiencing difficulty with their class work. For the majority of time, the researcher was able to sit and observe, trying to be as casual as
possible, encouraging both teachers and students to proceed as they normally would. In trying to be unobtrusive, the researcher was attempting to enhance the quality and credibility of the study, to be discussed later in this chapter.

In the observations of the nongraded classrooms, the reciprocity model was followed (Patton, 1990). In such a model, interactions occur whereby the "people being observed find something that makes their cooperation worthwhile, whether that something is a feeling of importance from being observed, useful feedback, pleasure from interactions with the observer, or assistance in some task" (Patton, p. 253). Because the researcher was familiar to the students at Central and to the staff as well, it was easier for the researcher to provide assistance with children in the classroom. In addition to providing immediate feedback on many occasions for what had occurred during an observation, the researcher also served as a substitute teacher one afternoon while the multiage teachers held a planning session.

Researcher’s Role as Interviewer

Interviews were conducted during various times and in various settings. For some of the participants, it was more convenient to be interviewed after school. On some occasions, the interview took place during the teacher’s break time. At other times, participants came to the researcher’s house during the evening and the researcher also interviewed four of the participants at their own homes.

The relationship between the observations and interviews might best be understood in terms of the following:
One observes, begins to formulate questions, asks questions and gets some answers, observes some more with perceptions sharpened by new cultural knowledge—refines questions, focusing them on relationships that appear to be particularly critical, observes some more, looking for repetitions of behavioral pattern with more focus than initially, and so on and so on. (Spindler & Spindler, 1987, p. 20)

As is the case with observations, the role of the interviewer is to “access the perspective of the persons being interviewed” (Patton, 1990, p. 278.) During the year-long study, both the informal conversational interview and a general interview guide were part of the semi-structured interviews.

The conversational interview was used during times when events occurred which required comment from the subjects when a structured interview might seem inappropriate. Bogdan and Biklen (1992) have suggested that enabling the respondent to direct the content of the interview will result in more meaningful information. At the beginning of some interviews, the researcher encouraged the participants to talk about whatever they perceived as being most pressing. The majority of interviews ended with a question similar to, “What else would you like to tell me?”

The role of the interviewer in the conversational interview demands that the interview must be able to:

interact easily with people in a variety of settings, generate rapid insights, formulate questions quickly and smoothly, and guard against asking questions that impose interpretations on the situation by the structure of the questions. (Patton, 1990, p. 281)

The general interview guide promotes a systematic collection of data and it keeps the interactions focused while allowing “individual perspectives and experiences to
emerge" (Patton, 1990, p. 283). This was useful in the cross-case analysis of data as it provided the researcher with similarities and dissimilarities that existed across cases. For example, as the participants' unique definition of nongradedness emerged from the data, this provided a basis for comparison in answering the first research question about variance.

Mischler (1986) maintained that the question itself is part of a circular process in which a joint construction of meaning between the interviewer and the interviewee is created. The questions take on “particular and context-bound shades of meaning” (Mischler, p. 53) and therefore the interviewer should be more concerned with “assessing meaning . . . [by] analyzing the interview process so that we can begin to understand how meaning is grounded in and constructed through the discourse” (p. 64). During the interviews, the researcher attempted to remain flexible and reflective enough to allow the purpose of the interview guide the process while being sensitive to what Mischler called the joint construction of meaning. If the researcher felt that the participant did not understand a question or had somehow misinterpreted it, the question was rephrased to ensure that the participant had fully comprehended the question.

Enhancing Quality and Credibility

Rose (1960) wrote that “Our techniques of acquiring data may not be delicate and precise enough to isolate the basic elements of human behavior and social organization. In that case, we must refine techniques before we can achieve any reliable and valid generalizations” (p. 55).
Techniques in a credible qualitative study should consider the following:

1. What techniques and methods were used to ensure the integrity, validity, and accuracy of the findings?
2. What does the researcher bring to the study in terms of qualifications, experience, and perspective?
3. What paradigm orientation and assumptions undergird the study? (Patton, 1990, p. 461)

The integrity of this study was enhanced when, in the analysis, the participants were offered the opportunity to address other rival or competing explanations throughout the study as they engaged in member checking. Member checks are thought to be the most critical procedure for ensuring credibility (Guba & Lincoln, 1989). In the setting of this research, each of the six participants completed at least five member checks, including a final member check at the conclusion of this study. During the final member check, the participants reviewed their own case study. Member checks also included the sharing of transcripts, clarifying of interview questions, and furnishing the participants with the research questions, findings, and interpretations. After each observation, the researcher reread and typed the field notes, attempting to objectively describe what had occurred during the time in the teacher's classroom. The teachers were provided with a copy of each observation and were encouraged to comment and/or correct any of the researcher's observations.

Prolonged engagement and persistent and frequent observations are other factors believed to influenced the credibility of a study (Guba & Lincoln, 1989). The length of the time in which data were collected, over nine months for the majority of the data and then into the second year of the study, also increased the credibility of this study.
Patton (1990) reported four ways in which the presence of an evaluator can distort the findings. They are as follows:

1. reactions of program participants and staff to the presence of an evaluator;
2. changes in the evaluator . . . during the course of the evaluation - that is, instrumentation effects;
3. the predispositions or biases of the evaluator; and
4. the evaluator incompetence. (p. 473)

In response to the first potential problem listed above, the researcher attempted to make her presence among the participants and students in the classroom as unobtrusive and as casual as possible. The researcher often told the participants that she was not trying to judge them, just to record what was occurring. By reviewing the transcribed field notes of observations, the participants were able to witness the researcher’s attempts at objectivity.

Instrumentation effects were minimized as the researcher tried to remain consistent in collecting and analyzing data during all phases of the study. A top priority of the researcher during the study was to remain neutral and impartial. The researcher also completed a reflective journal throughout each phase as an attempt to remain neutral and to reflect upon the data so that the study might proceed on the basis of the emerging data rather than the researcher’s own personal bias. The confirmability of the data is defined by the degree to which the findings are rooted in the data and not a result of the researcher’s bias toward the topic. To establish confirmability, the researcher has clearly outlined the methods and data used in the inquiry process.
Patton (1990) noted that in the discussion of researcher credibility, the main issue concerns intellectual rigor and professional integrity. While no simple formula exists to achieve this vague goal, Patton stated that the researcher must exhaust whatever means possible "to make sense out of things" (p. 476). In this study, this included a review of data that was continual and persistent. Additionally, the researcher met periodically with more experienced researchers to discuss the progress of this research. One of the peer debriefers independently analyzed the data of a case study, which included 66 pages of interview transcripts and 40 pages of observations. The patterns that emerged from the peer debriefer's analysis were consistent with the categories the researcher had also identified.

The use of a variety of data sources, or triangulation, is also an important aspect of credibility (Guba & Lincoln, 1989). In this study, the researcher utilized interviews, classroom observations, team meetings, and document review to fulfill this need. While serving as an attempt at triangulation, these varying sources also helped the researcher gain a deeper understanding of the teachers' perceptions as they emerged throughout the study. This was also an important consideration for enhancing the quality of the study.

Mischler (1979) maintained that it was dangerous to generalize across context. Patton (1990) discounted the use of generalizations in that qualitative methods "provide perspective rather than truth, empirical assessment of decision makers theories of action rather than generation and verification of universal theories, and context-bound extrapolations rather than generalizations" (p. 491). In the search for technique (Rose, 1960), meaning in context (Mischler), and the distinctive character of the social world
(Blumer, 1970), credibility is enhanced as the researcher matches method with philosophy and paradigm (see Sparkes, 1989). The researcher made such an effort to reflect upon the research methodology which was most compatible with the researcher’s philosophy.

Thus, the researcher’s attempts to enhance the quality and credibility of the study were guided by the prescient knowledge of its importance. These attempts included member checking, prolonged engagement, a reflective journal, and triangulation.

**Limitations**

In this setting which was very familiar to the researcher, the possibility of researcher bias existed. The setting of this school was the school where the researcher taught for one year prior to this study and the district where the researcher had taught since 1984. While the participants were given opportunities to validate observations and the final analyses of their perceptions, the researcher was responsible for the sole analysis. Time and money limited the use of triangulation, especially investigator and methodological triangulation. Lastly, the findings of this study were limited by the time period chosen for data collection. Even though at least two observations and two interviews were conducted throughout the first three phases, a longer study with more interviews and observations might have yielded additional significant data.

**Summary**

This chapter described the research procedures used to conduct the study. A rationale for qualitative research and the researcher’s history with the site and participants was presented first. Then, a description of the site and participants followed. The research methods employed in this study were explained in the sections on procedures for
data collection and the analysis of data. In the section on the role of the researcher, the researcher's role as observer and interviewer were provided. The researcher's attempts at enhancing the quality and credibility of the study were addressed. Finally, the last section of this chapter examined the study's limitations. The next chapter, Chapter IV, will report the results of the individual case studies.
CHAPTER 4

RESULTS OF THE INDIVIDUAL CASE STUDIES

This study focused on teacher perceptions during the implementation of a nongraded, multiage continuous progress primary program, examining the teachers' perceptions within the framework of the three research questions. One, as the teachers apply their knowledge of the definition of a nongraded, multiage continuous progress program, how do they vary in their implementation? Two, what are the perceived challenges which emerge when a nongraded, multiage continuous progress program is implemented? Three, what are the perceived benefits which emerge when a nongraded, multiage continuous progress program is implemented?

This research documented teachers' perspectives of nongradedness as guided by the three research questions. Data obtained through interviews and observations served as the source of these perspectives. For example, teacher discussions about student evaluations provided evidence of part of their definition of assessment in a nongraded, multiage classroom. Or, as teachers discussed the challenges or benefits of nongradedness, these perceptions contributed to the emergence of patterns and categories. Statements that were made by the participants during interviews and observations are included in the case studies as well as vignettes taken from the observational data.
The research findings are presented as six stories of the six participants. The stories of Nicole, Renita, and Ruth are presented first. These teachers teamed together for the first two years during the implementation of this nongraded, multiage continuous progress program. They had not previously instructed any of the children in their classes because their students from the year prior to the program’s implementation had gone on to higher grades. In contrast, the other primary team of Dana, Roberta, and Anne had been able to keep half of their class as they had taught either kindergarten or first grade the year before.

To introduce each story, a brief description of the participant’s background, including formal education and the preparation to begin this program, will be given. After that, the classroom environment and a typical day in the participant’s classroom will be described before addressing the three research questions. In reference to the first research question, the results will be divided among six areas, the participant’s perceptions of: the goals of schooling; organization; curriculum; instruction; assessment; and use of materials. A brief summary of each story will follow.

After the cases of the participants’ six stories are presented, a cross-case analysis of all three research questions will be provided. The analysis of the first question is based upon Anderson and Pavan’s (1993) six categories that were identified a priori: goals of schooling; organization; curriculum; instruction; assessment; and use of materials. The cross-case analysis of the second and third research questions is based upon the categories which emerged from the participants’ perceptions of the challenges and benefits incurred during the implementation of a nongraded, multiage continuous progress program.
Implications of both the individual cases and the cross-case analysis will be discussed in Chapter Five.

The Story of Nicole

Nicole was hired to teach in Bellingham City Schools for the 1993 - 1994 school year as a second grade teacher. Since she was a Bellingham High School graduate, she characterized the return as a “coming back home for me.” Nicole graduated from a small liberal arts college in Ohio in 1992 where she majored in Elementary Education. Her undergraduate area of concentration was psychology. All of her field experiences during her undergraduate training were in fifth, sixth, and seventh grades, and she stressed that “coming down to first and second grade was a big change!” She gained some experience in the primary grades as a substitute teacher the year after she graduated.

Nicole theorized that her experiences and course work in psychology provided her with a background to teach in a nongraded, multiage classroom. She felt this background contributed to a greater understanding in the psychology of learning and to her ability to manage student behavior. Nicole felt that her experience working with in a residential facility for Severely Behavior Handicapped (SBH) and other troubled girls prepared her to deal with children from various backgrounds and gain an understanding of “where they’ve come from.” Nicole thought that having only one year of full-time teaching experience made it easier for her to switch to nongradedness. “For me it was easier to dive right into it,” she stated. “I only had one year to relearn. It wasn’t any big deal.”

Nicole felt comfortable about the level of preparation the teachers had received to begin this program. She reflected that “after going to conferences and visiting other
schools, I think we’re right up there.” She elaborated by stating that in some ways, the Central program was better prepared than other programs. For example, she compared their program to another nongraded program in Southwestern Ohio that had been nongraded for four years. She said that even though Central was four years behind them in terms of experience, she felt that the staff was very prepared to begin a nongraded program.

In comparing the Central program to other programs she had visited, Nicole had some strong opinions about the organizational patterns of some of the other multiage programs. She explained that many schools were using a looping or pairing organization instead of a multiage arrangement. Looping is where the teacher keeps the same children for two or more years creating, as Nicole pointed out, homogeneous instead of heterogeneously-aged children. Pairing is an arrangement whereby high first graders and low second graders are paired together in the same classroom and the teacher is “still teaching to the middle.”

Nicole learned an important teaching strategy as a result of her preparation which she called, “teaching to the top.” Nicole explained that instead of teaching to the middle, teachers should first teach to the top, or highest ability in the range of abilities, and then follow up with “whatever is developmentally appropriate” for the students that needed further concept development. She also noticed that some of the teachers she observed did not appear to have adopted the whole language philosophy, a philosophy that she regarded as an important aspect of the nongraded program. She elaborated that she did not feel those teachers were integrating the curriculum nor were they using instructional
practices consistent with the whole language philosophy. She stated that they did not appear to be teaching to the various intelligences (Gardner, 1990); they were still somewhat traditional.

The part of her preparation that Nicole felt was most beneficial for beginning this program was attending the Society for Developmental Education’s 1994 Multiage Conference. She reasoned that the 1994 conference helped:

... not only because it gave a philosophy and background, but it also gave concrete ideas of how to manage the classroom. Which it boils down to whether you will succeed or not. Because you can be philosophically sound but if you don’t do it right, it will fall apart.

As Nicole expressed her excitement in being part of an innovative program, she reflected on past failures in education. She opined that past endeavors had failed because of an imbalance between philosophy and classroom management. She said:

That’s what happened back in the 60s with open schools. We’re doing basically the same things. The problem was people didn’t do what they were supposed to do and it fell apart and got a really bad reputation. So balancing with the philosophy plus the classroom management part, balancing has really helped.

Nicole’s Classroom Environment

No two tables in Nicole’s classroom were alike. They were of different shapes and colors, looking much like she had raided a warehouse of long-forgotten furniture. One piece of furniture she had literally extracted from the trash bin; the night janitor had helped her transform the partitioned, circular standing structure into a listening center. Four mismatched, oddly shaped tables dominated the center of room, enabling the periphery to be utilized for learning center activities. To the left of the entry, in the corner by the sink,
she had assembled art, sand, and water materials. Toward the windows, where shelves lined the bottom portion of the wall, Nicole created space for math centers to the left of the main working area and space for various thematic centers to the right. A computer sat in close proximity to the math materials. Her own work station was another table situated in the right back of the room. The other corner was used for a reading center, and a free space designated for whole group meetings was featured along the interior wall that led to the doorway (see Figure 4.1).
Figure 4.1: Nicole's classroom environment.
At various times during the school year, Nicole’s room was resplendent with many school materials that are not typically found in classrooms. These included a shower curtain with a map of the world on it, boards with nails for weaving fabrics, an electronics mother board, and pieces of vinyl wallpaper folded and tacked to hold student work. Her reading center included baskets of books, books that were propped up for display, and an old cloth-covered couch.

Labeled items dominated much of the existing wall space. The majority of visual aids were teacher-made. For example, she had created a chart with the class to distinguish between common and proper nouns. On another chart, she had written incorrect sentences and corrected them, using names of children in the class for the subjects. Projects and art work of the children were also prominently displayed as was a dry-erase board for displaying the day’s schedule. Covering one of the chalkboards was a chart with children’s names and the names of the current centers. Nicole often referred to this during class time when announcing that it was time for the students to change activities.

A Typical Day in Nicole’s Room

Students began to file into Nicole’s room at 8:45 a.m.; school did not officially start until 9:00. Once they entered, they began to write their daily journal entry. Nicole stated that the writing focused on a new topic each day and was related to units the class was currently studying. For example, she and the class had been discussing events in Africa, so one journal entry in December began with, “Africans think Santa lives . . .” Students took turns stamping the date on the daily journal entry before they file it. On Fridays, Nicole explained, the students could choose to write on any self-selected topic.
When their writing was completed, students would then visit the reading corner until the daily calendar activity commenced. Calendar activities included the naming of days and months, skip counting, and a daily oral language activity she called “Mystery Message.” She and the students would discuss and correct this message using chart paper.

After calendar activities, the class usually visited the rest room and then returned for math activities. The students were grouped into high, medium, and low ability groups. Often, the special education resource teacher would work with one of the groups on math facts and math concepts while Nicole did the same with another group. For the group that had no teacher, Nicole directed them toward games, puzzles, or math tubs for “exploring.”

Math activities kept the children engaged until approximately 10:30 a.m. most days. At that point, the whole group was broken into four smaller groups for learning centers. While she worked with one of the groups with reading or writing skills, the other groups worked at centers that varied on a regular basis. “There’s a progression of eight different days that I have things that I rotate,” Nicole explained. Various centers that she had created throughout the year included a career center, weaving and looming, bookmaking, as well as language arts, science, and math activities.

The lunch and recess break usually occurred after she had met with two of the four groups. After lunch, she would gather the whole class to listen to one of the students read a book that they had been practicing. She explained that many of the students enjoyed reading to the whole class and would diligently prepare for a whole-class reading. Then the students usually needed a restroom break, so the class would resume with centers after
that. The Reading Recovery teacher usually withdrew her students after the lunch-time period. The afternoon was broken up by either recess or a special class such as art, music, library, or physical education. The rest of the day was devoted to the completion of special projects and activities which related to the current science or social studies theme. Nicole stressed that she liked to use any time left at the end of the day for enrichment-type activities. For example, if her class had been studying electricity, she would allow the children to explore with the electric circuits.

In early February, Nicole’s typical day was altered slightly as she introduced to the students an instructional device termed “menus” (see Alsdurf & Peterson, 1995, and Appendix A). She described menus as a list of activities children were required to complete within a certain time, usually a week or two. Basically, the menus were divided among three areas. For the first area, students were required to complete various tasks such as: using trapezoids, measure how long your table is; make a pattern using pattern blocks; or after reading a certain story, complete a journal response form. The second section was entitled “a la carte” and students were given a list of activities to choose from. These choices might entail: visit the electronics’ center, visit the reading corner, or complete a certain activity which might be a literature extension or a project relating to the current theme.

The last section on the menu was labeled “dessert” and this served as a reward for completing all of the activities in the first two sections. The researcher had observed Nicole’s class while they worked on their dessert, making ice cream sundaes. Students not participating had worked on their menus out in the hallway. Nicole pointed out that
the menus could be tailored to the individual in that the activities were based upon what
she knew they were capable of completing. She would add certain topics for certain
children; generally, she usually used three different menus for her high, middle, and low
students. She also pointed out that at various times during the year, children would learn
of an activity that was on another menu and request that it be added to their menu, a
request Nicole would always honor.

Instead of rotating groups at centers during the time block before and after lunch,
students usually worked in small groups of their own choosing as they attempted to
complete the activities listed on their menus.

The following vignette demonstrates the level of activity that frequently occurred
in Nicole’s classroom:

The children were gathered at the carpet area. She
explained to the children that the researcher was visiting
again today and asked for volunteers to explain what had
been added to their menus. Seven hands shot up, and the
girl she picked reported that four new centers had been
added.

Nicole then passed out the students’ folders and
the children quietly dispersed to begin their work. Some of
them worked alone; three girls gathered at the computer
while others work with partners at a table or on the floor.
The children who had visited the electronics’ center seemed
keenly interested. Nicole called to a student to sit with her
and then she pulled out her grade card. Nicole began to
test her knowledge of time and money.

A girl, who regularly took prescribed doses of
Ritalin, yelled across the room that someone had returned
from Reading Recovery. Nicole walked over to her and
quietly reminded her that she was not to yell across the
room like that.
Nicole’s perceptions about her preparation and the description of her classroom environment and daily activities have illuminated some of her unique characteristics, such as her resourcefulness and her desire to include students in the assessment process. The following section will provide a more complete discussion of how Nicole perceived the criteria that serve to define nongradedness.

Nicole’s Definition of Nongradedness

This section will be organized following Anderson and Pavan’s (1993) six areas that were identified a priori: goals of schooling; organization and grouping schemes for teachers and students; curriculum; instruction; assessment and reporting practices; and use of materials.

Goals of schooling. Nicole felt that an important goal should be that children enjoy school. Nicole posited that the social and emotional growth of the child are important considerations. She shared the concern that segments of our society do not provide for emotional and social growth in the home.

That’s why I think it is so important for kids to go to field trips and to be exposed to all those different things that a good parent would be doing, to develop an artistic side in them and [teach them] everything is not just black and white, there are other things, like feelings and more.

Realistic and authentic experiences, such as caring for an animal, are important goals, Nicole believed. This may include experiences like tying a knot and threading a needle, the type of activities her students have attempted during various projects.

Nicole stressed that enabling students to become decision makers is an important goal for schools. “I’ve heard over and over, employers are looking for people who don’t
have to be guided through every little step. Do they have self-direction? It’s not just
memorizing, but problem solving.”

Whether it is being a leader or follower, Nicole believed that students should learn
various roles that the children will eventually play as members of society. Inherent in
learning these changing roles, Nicole maintained, is that the individual makes progress in
attitudes toward work and social communication. In this environment where students
learn various roles, the teacher does not represent the only role model as capable students
serve this purpose, too.

Nicole emphasized interdependence in maintaining cleanliness. Nicole recalled the
incident of how her students worked to keep the privilege of having a guinea pig in the
classroom. As a class, they had discussed how animals do have to get rid of their waste
products and at some point, she told the class, it would probably happen during the school
day. “So is that any big deal? So do we scream and make a fuss or anything?” After
discussing the appropriate measures for cleaning such a mess, the subject was dropped.
Then a week or two later, she realized that the children had followed the example
provided and had maintained cleanliness. “They knew,” Nicole surmised, “the guinea pig
would be gone if they made a big deal over it.”

Nicole opined that a goal of schools should be to foster a type of competition
whereby the children compete with themselves. She felt that this would help them to
become aware of the competition from within and what it means to improve, “as far as
getting better.” She recalled an experience with one child:
We looked back at the beginning of the year to see how they wrote and [to show] this is how you write right now. I have this one girl and it's like a light bulb has come on with the sounds. And we looked back at her handwriting all the way through the year. She's so proud of herself.

Nicole posited that diversity is a quality that should be valued in schools, noting that in a traditional classroom, “You’ll have a range but the range won’t be as diverse as one found in a nongraded classroom.” Nicole strongly believed that having an even wider range is important for enabling students to help each other. She felt that learning and appreciating the differences between countries and cultures should also be stressed in schools.

**Organization.** According to Anderson and Pavan (1993), organizational schemes in a nongraded program should encompass various grouping patterns for students and teacher teams for teachers. Both of these considerations will be addressed in this and subsequent cases.

Nicole had strong opinions on the whole-class composition and organization of the ideal nongraded classroom. First, it should be a heterogeneously grouped class with varying ages and abilities. In addition to ability, she viewed gender as being an important consideration. At one time in the year, she had wished that she had more boys. She reasoned that she had one boy in her class who had no close friends, no one he could “fit in with. He's not into playing with girls, either.” At the end of year, when kindergarten teachers were placing their children in the nongraded classes, Nicole again raised the concern that she was in need of a boy. She described the profile of the type of boy she felt
her class needed; high in ability and leadership. Nicole felt her present boys lacked these abilities and might not be able to serve as proper role models. In fact she felt so strongly about this classroom composition, she even offered to keep one that was going on to third grade to fill this void which she perceived as being an important role to fill.

During the year, Nicole’s composition of groups changed after she instituted menus instead of rotating centers. “Before I was having them in rotating groups at centers where the groups, the same four, five, or six kids were together the whole period.” The groupings became much more individualized with the menus because the students were able to choose their own groups or even to work alone. During the times when she did group for reading and math instruction, she used homogeneous groups of high, medium, and low abilities. Nicole said the composition of her middle groups constantly changed; however, there was little movement of children into and out of the high and low group. She explained that she would often introduce a reading skill to the whole group and then meet with the three or four ability groups to practice the skill. While she would prefer to work with individuals, she found it was difficult to manage the time to meet with all of the children. The only time she could quickly meet with individuals was when she completed reading “probes” that were required district-wide. To conduct these probes, Nicole would listen to students oral reading to note progress in reading fluency.

While the six primary teachers constituted the larger primary team, Nicole worked primarily with a team of two other teachers, Ruth and Renita. Each Friday, a common planning time was arranged for teams of three. Nicole participated in team teaching, whereby each teacher taught lessons to each of the classes on their team, on at least three
occasions. Each thematic unit lasted at least one week. Nicole stated that while this was something she might want to do more frequently, she wouldn't want to do it all of the time. She felt that a major benefit of team teaching was that the classroom teacher could receive input on the progress of each child from a variety of sources, such as other team members and resource teachers.

Curriculum. As the teachers began this new program, one of their first activities as a collective group of primary, multiage teachers was to combine the district's first and second grade courses of study into one curriculum. For math, reading, and language arts, this resulted in a checklist that synthesized the curriculum's scope and sequence for these subjects (see Appendix B for the complete checklists). The teachers decided that they would teach the science and social studies courses of study of the second grade in the first year and the course of study of the first grade in the second year so that students who remained in the program for two years would not miss any content.

Nicole used the term developmentally appropriate to describe her views on the nongraded curriculum. "Teaching to the top" was a phrase which implied that whole group lessons targeted the higher abilities for the main learning objective, but for the rest of the students, the activities were geared to their level. The use of developmentally appropriate activities for all students was vital to the success of a multiage classroom, Nicole stressed. For example, Nicole would often present a writing prompt and allow the students to respond in their own developmentally appropriate way. She explained that some students might reply to a prompt with a picture and a short caption while others
might write "novellas." Nicole felt that the nongraded curriculum should emphasize "self-directed learning" as opposed to "teacher directed."

The nongraded curriculum is very individualized, Nicole noted, and the only activities her whole class completed together on a regular basis were activities relating to the current theme and beginning-of-the-day activities. Certain math processes, like weighing or graphing, were done with the whole class. She also thought it is important to include assessments as a routine component of the daily curriculum. The use of menus enabled Nicole to tailor the tasks to meet the needs of the students. She explained how she would individualize the menus of two boys in her class. One of their menu tasks included researching a particular subject and then presenting it to the class. She also used reading baskets which were labeled according to levels so that she could direct her individual students to the proper level. On each menu, she would simply indicate which basket the children should read from.

Nicole believed that this individualized approach toward teaching in the nongraded classroom should include an awareness of different learning styles and learning modalities among the students. To demonstrate this belief, Nicole gave the example of Carly whose reading improved significantly when it was written in the beat of a rap song. Nicole stressed that Carly's sense of beat represented the key for unlocking some of her problems with reading and she would try to teach toward that strength more often.

Learning centers were an integral part of Nicole's curriculum and were organized to facilitate student learning of specific curriculum objectives and to present students with choices. Nicole felt it was important to offer students options. When she used the
rotating centers, one of the centers was usually labeled “Free Choice” and the students could choose from any of the materials available. When students were working to complete activities from menus, they were free to choose how to spend their time and to work with any available students.

Nicole’s opinions regarding literacy changed during the first two years of the program. In the beginning, she taught reading skills of varying difficulty to her ability-grouped readers. Then, during an interview in February, Nicole discussed the need to teach phonics on an individualized basis rather than as part of a sequence. She seemed to struggle with this because shortly after that, she considered but never instituted systematic phonics instruction. The upper grades at Central had adopted an intensive phonics program, but she didn’t feel that was compatible with their primary program that she viewed as being consistent with whole language. Also in February, after attending a conference, Nicole changed her approach to teaching reading and stressed a more individualized approach using menus. Part of the literacy activities on the menus would enable the children to participate in literature extensions and create some of their own activities while responding to the literature in various ways. Nicole would share literature with the students and then provide them with a prompt such as, “Write a story about funny monkey business.”

Nicole’s views on the spelling curriculum were part of the change in her approach to literacy. Unlike four of the other multiage classes, she did not administer the traditional spelling test during the first year. She stated, “I think it’s against our philosophy to do the spelling test.” Nicole used the high frequency word list that the other teachers tested
their students on as an activity to do with parents at home. She explained that through her teaching of the writing process, she assessed and provided for instruction in this area on the basis of the students' own attempts at writing.

During the second year of the program, Nicole's views on the spelling curriculum changed. She had decided to administer spelling tests "to prepare them for test taking in third grade." The spelling curriculum consisted of high frequency word lists and content area vocabulary that she would select for ability-grouped students. She did not keep spelling grades but she found that by focusing on the spelling words' phonetic patterns, the children seemed to improve in vocabulary acquisition and in word attack skills.

Concerns relating to classroom management represented another aspect of the curriculum that Nicole practiced. Through brainstorming and role playing, Nicole often spent time teaching her students appropriate behavior in the nongraded classroom. After she had attended a conference on nongradedness, Nicole explained how the presenters advocated spending the first four to six weeks talking with students about how to work in teams, to show where everything is, and talking about any other procedural concerns. Nicole said that while she often wondered if she spent too much time talking about such issues, she thought that following this advice would "be more productive in the long run." Nicole had also learned another technique for teaching children proper behavior in which the "whole point of her discipline plan" was to reinforce and instruct for desirable behavior. She elaborated that in this approach, the teacher would direct a five-minute lesson in which the objective was to teach students appropriate conduct.
Nicole gave specific examples of how she had handled these issues in the past. She said they would brainstorm solutions for specific problems, like how to clean up after recess or how to proceed with finding materials and getting to work. "Without getting too off track . . . we'll talk about it with the whole class," Nicole stated. An often repeated slogan in her classroom was "Stop and think." Another common slogan in Nicole's classroom that she had learned from other nongraded teachers was, "Ask three before you ask me." Although this is an example of an instructional strategy, this represented another aspect of Nicole's curriculum in that she encouraged students to learn from each other. Nicole stressed how in the nongraded curriculum, she has to teach and talk to the children about how to help, especially when heterogeneous groups are engaged in cooperative learning activities. Most importantly, the children need to be taught the differences between helping and letting others copy.

In Nicole's view, part of the curriculum should include keeping children accountable for their work. She discussed one boy who had lost part of his work in his folder: "I told him that's not acceptable; that's part of your job. You're responsible to keep track of your things. He accepted that." Rewards have been part of the work ethic instilled in her classroom. On one occasion, Nicole rewarded the students that achieved their goals with root beer floats and a movie. The others that did not reach their goals did not take part in the reward and finished their work out in the hallway.

Instruction. The instructor in the nongraded classroom is more of a facilitator, Nicole noted. The nongraded teacher acts "as a facilitator who encourages children to work things out themselves. They know that the teacher isn't always available to work
out their problems, so they will talk to each other.” In this role as facilitator, the teacher creates an environment whereby students can receive immediate feedback. Nicole explained how she arranged some of the materials at centers to be self-correcting activities. Hands-on instruction is important in this environment, especially for keeping the children actively engaged. Nicole stressed, “I don’t feel like I have to be watching everybody all of the time.”

Nicole has stressed to the students that she doesn’t always have all the answers. “I might say to them, ‘Who do you think would know the answer to that?’” She encouraged them to solicit help from one another while trying to be impartial and give everyone equal chances to help. Directions and questions are very open-ended as are projects. Nicole found that she practiced that quite a bit. She often asked questions for which she had no answer. For example she had once queried the students, “What did people do before cars? Who could we ask?” Nicole stressed that instruction should encourage learning ways to find answers rather than knowing the answers.

Nicole demonstrated that it is important to take risks with instruction. It doesn’t bother her if something doesn’t work, she can redo projects or even forget them if necessary. “I really don’t have any trouble with throwing it in the trash can and trying something different.”

On different occasions, she explained how she left her students, telling them, “When I come back I bet you’ll have it all figured out how you’re supposed to be where you’re supposed to be.” Then she discovered that they would direct each other toward
achieving the correct behavior. "Sometimes I'll just close my eyes and tell them I'm not here," she said.

Nicole thought that in trying to motivate students, intrinsic rewards have more value than extrinsic rewards. Individualized rewards and selectively awarded privileges are more important, she stressed. Nicole noted that she did not use up all the stickers she purchased earlier in the year and must not emphasize that too much. "Students mostly want comments on their work," she maintained.

As has been mentioned in an earlier section, Nicole's instruction changed at mid-year as the result of the implementation of the menu system. Nicole stated that the menu system was more developmental and easier for individualizing. The menu included the independent activities students pursued while they were not meeting with Nicole in a reading group. Menu activities would relate to the current theme and reading and math objectives that students needed to master. The students are required to complete a list of tasks either independently or with the help of their peers. Students that successfully complete the tasks are rewarded with "dessert." The list is usually five to ten tasks. Nicole explained:

Usually the list lasts for more than several days. So far I have only had mine last up to five days now, that is the longest, it could go up to two weeks. The students have folders with a 'to do' side and a 'finished' side. A basket of reading books is assigned to them and then they sign up for a reading conference with me or aide to make sure they actually have read them.

Assessment. The report card that Nicole used is the same report card all six primary teachers use. This report card is a rating scale which evaluates student progress in
ten different areas and also indicates an achieved reading level of 1-20. After 20, a student would be classified as reading at an “Independent” level. In addition to the main content areas, the report card assesses “Work Habits & Social Behavior.” In each grading period, a check is given in any of the three domains: Not yet, With help, or Satisfactory. For students that might earn satisfactory marks in all areas, space is available to add new goals at the end of each evaluated area. Nicole explained that she had added such topics as “uses an encyclopedia” and “beginning multiplication” to some of her students’ report cards.

Nicole characterized the role of assessment in her nongraded classroom as more of a process than as a product. She often attempted to ascertain the student’s rationale for proceeding with a given response. Nicole stressed that when this approach is taken with students, “They would come up with an answer that made total sense . . . You would never think of it that way if you’d have just looked at the paper.”

Nicole felt that portfolio assessment is an important part of the evaluation process in a nongraded classroom. Each month, Nicole held what she called “portfolio day.” On this day, the students got out their portfolio boxes and began to sort through the papers they had accumulated. Nicole taught them to put them into piles according to math and non-math related items. From there, she instructed the students to separate them into three piles: one for the permanent portfolio, one to take home, one to throw away. When she instituted menus into her program, she did this sorting activity after each menu was completed. Nicole discussed the important questions students must ask themselves: “Is it their best work and will I think it is their best?”
Nicole had become more skillful in completing running records during the second year of the program. Running records (see Marie Clay, 1993) are systematic observations of student’s reading in which the teacher analyzes reading errors and arrives at a rate to determine the reader’s instructional level. Using a diagnostic approach to the errors, the teacher can then identify the cuing systems the child is experiencing difficulty in mastering. The three types of errors that are analyzed are meaning, structural, or visual errors (Clay). During the final interview that took place in 1996, Nicole noted that as she became more comfortable in conducting this type of assessment, she did them more frequently. In the first year, she had found herself assessing the student’s level more infrequently and often to complete that section for the nine-weeks grade card. She said that during the second year, she completed them on a weekly basis for most of her students.

**Use of materials.** Nicole felt that a nongraded classroom should have a broad range of materials. In her classroom, she had art centers that included painting, and also sand, clay, and water centers. Nicole said that they were always doing things with “junk.” For example, they once used scraps of yarn for making names. Nicole emphasized that she tried to make sure there was something new about one of the centers each week. She also stressed that she only used skill sheets that she had selected from old workbooks of various levels.

She lamented how she only had one computer this year but wished for more as in the previous year, she had five computers. For her team’s Zoo unit, she had used interactive software which she felt her students thoroughly enjoyed. The wide array of materials created an atmosphere which Nicole labeled as a “playful one.”
The books in her classroom were representative of various genres and Nicole emphasized that resources in the reading corner are always available "where students know they can find information." She had about ten baskets, each with approximately 25 books per basket for a total of 250 books. Nicole estimated that students visited the reading corner on a daily basis, either during free time or first thing in the morning. On occasion, Nicole has made her own books as she claimed it "seemed easier" than to search for the topics for books that her children could easily read. With the help of the Reading Recovery teacher, the books that she used for literacy instruction had been identified according to levels of difficulty.

To summarize, Nicole felt that her minor in psychology as an undergraduate helped prepare her to teach in a nongraded, multiage classroom. From February on, Nicole adopted the use of menus, an instructional tool which she felt facilitated the type of independent student activity that students in multiage classes needed. She often spoke of two boys that participated in self-directed projects to demonstrate how she individualized instruction. Also, Nicole regularly involved students in the assessment process. Nicole used portfolio assessment extensively in the first year but did not emphasize this type of assessment as much in the second year. Nicole vacillated in her approach to literacy as she was unsure about how to correct reading weaknesses, the teaching of phonics, and she had changed her approach to spelling during the second year of the program. Nicole felt it was important to directly teach students certain nonacademic objectives, such as how to cooperate and solve problems.
The Story of Ruth

As a veteran of the educational scene in which she portrayed various roles, Ruth was more realistic than idealistic about nongradedness. She had already raised four children, served as a teacher’s aide in various capacities, and had a granddaughter who had been a participant in a nongraded, multiage program, giving her a seasoned background from which to view educational reform. After spending five years working in a factory, Ruth had worked as a teacher’s aide for approximately ten years. During part of this time, she attended college for 13 years before graduating from a small, private college in 1985. Her first and only teaching job has been at Central where she has taught second grade for nine years prior to the implementation of the multiage program. Her graduate level training included 30 semester hours from three different institutions. Ruth explained that she chose courses, such as one on dysfunctional families, math or language arts courses, that she felt would be “beneficial at the time.”

Ruth did not appear to be as confident as the other participants in her attempts to tackle nongradedness. She was very self-critical; she often blamed herself for some of her multiage students’ lack of progress. Also, she shared that she would often solicit advice from the other teachers. For example, she asked the others for suggestions about how to motivate or how to teach for independence in a multiage classroom. Describing herself as being more rigid in style and not always quite flexible enough “to grab those teachable moments,” Ruth also contended that she was “not an organized person.” However, she did point out that she knew the second grade curriculum very well from teaching it for nine years and that she felt she could easily “pull what I wanted.”
Ruth was very reflective and insightful. She described herself as not being one who "adapts well to change . . . I don't just tackle anything. I'm more conservative." Ruth admitted she was not the type of person who was comfortable at having visitors in her classroom and participating in this study represented a major deviation from prior tendencies. "I really want to get to the point where I'm comfortable having people in and out" of the classroom, Ruth stressed.

Ruth was encouraged by the positive experience her granddaughter had enjoyed in a multiage program in Columbus. While acknowledging that the change to nongradedness was difficult, she was always quick to point out that she was doing "what was best for the children." She said one reason she decided to try multiage was because "the way society is now, children will never again follow the do-as-I-say approach. So they need to develop some kind of inner-responsibility."

Ruth had been convinced of the merits of nongradedness by the reading she had done and from visits to other schools. One of the most helpful aspects of her preparation had been the winter conference she had attended with Nicole and Roberta. She felt that some of the classroom management techniques that were presented provided multiage teachers with "an immediate way to get started." If she could have received additional training to begin this program, Ruth would have opted for more training in the "reading and writing connection" which would help her "really involve them in writing from the very beginning."

Ruth and the other participants all acknowledged that the first year of this program had been a difficult one for her. She had missed several days of school because of poor
health. In addition to her poor health, the composition of children in Ruth’s class was not a desirable one. Because many of her students had left at various times in the year, these voids were filled by transfer students. As a result, she had a group that she and other primary teachers characterized as being most challenging and, in her words, “an overabundance of underachievers.” She stated “I’m expecting next year to be better.” As she pointed out, she would “only have 10 to 12 new students.”

During the 1995-1996 school year, Central Elementary received a new principal. For the 1996-1997 school year, the new principal proposed the elimination of two multiage classrooms. In place of these, the new principal decided to offer a traditional first and a traditional second grade. Ruth was projected to teach the new first grade.

Ruth’s Classroom Environment

Ruth’s room was very pristine. Materials were neatly stacked and arranged on shelves so that they were easily identified. The tables and clusters of desks were spaced evenly throughout the room. Her arrangement of posters and charts contributed to an uncluttered appearance. Posters were adhered to the window shades and three columns for the three different spelling groups hung neatly in the right interior corner as one entered the room. Student colored birthday cakes bordered the top of the chalkboards. The materials on display were a mix or commercially and teacher/student prepared materials. The boundaries of the whole group meeting area were set by the interior wall and a cluster of desks. The table she worked with children at was in the right center of the room, as one entered the doorway, and another table that the resource teacher used when she worked with small groups was off to the far left (see Figure 4.2).
Figure 4.2: Ruth’s classroom environment.
A Typical Day in Ruth's Room

The management of her morning activity was run according to a style she referred to as “Work Shop.” Ruth explained that the “Work Shop” activities are a variety of seat work involving reading, writing, math games and centers for the first hour. During this time she meets with a reading group or two to conduct either group lessons or individualized reading and writing. After that, she would meet with the whole class to complete calendar activities. She explained that this would sometimes involve guided reading of a poem and a survey question. The survey question was usually a yes/no question that she incorporated into the day’s math lesson. For example, she once used the question, “Do you like snow?” Another part of the whole group meeting would be something related to a group project. For an activity relating to endangered species, they might look at a map and discuss its location and predators. During the morning, Ruth said her children did “lots of independent writing and research” while she tried to meet with the homogeneously grouped reading groups.

The afternoon began with silent reading and was followed by one of the special subjects, such as art, music, physical education or library, and then math. For math instruction, the students were ability grouped. Ruth explained that her students used manipulatives, such as tubs and “shake the beans” in which students would practice exploring various combinations of addends for a particular sum. After math, Ruth would then organize lessons according to the current science or social studies focus.

During the latter part of the first year and during the second year, Ruth used menus during her morning time block. She explained that they were changed every two
weeks, on the average, and that they “contained everyday things like journal writing, spelling, cut and paste activities and some art and science activities that went with whatever topic they were on.” Ruth explained that she usually created three different varieties of menus to account for the varying range of student abilities. Noting that the menus included “all of the curriculum,” Ruth maintained that they “kept children responsible for their own learning.” During menu time, Ruth said they could choose a partner or they sometimes worked in small groups that were usually heterogeneous. She would use this time to meet with the groups that were of high, medium, and low abilities.

Ruth’s Definition of Nongradedness

This section will be organized following Anderson and Pavan’s (1993) six areas that were identified a priori: goals of schooling; organization and grouping schemes for teachers and students; curriculum; instruction; assessment and reporting practices; and use of materials.

Goals of schooling. In discussing how she felt schools should identify their goals, Ruth reflected upon her experience as a factory worker. “My training foreman said I want quality not quantity. Quantity will come.” She felt that the classroom environment should exhibit this quest for quality and that teachers should constantly be learning from students. “If you don’t learn from students then maybe you need to hang it up,” she suggested.

Citing the ubiquitous quote, “Childhood should be a journey, not a race,” Ruth stressed in this quest for quality, students should learn real-life skills. She posited that in penalizing students for not completing work on time, she was teaching them consequences that were
applicable to realistic situations. "Because you have to go to work on time. There're just
certain things you have to do. They need to learn that."

Ruth felt that the goals of multiage schools and other schools should be to provide
children with an environment that is nonthreatening and challenging. In this environment,
she felt students should be able to explore and develop their own style. "I just feel that
they're not going to make much progress in the world we're coming to unless they
develop their own individual style and learn how to use the resources that are available."
She felt that it was important for schools to focus on the interests of the child. She
thought that if children were interested in a subject they were more likely to be successful
learners.

Organization. Ruth maintained that she should prepare her students for a future
that "consists of people working together in groups for the benefit of all." In organizing
instruction, she would like to "get more of a team spirit for the room." Ruth recalled an
experience the year before in which all of Central's teachers had planned a multiage
experience based on a multicultural theme. She explained how she had fourth and fifth
graders mixed in with her second graders and how this benefitted one second grader in
particular. "He learned the names of the states, he drew a map of the states, and it
sparked him to work with these older students. And their interests were all the same."

She thought that such "cross teaching" and teaching according to interests
benefitted the child but also noted that team teaching was hard for her at first "because I
just wanted control. It was my room and I wanted to be the one in control." Ruth
explained that because of her experiences with inclusion the year before, she had learned
“to give up a little more.” She stated that “the child’s the important one” and that grouping decisions have to be based upon what’s best for the child, not the teacher. “I got to thinking, ‘I’m not the important one here.’” She elaborated that if another teacher is in a better position to help the child, she needed “to let go of what I want.”

In her own experience during the first year of the program, Ruth had experienced difficulties with flexible grouping and with team teaching. She admitted, “I haven’t found a way to get around that low, medium and high reading groups. I was not flexible in that way; we had those reading groups everyday.” She did not take part in the primary team’s career unit in which the other five teachers had each planned a career center that rotated from class to class. She discussed the cause.

I didn’t participate. I didn’t pick a good subject. I had planned to have some outside people come in and they weren’t available and none of the scheduling worked out. I just had nothing developed to make it worthwhile to participate.

Curriculum. As discussed previously, the six teachers had created one multiage course of study that combined the district’s first and second grade courses of study. This effort had resulted in a checklist that summarized the multiage curriculum in the areas of math, reading, and language arts. For science and social studies, the teachers had decided to teach the second grade curriculum the first year and the first grade the second year.

Ruth felt that the child’s interests should be an important part of the nongraded, multiage curriculum. She theorized, “You don’t know what a child will do when there’s a high interest.” She felt that children were very interested in math and sciences. She thought that if she could integrate the math and sciences
better, she would hit upon topics that would provide a better curriculum for the students. This was a goal that she was still striving for after the second year of the program. 

She thought that within the curriculum students should initiate their own self-directed projects. The multiage teacher needed to capitalize on the various interests of children in the classroom, Ruth felt. She recalled, “If there was a group that was interested in the story in addition to the one they were doing with their group, then I’d let them come up and join in and discuss it with us.” Ruth also spoke of a child whose “interests are so varied,” explaining that, “He would bring in all kinds of things. He got so much outside of the classroom that he was bubbling over to share inside the classroom.” She noted that the ideal curriculum should address theories of multiple intelligences (Gardner, 1990) so that the children’s varying interests and needs can be met.

She felt that in the multiage classroom, “The teacher nor the students worry about getting to a certain level at a certain time and mastering certain things.” She explained how the curriculum should be child centered in that concepts are presented as “the child is ready and able to do it. You just don’t push them through to something when they are not ready.” She likened the ideal curriculum to being like the Montessori approach. She explained, “When you look at it, it looks very unorganized, but it certainly is the most structured setting or curriculum.” What she liked best about Montessori methods are that “It just takes the child at his natural ability level.”

Ruth maintained that in this first year of multiage, her curriculum contained “more writing and less worksheets.” She mentioned consistently that it was imperative for
creative writing to be emphasized. She felt that the use of menus presented an
to opportunity for students' individual personalities to emerge. She felt that teaching with
thematic units was important and was excited about the plans she had made with Nicole
and Renita for the second year of the program to teach around the theme of endangered
species.

Certain nonacademic aspects of the curriculum were also important, Ruth stressed.
She recognized a need to “spend the first six weeks of next year just going through some
of the directions the children need to follow and how to act as they go from group to
group and material to material.” She stressed the importance of students taking “the
responsibility for completing their work.” She felt that students possess a real need for
“group approval.” She posited that this need should be a part of the curriculum. The
following demonstrates how Ruth encouraged children’s behavior to be group oriented
and self-directed.

A child told Ruth she didn’t know what to do. Ruth told her, ‘If
you don’t know what to do, ask someone else.’ The girl asked a
boy for advice then she quickly began coloring and cutting her
Christmas Story.

Just then a child quietly told Ruth, ‘Jackie is throwing up.’
Ruth and the researcher both looked over to the direction of Jackie.
He was quietly vomiting into a trash can. ‘I’ll say this for Jackie,’
Ruth addressed the class. ‘He did right what I’ve asked you all to
do.’

After helping the boy wipe off his face and setting the can
out in the hall, she related to the researcher how she had implored
the students to find something to vomit into after a messy scene
days before. With only the smallest of a break in their time on task,
the children were back working on their Christmas stories within
seconds. Amazingly, the children’s time on task had not been
interrupted as a result of the child’s vomiting. The researcher kidded
Ruth, asking, 'Is throwing up in your trash in the first grade curriculum or the second?'

Ruth continued to circulate around the room, helping children finish their nativity scene for the Christmas story. She told one child, 'I'm disappointed in your actions.' Then Ruth asked another child if he was going to get finished today while one child helped another fold her Christmas paper. Ruth continued to circulate and asked a child if she minded if someone else helped her.

**Instruction.** Ruth felt that the nongraded teacher must teach and present concepts in a manner that encourages problem solving. In discussing her approaches to teaching inductively, she felt it was “right on target with multiage. The whole purpose is for them to deduce for themselves.” Ruth explained, “Process is more important than the product. I think if there’s anything more important about the nongraded situation it’s learn the process!”

She realized during the year that she needed “to do more things on a second grade level” knowing that “those that could pick it up do” and the ones who didn’t fully learn the concepts would have another year. She explained how when she was teaching something to the older children that she thought others needed also, she’d stop and “everyone would have that lesson.” She gave examples of teaching phonics, syllabication, or vowel sounds; they were usually concepts the traditional second graders should have mastered. “I didn’t think it would hurt the younger” to learn more advanced skills, Ruth posited.

She shared her political views and how those who are “from the far right think we’re missing the boat by having no drills” and less phonics. She discussed the error of emphasizing drills and teaching phonics in isolation, “You want children to think. By and
large, unless you are gifted, I think it [the teaching of isolated skills] has done more damage to children in our country.” Ruth posited that children must learn to think “for themselves and evaluate and judge ideas and activities.”

“Teachers are the facilitators more and I’m coming to that point,” Ruth reflected. She felt that the teacher must facilitate for children an “environment where they aren’t threatened. They need to feel they can take a chance and make a mistake. . . [They should feel that] they won’t be criticized . . . they can explore, and be silly and have fun.”

Assessment. Ruth used the same primary report card the others used; however, she felt it was created mostly to help teachers, not parents. Narrative reports are more desirable, she thought, and should be more helpful to parents than other types of progress reports. Such reports should indicate, “This is what your child had done and this is what he needs to do.” Ruth thought that the checklists the teachers used helped them keep track of student progress but was not useful for helping parents help their children, she thought. Except for posting results of completed homework, Ruth does not want to use any type of reporting system that fosters competition.

Ruth said that she completed a running record about once “every three weeks.” During the second year, she became much more comfortable completing them. She felt they helped her to more readily identify the instructional reading levels of her students. However, she admitted that she did not conduct this type of assessment “as much as I should.” She conducted them mostly when “it is close
to the time for reports.” She used the checklist of math and language arts objectives to consistently note the level of each child’s achievements. She explained that she held conferences with each student on a weekly basis but that it was “pretty informal... [They discussed their] journal or menu, and we always went over it.”

While discussing standardized testing, Ruth shared her opinion of the “bell curve.” She maintained that it was “valid whether you like it or not.” She emphasized that she did not let this opinion affect her interactions with children stating, “You just accept them for what they can do.”

Use of materials. In her classroom, Ruth relied on the basal and skill sheets for her reading materials. For math instruction, Ruth used tubs of math manipulatives such as unifix cubes, pattern blocks, and geo boards. For her first graders, she relied upon the basal reader while for second graders, she used both the basal reader and literature. At the end of the second year of the program, she reported using literature with all of the children during the last month of school. Ruth relied upon the special education resource room for some of her materials such as commercially-made vowel games and bingo games emphasizing sight words. Ideally, she felt that a nongraded classroom should have a variety of materials to meet all the varying needs. She felt that such materials should also encourage self-direction on the part of the students.

In conclusion, Ruth was very reflective and self-critical about her experiences as a multiage teacher. Her first year had been difficult but her second year had progressed more smoothly. While admitting that teaching multiage children was difficult, she did it
because she thought it was better for the children. Ruth acknowledged that she relied upon the use of low, medium, and high reading groups. Ruth believed that assessments should provide information to the parents that would enable them to assist in their children's learning. For the 1996-1997 school year, Ruth was scheduled to teach a traditional first grade classroom.

The Story of Renita

Renita did not become a teacher until after she had been a nurse for 15 years. She attended two different Christian colleges in two of the prairie states before finishing in Ohio at a branch campus of a major university. Renita said her background provided her with the strength to deal with the demands of teaching. She said, "I pray for my students everyday on the way to school and I just really feel that as a teacher you've got to in some way love every student in your classroom." Her "holistic education" began at the university in Ohio and was embellished when she received her master's degree at a private university where she studied children's literature and whole language.

While Renita has been employed by Bellingham City Schools for seven years, until the 1995-1996 school year, she had never taught the same assignment consecutively. In those seven years she taught two years of a first and second grade combination, and one year each of first, second, and fourth. Before teaching in this nongraded, multiage program, she had been a fourth-grade teacher. "Every year is a new challenge so it doesn't really matter what I'm teaching," she felt. Roberta stressed that in those years when she taught with first and second graders combined, she "did not teach them as a split. I taught thematically, which was the easiest way to handle two groups together."
Renita felt very strongly about the need to be organized and to plan extensively for teaching thematically. "I'm not one to just throw things together," she shared. Renita reflected on how, seven years ago, another colleague "said you are a crazy woman" when she insisted on teaching holistically with the children at Central. She divulged that she persisted in this approach to teaching and that she successfully incorporated literature, eventually throwing "the basal reader out." She felt one thing she has enjoyed most in her years of teaching at Central has been watching her colleagues evolve into a more holistic, less traditional approach. She thought, "I guess that's been kind of the fun part of it is to see the changes that other people will have made and the strides that we've made over the last seven years."

Renita explained how the change from middle to lower grades had affected her. She said, "At the beginning I was overwhelmed, having taught fourth grade last year and being away from the primary for a year. I had forgotten how much they don't know." She maintained it took about "three weeks before I really felt like I was comfortable." She felt that knowing the second grade curriculum and having her master's degree in literature and whole language were a "big asset" for preparing her to teach in a multiage classroom. Since Renita was the last teacher to be added to the primary team, she did not do as much visiting or attending of conferences as the other participants.

Because she was both used to and willing to change teaching assignments, Renita predicted correctly that she would be the teacher that the administration would move to another grade level. Throughout the first year of the program, Renita repeatedly noted how the number of children going on to the third grade was too high and additional
personnel might be required. While no change occurred during the 1995-1996 school year, it was projected for the 1996-1997 school year that Renita would teach a second and third grade multiage classroom.

Renita's Classroom Environment

Renita's classroom was arranged with a mixture of desks and tables of varying shapes and sizes to accommodate her class of 22. Instead of chairs, some of the children sat on plastic crates with cushions. To the back left, as one entered the room, was a reading area that was partitioned off from students' desks by a book shelf with encyclopedias and other books. This area was also replete with a terrarium, two aquariums, and a brightly painted yellow bathtub with cushions on the bottom. Two computers sat in two different locations; one was in the back right and the other was next to the group meeting area.

The whole group meeting area was situated on the interior wall to the right as one entered the room. Renita's teacher desk was right by the doorway, to the left, and her work table was to the direct right of the doorway. In this area, Renita had hung a daily agenda, a schedule for special classes, word banks, poems on chart paper, and a large calendar. Boxes and games were stored in crates at various locations in the room, under tables and above shelves. Baskets, full of supplies such as books, yard, and fabric, were tucked away in different spots throughout the room. Hung on a string going horizontally across the window shades were teacher and student made materials relating to the current theme (see Figure 4.3).
Figure 4.3: Renita's classroom environment.
A Typical Day in Renita's Room

Renita’s day commenced with a whole group meeting time which she called their “Glad Group Time.” At this time, she would allow two students to share something good that has happened to them. This information would be written on the chalkboard “So that we have something really positive to look for.”

For the next thirty minutes, the class would complete math and calendar activities. Also, Renita stated, they would always write an agenda to describe the day’s events. From 9:30 to approximately 11:15, Renita organized the children into heterogeneous groups as they rotated among five different centers. Renita explained how these center activities usually included reading, art, writing, math, handwriting, or a project. She posited, “I found that the cooperative group, where you have a high, a low and a couple of middles, works much better during that time because there’s more support there.”

While students rotated from center to center, Renita would call students over to her work table and complete reading activities. These small groups might be ability grouped or according to projects students were working on. For example, one group project had been to prepare a play to present to the class. After these activities were completed, they would then clean up and prepare for the noon lunch and recess.

Renita’s afternoon activities began with “45 minutes or so of what I call our theme time.” Theme time, she explained, was when she would work on something related to the theme, for example, a project or reading activity. Special classes, such as art, physical education, music, or library, met in the afternoon and for the remainder of time, Renita would schedule math activities. Math activities might be whole group or small group,
Renita noted, depending upon whether the resource teacher joined them to help teach ability groups. For example, she and the resource teacher might split the children up so that she could teach regrouping in addition to the students “who are ready” for it. Since social studies and science were usually integrated during theme time, Renita usually did not have a separate time block for these subjects.

The following vignette shows Renita teaching during what she called her “theme time” after lunch.

The room was darkened; lights were out the shades were down. Renita was using a flannel board in the group meeting area to tell a ghost story. The only audible sounds were the running water from the aquariums and Renita’s voice. Using inflections and squeaking sounds as she told the story, the children appeared deeply engrossed, grimacing and laughing at the appropriate times. At the story’s conclusion, when she let out a loud, ‘Boo!’, the children all jumped and squealed with laughter.

She briefly discussed the ghost story with the class, enabled it to serve as a way to introduce the science lesson. Before she dismissed the children to their seats, she asked, ‘Would a ghost walk? What would they do?’ After discussing the noises and rattles ghosts would make, she requested that they float back to their desks, purring, ‘And don’t touch anything either.’

Cooperating fully, the children were quickly and quietly seated. She pointed to a graph at the front of the room which was entitled, ‘Which ghost will spin?’ She passed out a paper and referred to the word ‘hypothesis’ at the top. The children repeat it several times with Renita explaining it was an ‘I think’ statement. She told them she would introduce them to four different ghosts and then complete the statement ‘I think ghost number ? will spin because . . .’

Renita continued the science lesson, explaining how people formulated hypotheses all the time. After giving several examples, she then introduced the four ghosts. Some had arms extended in different ways and some had paper clips appended to them. This lesson, which she had found from an Activities Integrating Math and Science booklet, lasted for 30 minutes and about one third of the class had chosen the correct ghost. After the children had
ample opportunity to discuss and complete their choices, Renita graphed their responses on the class graph. Providing closure for the lesson, Renita and the class discussed other objects that spin and how they were similar to ghost number three.

Renita's Definition of Nongradedness

This section will be organized following Anderson and Pavan's (1993) six areas that were identified a priori: goals of schooling; organization and grouping schemes for teachers and students; curriculum; instruction; assessment and reporting practices; and use of materials.

Goals of schooling. Renita felt it was important to develop a "community of learners." As part of this community, Renita posited, "We're trying to teach children to be life long learners... They have to feel like they can answer that question or look for an answer." She explained that the reason she got them right into writing reports was because "I want them to know that even though they are only five, six, and seven years old that they can do that themselves." She elaborated:

We talk about why we are learning things. I try to put it in the context of everyday life. When you are learning how to count money, if they go to the pool and they don't know how to count money, someone is going to cheat them out of their change.

She also felt that children needed to learn responsibility and while there was a time to work in groups, there was also a time to learn to work independently. She emphasized:

Where I really push them learning independently is when we are doing a unit and they have a question about something. For example, I had a little boy draw a flag for me and I said there's a lot of flags all over, every country has a flag. He wasn't sure about that and I said where in this room would you go to find out about flags? Well, he knew that we had encyclopedias in the room so we
went to the encyclopedias and we got flags out. He was just enthralled.

Renita felt children should be responsible for their own learning. "I try to step back and see where the child is coming from and evaluate what they're feeling in that situation." Then, she explained, she would decide how to respond to the child. She would always try "to be as positive as I can" and try to facilitate "making it his responsibility rather than mine."

**Organization.** Renita characterized her grouping arrangement for students as being flexible. She stated, "There are lots of times that they are grouped according either to what task they are doing or an interest that the child might have." One example was when she grouped the older students to teach report writing. "There was a range of low, middle, and high" ability readers, she stated, as she had decided the traditional second graders needed practice with that skill. After she had instructed the older children on how to write a report, she then "teamed" them with students who had not yet learned report writing. She felt that grouping students for cooperative learning, "where you have a high, low, and a couple of middles," provided more support for student learning.

One reason Renita felt using centers was advantageous was that it allowed her to "do a lot of one-on-one or small group at my table during that time." While stating that she did some ability grouping for reading, she pointed out that they "also read together heterogeneously also, like when they are in the reading center they might buddy read." For math, she tried some ability grouping "if we are working on particular skills, and then
I would put them with a partner that would already know how to do that.” She added that the student helping benefitted also from receiving more practice as they taught.

She felt that when students knew they were in a certain group, such as for spelling, was wrong. “We are saying, ‘You’re the green list, you’re the blue list, you’re the red list.” She felt this was detrimental in that “we’re telling the kids that there’s a difference in them when we do that, and I don’t like that part of it.”

For teachers that are team teaching, Renita emphasized the need “to communicate more.” She felt strongly about meeting regularly and planning so that lessons are not “just thrown in at the last minute.” “I like to have things planned out a little bit more long ranged than what they are,” she stated. For the second year of the program, she and her team of Ruth and Nicole had planned a year long theme on the rain forest that met all of the curriculum’s science and social studies objectives. At different times during the year, for units such as the zoo unit, she and her team of three had departmentalized for the teaching of various lessons. This was something she would like to do more of if they only had more time to plan, she insisted. She referred to the other team’s experience in which the team of Dana, Roberta, and Anne had team taught for math instruction on a weekly basis. She opined, “We might want to consider doing some of that or just moving some students where needed.”

Curriculum. As discussed previously, the six teachers had created one multiage course of study that combined the district’s first and second grade courses of study. This effort had resulted in a checklist that summarized the multiage curriculum in the areas of math, reading, and language arts (see Appendix B for the complete checklists). For
science and social studies, the teachers had decided to teach the second grade curriculum the first year and the first grade the second year.

In a nongraded, multiage program, Renita felt individualization was imperative and an important part of the definition, maintaining you are forced to individualize because of the variety of needs. "I think that to be a good nongraded teacher of multiage [children], you have to have a holistic philosophy. You've got to be child centered . . . You've got to go find materials that are going to help this child."

She thought, "Everything is individualized to meet the needs of the child . . . I would say more so than what you’d do in a regular classroom." Renita posited that a traditional teacher might think, "You are out of your mind to have all those levels." But, as Renita pointed out, "You have all of those levels in any classroom anyway. But most teachers do not attack those levels for the learning of the child."

Renita wished that she had taught spelling differently. She explained that she was "looking at individualizing spelling more than we do now." While she was against organizing students for spelling groups, she felt spelling should be taught along with the writing process. She would often do spelling activities as part of her centers or send words home for homework but she did not emphasize the spelling groups or tests. She admitted, "There are weeks that I forget we need to do spelling tests."

Renita explained how she thinks "thematically" as she provided an example of one of her themes. "Everything that we've done with reading and writing has been around the bear theme. Our science things have pulled into that." She felt this type of planning was unique in that the lessons that are planned around a theme is a constant for all children,
something they all have in common while also being treated as individuals. She felt this was needed for “keeping the interest level high.” With themes, curriculum was extended to their personal interests as “They get interested in a particular theme, they . . . bring things in from outside that they have found” that relate to the theme. She explained how she and her students would begin a thematic unit “with webbing.” She elaborated, “We put the theme up and we talk about what we know about it and what we want to find out about it . . . and then what we learned about it.” Renita maintained, “Learning experiences based on the child’s expressed interest will motivate the child.”

Through the teaching of themes and related project work, Renita thought she allowed them more freedom and choice. “I try to vary the tasks so that it allows choice in what they’re doing,” she explained. She would present a topic and then suggest various approaches for mastering the objective. She explained, “I introduced a lot of different ways of presenting material and projects.” For example, she would give them the choice of writing a report, a story, or making “a diorama or whatever.” When students were writing letters, she would let them follow the form letter she provided or make one that was original. “I try to do that as much as I can on every project . . . even when we do centers, I usually have two to three things that they can choose to do in it.” She gave the example of how in her writing center, they “brain stormed six to eight ways that we had studied spelling throughout the year, whether it was linking letters or writing on somebody’s back.” This list served as the choices from which they could choose to follow during center time.
Renita felt strongly that children need to be taught proper classroom management and thought she had spent time doing “a lot of directing at the beginning of the year.” Most of her direction focused on teaching the students “how to act.” Renita valued the nonacademic aspects of the curriculum as she maintained that it was very important to establish relationships with the children. She felt the need was demonstrated by the problems that occurred when she was gone for several days. She explicated:

But when I was gone that six days in Michigan for my mother’s funeral, my kids had a terrible time. I had two incidents of domestic violence and my one behavior problem just completely lost it in the cafeteria. They just couldn’t stand it. I was talking to a mother of the girl who is my top student and every day she came home and said, ‘I just can’t stand it that Mrs. R’s not there.’

Renita felt strongly about taking “the time to allow children to learn what was expected of them.” She gave the example of how one boy, who initially was a behavior problem, did not seem to understand that she would “check on him.” She felt his behavior improved when he realized what she expected from him and he knew “what he could expect from me as far as my behavior.”

After the first and second grade students had been separated for the standardized testing in the spring, Renita said she and the class “started talking about how part of the group would be staying and that they would become the leaders then.” During the second year of the program, Renita was pleased to announce that this did indeed occur. She spoke of her second year students in general and specifically cited two of her low ability students: “All have done real
well. Even ‘David’ and ‘Carrie’ [pseudonyms] have taken leadership roles which in
the regular classroom, they would not have [had the opportunity].”

**Instruction.** Renita shared how she perceived her instructional role. “I see
myself as the facilitator. I want them to know where they can go to get
information and know how to process that. I do a lot of introducing to things and
then we do a lot of exploring.”

She explained how in her seven years of teaching, she has “always used
centers.” She felt it had advantages:

When you use centers a lot like I choose to in my classroom,
there’s a lot of communication that goes on with kids . . . It also
allows me to either do a lot of one-to-one or a small group at my
table during that time, and I really like that.

Renita thought she was much different from traditional teachers whom she
characterized as being “very dogmatic.” She felt that part of this was due to their
dependence on textbooks to dictate curriculum and instruction as they “follow a routine,
go through a text.” She shared how she felt some of the traditional teachers in the district
felt about the multiage teachers: “They think we’re crazy.” In her view of instruction, she
maintained that in instructing students she “wanted them to take a risk” in their thinking.
She gave the example of how when students were formulating hypotheses about the
spinning ghosts, she had to encourage the students not to choose the same answer as the
girl they had perceived was the smartest girl in the class.

Renita thought that classroom instruction should be “hitting all the kinesthetic, the
visual and the auditory approaches to learning. . . I have worked harder at that this year
than I have any other time.” For example, she explained how she incorporated art, music, poetry, movement, and dance into her instruction on various occasions.

Renita felt that using a thematic approach to instruct the multiage classroom was vital. “I feel like when you do things thematically, you have to open up the questions of the who, what, why, where, when and how to really get them into wanting to explore.” She gave an example of how she always tried to teach skills in context. For example, some of her best lessons were derived from a discussion during her morning meeting time. When a younger student asked why she used an apostrophe after a child’s name, she had proceed with a mini lesson on possession.

Assessment. Renita explained how her assessment was guided by the attitude that she tried to instill in her children: “She [the child] didn’t fail at it, it was just something that we need to work on.” She reported that her assessment “is continuous, cooperative, and comprehensive to fulfill its diagnostic purpose.” This was evident in noting her assessment which is a three-ring binder with sections denoted for each individual child in her classroom. For each child, she has the language arts and math checklists, comments on favorite titles, comments about types of errors committed most frequently, and recent copies of running records (Clay, 1993).

At the spring board meeting at the end of the first year of the program, Renita shared her assessment notebook. She explained to the board of education and the superintendent:

I brought my assessment notebook which shows the checklists we developed last summer. We all have something similar to this (showing a big white three-ring binder). For example, we
developed checklists using our curriculum. I have a notebook showing where each student was when he came in. We also did the same for math. We also have a Math-Your-Way Assessment type thing. As you can see, I like to color code and use post-it notes. This here’s a running record, although I didn’t bring one for each child. We also worked on a new report card.

Renita explained that the children were very familiar with her assessments:

“They know my notebook has things in it and I always show them that these are things that they have to learn and they should be learning.” Renita felt that students were very aware of their own progress. She also explained how part of her assessment was to compile notes about the children. “Particularly for my students who are moving on to third grade, I’ve tried to make notes about particular books they’ve liked.”

“Conferences are real important” to her assessment process, Renita explained. She gave the example of a child who had made great progress in reading, “She’d gone from a level six to twenty.” During a conference she had praised the child for making “that jump.” She had also implored the student “not to stop this summer, that she should continue reading all summer.” She tried to regularly schedule meeting times with the children. She said, “I try to meet with the kids at least once a week, one-on-one.” Renita felt her child centered, holistic approach to teaching enabled her to be strong in this area. “I feel like my assessment this year is probably better, stronger than it’s ever been.” Assessment was a “critical” component in attempting to teach in a nongraded, multiage classroom, she maintained. Renita stressed it was imperative for the
teacher "to know where each student is level-wise and to be able to see how they are progressing." She elaborated, "You spend the first nine weeks trying to decide where they are at and what you need to do to meet their needs."

Renita was also an advocate for portfolio assessment in the multiage classroom. She explained that she kept two different types of portfolios in her classroom. She kept one of them to pass along to the next teacher which included work samples that she felt were indicative of the children's capabilities. The children were allowed to take home the other portfolios. This portfolio included work that the children had chosen.

Renita felt it was important that "Children's work is assessed in terms of their past achievements and their own potential, not by comparison to group norms." She explained how growth patterns are irregular and often occur in different areas of the curriculum and at different times." Like the child who had made a huge leap in reading achievement, she discussed several children who "were stuck" at lower levels for a long time and then just "took off."

Use of materials. Renita was adamant that textbooks were not part of her perception of the multiage classroom. She felt the students needed to experience variety as she explained how she tried to keep her centers full of choice and varying activities. She liked to use various types of games and most of her materials were collected to fill her writing and publication center, art center, and two computers. She had one printer to publish students' work.

Renita thought that these various materials contributed to an environment in which visitors might "think that all they are doing is playing in these areas when they are really
not. There is a specific thing that they are supposed to be doing." The following example is provided to show how she used such materials in her classroom.

Renita addressed the entire class, "Listen. We only have until 2:45 to finish our Mother's Day gifts. You'll continue with centers and some will work with me. While you're playing games at the centers I want you to use good game manners. What do I mean by that?"

Several children volunteered and she elicited responses like, "Be nice and play right . . . Use a nice voice . . . Share . . . Don't cheat . . . Don't argue . . ." Both boys and girls and younger and older students offered examples.

"If you have an argument during a game, how do you solve it?" Renita persisted with this idea. "Do you run to Mrs. R?"

The children offer no, and that they should solve it themselves and only go to her if they really have to. A child also said, "Don't talk back."

"Yes, that's always a good one," Renita praised and asked, "What about when we switch from one center to the next?"

The children state that they leave the stuff where it was and just take someone's place and ask whose turn it is. They should pick up where the others left off, it was agreed upon.

Renita set the Junior Monopoly Game and Sorry game at two different clusters of desks. Some of the children moved to start and Renita told them, "Don't start yet." Then she directed a group to go to that week's career center, the store.

She chose a group to go back with grandma/painter Mrs. Swartz telling them, "Ask Mrs. Swartz where she'd like you to sit."

As they settle in to paint, the others began to work on their specific tasks. Four children played the board game "Sorry," four played "Monopoly Junior," one worked alone with a "Geo Safari" activity, and one student worked on one of the computers doing math facts.

Renita sat at her work table with a child, assessing the child's ability to construct an oral story problem, "I want you to use beads to help you figure this out . . . I had four dolls and my sister took three away . . ." The child used the beads to show 4 - 1 appropriately. When she finished with this child, she asked a younger boy to sit beside her. He complied and she checked him, asking about such topics as telling time and reading the days of the week.
After several more minutes had passed, Renita told the whole class, "We're going to change centers now. Let the new group know where you are in the game. The other group is still painting so I'm just going to move you guys. Watch how my circle goes," she demonstrated with her arms how the groups should rotate to their next location. The children watched and easily followed her direction. She also told them, 'Mrs. Swarz is going to put them [the Mother's Day gifts] over on the window sill to dry so don't bump them accidentally when you're playing store.'

To summarize, Renita felt that the way she taught in a multiage classroom was the way she had always taught. Regardless of the grade level, Renita had always taught for continuous progress using a thematic approach. She was very comprehensive and organized in her approach to assessment. She attributed this teaching style to her whole language background. Renita employed flexible grouping strategies and worked very hard to keep children working productively in small groups.

**The Story of Dana**

Before becoming a first grade teacher in 1991, Dana had taught developmentally handicapped (DH) children for 14 years. Her teaching experiences also included one year of second, one year of third, and three years of teaching first grade. When the study began, Dana was four classes away from earning her Master's Degree. The summer after the initial year of the nongraded program, Dana successfully completed the requirements for this degree. She received her undergraduate from a major university in southwest Ohio where she earned a dual certificate in elementary and special education. She pointed out that she had attended many workshops over the years, most notably workshops for serving on the Intervention Assistance Team and for training in Math Their Way.
As a teacher of multiage students, Dana felt that her experiences of teaching developmentally handicapped students were very beneficial. She pointed out that it was similar because in both situations, the teacher is instructing children that are achieving at various levels. Dana stated, "When I taught DH, I worked really hard and everything was new. It was different every year . . . So you always had to find new ways to do the same thing, because you have the same children."

Dana’s interest in multiage started when she and another participant in this study, Roberta, became interested in the concept of looping. Looping is an organizational plan by which the children remain with the same teacher for at least one more year. When looping was never instituted, she and Roberta then became interested in nongradedness. Dana stressed that people often initiate change “because they’re looking for a better way to do something.” After attending a workshop on multiage, she decided it “sounded really good.” During that same school year, she and the other primary teachers had been able to discuss nongradedness during monthly morning meetings the district labeled as “huddles.”

Dana posited, “It just kind of started when we were talking at a huddle, brainstorming things we could do to help the kids because so many of them are so far behind.” Dana explained that when she and Roberta first became interested in nongradedness, the principal agreed it might be appropriate for Central. However, Dana noted, the principal was involved in other building projects and the subject was temporarily dropped. Dana theorized that a change in key personnel at the board office may have contributed to the acceptance of nongradedness. She commented:
But with a new superintendent, we thought it was a good time to do our change. But it really came to a head rather quickly. Although we’ve been thinking about it and talking about it for a long time, they [the administration] weren’t serious, they were just sort of interested, so it seemed to us.

In the spring of 1994, Dana attended a two-day workshop with three other teachers. Because of her summer school schedule, she was unable to attend the Society for Developmental Education’s Multiage Conference that four of the six teachers had attended. She cited visitations as being the most helpful as she prepared to begin this program. “You could ask questions and see how did it mix with the ideas we already had,” she opined. Dana added that the brainstorming the year before and the mixing of ideas from the other teachers added to a rapid-paced preparation that culminated in a summer of meetings during which “We worked real hard.” But, as she pointed out, she was used to working hard from her years of teaching special education, so this was nothing new for her.

**Dana’s Classroom Environment**

In her classroom, Dana had created barriers that served to provide lanes of traffic for children to follow throughout the room. In the middle of the room, she had organized a line consisting of two pairs of movable desks with a file cabinet and shelves on top. Perpendicular to this line was two separate clusters of paired desks that lined the lane next to the windows. Her work area, a kidney bean shaped table, was to the right of these areas, as one entered the room, in the back right corner. Another cluster of desks dominated the area to the left of her work area and toward the interior wall. Along this interior wall was where she organized the children in this open space for whole group
meetings. She often moved these four distinct clusters of desks around the room for different occasions.

Her desk and computer served as a barrier that enclosed this open area and created a lane for entering into the room. To the left of the door was a sink area that she used for painting, sand, rice and other messy activities. This area had also been used for a terrarium that held meal worms. At various time of the year, she had constructed a tent in the back, far left corner of the room. Other times, she had partitioned this area into spaces of two by two and one-half feet by moving desks and tables (see Figure 4.4).
Figure 4.4: Dana's classroom environment.
Teacher and student-made materials hung in various places around the room. Only the chalkboard behind her meeting area served as open space for writing. A daily agenda, with subject and times, was posted on the interior wall next to the calendar. Dana had also made various user-friendly charts. One was entitled “I Do My Homework” and on another Dana had written, “What We Would Like To Know.” Other charts listing the current poem or ones used for chorale reading were hung in key, accessible locations around the room. A routinely used set of charts included the ones that included three different levels of spelling words. Big Books, enlarged versions of children's books, were often displayed throughout the room. 

A Typical Day in Dana's Room

At 8:45 a.m., when the children entered, they would participate in various activities set up at learning centers. Dana would indicate the names of students on the center that they were to visit each day. Some of the most common centers included activities with wooden blocks, Legos, Lincoln logs in one; the computer and GeoSafari in another; the sand and rice center; and also a reading center whereby children either read in the tent or painted at the easel. Another center involved the choosing from a variety of materials Dana placed on a shelf, including what she felt was most popular, a memory game. This shelf also included various types of letters and other commercially-made word games.

At 9:15, the children cleaned up while she took attendance and organized her plans for the morning before beginning the morning meeting. The citizen of the week conducted
the calendar activities which consisted of objectives relating to dates, money, pattern, place value and filling out the day’s schedule. Together the class would read the current poem while the citizen pointed to the corresponding words. The citizen also quizzed fellow students and conducted more choral readings.

After the whole group meeting, the Chapter One Teacher either took children with her or worked with them in the room. This was also the time when Dana began to meet with ability-grouped readers on everyday but Wednesday. She reserved Wednesdays for working with individual readers. Before they broke for these group activities, she explained what they were expected to accomplish at the different centers. These centers were different from the previous ones and included more academic activities such as journal writing, spelling activities, and book making. When children completed their morning work, they were able to choose from math manipulatives, puzzles, or sequence boards to occupy their time. Dana explained that she tried to stagger the groups so they are pursuing different goals in different areas. She reflected how it had taken her some time to arrange the schedule to that the Chapter One Teacher would work with her students while they were working in their spelling center, an activity that didn’t take as long. Therefore, they wouldn’t miss much from the centers.

Special classes were scheduled for the afternoon, usually after lunch. If Dana had met with each student for reading, she would then begin to teach math. The children were ability grouped and on certain days, her team departmentalized their math instruction. During one observation, for example, she had organized the children into three groups.
While one group worked with her on concepts about time, the others had worked independently, doing measurements and practicing with sums up to a given number. The remainder of the day was devoted to whatever science or social studies lessons she and her team had planned.

The following vignette demonstrates the type of classroom activity that was most prevalent in Dana's class.

On this day, the children were organized into groups that worked at four different centers. One practiced handwriting while copying the poem 'The Setting Sun.' Another practiced word analysis with worksheets that required practice with blends and then Dana had posed a riddle that they were to solve. In another group, children were creating books with words taken from their group's spelling list. Since this was a Wednesday, Dana sat at her work table, working with individuals. While she worked with individual readers, the others sitting close by would listen or write or draw about their story. On this day, she took a running record as individuals read to her. When they finished she would choose one book for them and then allow the children to pick another. Then she would place these books into a laminated envelope and remind them to practice at home.

The researcher moved to where two boys were copying a poem about the setting sun that was hung on a ring and chart paper. 'What are you doing?' the researcher asked. 'This,' one boy pointed to the poem. The other spoke, 'I'm trying to help him with his cursive S's.'

Another boy, working alone, lay in the open area, pondering the answer to the riddle Dana had posted for the week. He asked the researcher for help, who in turn gave a few hints. Finally a girl working in another area close by offered, 'It's a snowflake, Ethan.'

When the researcher asked another group if they were working on their journals, they replied, 'Oh no, these are response logs.' A former student of the researcher informed her, 'I'm on [level] 12, and it's hard.' The boy next to him turned the book over to show where the level 12 was indicated.
During the afternoon, Dana would often hold whole group meetings to explain the current social studies or science theme. One of the activities had been to make Indian drawings as the current theme had been Native Americans. The following depicts Dana’s interactions with her class during a whole group meeting as she demonstrated how to create Indian Drawings.

‘Did Indians use guns?’ Dana questioned. When no one volunteered an answer, she told them. ‘Only if the pilgrims or Europeans gave them to them. But how else did they hunt?’

‘With a bow and arrow!’ a few called out. Dana drew a deer on her simulated deer skin, paper bag and gave it a crooked mouth line. ‘He’s making a face,’ she joked. ‘I guess I’d make a face if they were hunting me, too.’

**Dana’s Definition of Nongradedness**

This section will be organized following Anderson and Pavan’s (1993) six areas that were identified a priori: goals of schooling; organization and grouping schemes for teachers and students; curriculum; instruction; assessment and reporting practices; and use of materials.

**Goals of Schooling.** Dana discussed the environment of the ideal school:

One [objective] would be [to create an atmosphere that is] . . . stress-free or one which a child feels comfortable. Another would be where curiosity is encouraged. It’s okay to make mistakes, everybody does, and you just learn from your mistakes. Give it a try, and if you’re wrong, you’re wrong. Always try, and never to say you can’t.
Curiosity was an important goal for Dana in her classroom. She felt that the teacher could present ideas in a way that would encourage curiosity. She thought that sometimes “you just let them think and find it out for themselves.” Dana felt impartiality was important and that a competitive environment can be damaging. She maintained, “My environment downplays competition.” Dana felt it was important to encourage friendships and responsibility. She often created groups to facilitate friendships. Ultimately, your main goal must be to foster an environment where the children will want to learn on their own, Dana stressed. She theorized, “It does sound Utopian, but I think you have to try . . . That’s your goal, to make them want to do it for themselves.”

A desirable goal for schools should be to ensure that each child can reach their full potential, Dana reflected. She shared her definition of the ideal nongraded classroom:

It is a classroom where the children are able to start where they are, work as fast as they can, go as far as they can, feel safe to be able to do that, and [have] the things that are necessary to do that.

Organization. Dana explained that she used a mixture of ability groupings and random groupings. Random groupings often resulted from the children’s own selection of seats as she would meet with groups on the basis of their seating arrangements. She would allow students to trade seats each Monday if a trade could be reached amicably.
In the mornings, her center time enabled the children to pursue various activities. Therefore, the groups that were assembled in the morning for centers were not the same groups that would be assembled later in the day for reading. Dana pointed out that the groups were never labeled, she would alternate calling the groups by the names of the children which constituted the group.

In creating groups, Dana tried to assemble an equal number of boys and girls. She would often allow friends to be in the same group as long as this didn't prove to be a disruption. Later in the year, Dana began to purposefully choose group members on the basis of whom they would probably be spending time with the following year. She had strong opinions on the purposeful composition of groups and explained how children's personalities and levels of maturity were given much consideration in this process. She also considered this for her reading groups which were ability grouped. For example, one boy, who was a skillful reader, was not placed in the top reading group because she felt it was too stressful for him.

On several occasions, Dana had voiced a concern regarding her math instruction as she had pondered whether or not her children were accomplishing as much as they should. After the Christmas break, she, Roberta, and Anne had decided to team teach math and they traded children two days each week to teach certain math objectives. Dana kept the children that were mostly in the middle range as far as achieving the primary unit's math objectives. Dana posited the team teaching was necessary "because as much as you try, you can't necessarily do
Dana explained how she worked with a girl in her own classroom who wasn’t ready for the advanced addition that Anne was doing with her math group.

She wasn’t good at doing facts. I knew if she couldn’t do that I wasn’t going to send her into a situation she wasn’t ready for. But now she’s ready. So I sent her over and she caught on quickly. I had another little girl helping her and they would work real hard in class . . . If I had sent her before she was ready she would have just been overwhelmed and frustrated. We have done that and taken them out when they’re frustrated. I think it’s better to start low and accelerate.

Dana chuckled when talking about her vast experiences in teaching and how the other two teachers on her team, Roberta and Anne, also had years of experience to benefit from.

I think . . . that because in the group I am in, between us we have a lot of experience and I think we do a lot of things . . . by the seat of our pants. But it all comes together because we have all done things like that so many times.

Dana thought that overall, the team teaching was working well. To meet with all six of the primary teachers was difficult, but for her team of three, they were able to meet and plan at the very minimum, each Friday afternoon.

A member of her team, Roberta, was a very close personal friend. In fact, the reason Dana had initially transferred to first grade was to teach with Roberta. At that time, they had hoped to try looping. She felt that the three of them worked very easily together.

Dana admitted to being the detail person of the group. This complemented
Roberta who, Dana said, was more of an idea person. While all three of them were quite verbal, Dana noted, Anne was the most outspoken.

Dana remembered how her team of three had planned for a literature extension on a book that each of them had shared with their classes. They had quickly brainstormed during lunch, talking about titles and possible activities. As mentioned previously during the discussion of Dana's background, their collective years of experience made it easy for them to plan spontaneously. In Dana's words, "We have done that [planned literature extensions] just by running with it."

Curriculum. As discussed previously, the six teachers had created one multiage course of study that combined the district's first and second grade courses of study. This effort had resulted in a checklist that summarized the multiage curriculum in the areas of math, reading, and language arts (see Appendix B for complete checklists). For science and social studies, the teachers had decided to teach the second grade curriculum the first year and the first grade the second year.

Dana explained that she and the other teachers had created a scope and sequence of objectives as one of the first steps in planning this new program. Dana pointed out that having a scope and sequence helped her determine how to progress with the students' instruction. It served as a tool for helping her to decide on which objective needed to be addressed next for each individual.

Dana's views on curriculum were developmental and sequential as she admitted she doesn't "like skipping steps." She used as an example children learning
comprehension skills, such as the use of context clues. She posited that it was necessary for students to proceed at easier levels first before advancing to more challenging material.

Dana’s view of the nongraded curriculum was the same for how she thought all teachers should teach. She stated, “If you’re a good teacher you ought to be meeting everybody where they are.” Dana felt that the unique needs and interests of the children should be considered in planning curriculum. She felt that social, physical, and cognitive aspects of the whole child should be considered and, as the previous section demonstrated, these were also considerations when she grouped children. Dana believes in giving students choice, but not so many choices that they become overwhelmed by them.

Dana theorized that the nongraded curriculum is a viable alternative for all population types, not just the type of predominantly at-risk population that defined Central Elementary. “In every population there are always kids who are good here and not so good here . . . Everybody has places where they are not as strong as others, even if it is a very bright child.”

Dana believed that parts of the curriculum should be tailored to the individual. Dana knew her students well enough to be able to recall her students’ exact levels of achievement at given times. However, she also reported believing it would be wrong to completely individualize. It would be unrealistic because of the time factor, Dana noted, and it also might prove to be detrimental because it would isolate the students too much. Dana felt it was important for children to realize they aren’t always doing the same work as their neighbors. “Children see they don’t have to be doing the curriculum of others
once they realize how proud the teacher is of them . . . even though what the other’s doing is harder.”

Dana reflected on a conference she and Roberta had attended the year before they began this program. “At first we didn’t think it had anything to do with multiage.” Most of the topics at this conference centered around whole language and team teaching. “We didn’t realize then, but we realize now that they’re a big part of it!” While Dana reflected that she didn’t think she or anyone else on their team was “totally whole language” she noted that reading was the subject area that she felt most comfortable with mainly because “We do so much of it!” She reads aloud to students, they read in groups and pairs, and also they take books home for practice on an individual basis. She said they participate in journal writing and creative writing as one of their daily centers. Their creative writing, she noted, was quite imperfect yet accepted and valued just the same as if it were perfect. Dana maintained that her views on reading and writing have changed as a result of her experiences with primary children. She said she “used to think you would never make children write until they knew how to read.”

Her views on the math curriculum were that it was more difficult to teach than reading “because you need to do so much memorization for facts.” She compared the high math student to a good reader by concluding that “You have to keep them challenged by offering problem solving or harder things.” Math was the only subject in which she and her team departmentalized their teaching.

Another part of the curriculum Dana thought was important was for children to learn was budgeting their time. She discovered this was difficult for some when she used
menus with her students. But learning to budget their time wisely, Dana stressed, is something they would need to be able to do for future teachers. She compared her use of menus to Nicole's and stated she didn't use them as much; however, Dana emphasized their use more in the spring of the year to develop students' ability to efficiently use their time.

The curriculum should be geared to the older students, and Dana used counting as an example of this belief. Many of the first graders do not know how to count as high as the older students, she explained, noting that "First graders are picking up things they wouldn't have been exposed to" in a traditional arrangement. She felt it was necessary to talk about many topics with older kids, "even if some of the younger ones don't get it." Because group work is an important part of the curriculum, Dana stressed that the children do need to be told "How to help without doing it for them because they won't learn."

Appearing very protective of her curriculum, Dana felt strongly about the use of her own time and her class's time. Curriculum should not be interrupted by programs such as spring musicals because it "takes too much of our time. It upsets many things for other people, too." Dana stated she would like to make time to allow the students to pursue more of their own interests.

Dana participated in the teaching of thematic units with the other five primary teachers and with her team of two others. She stated she has mixed views on teaching thematically. Dana once told the researcher she did not think it was necessary to count canoes for math just because they were studying Indians. On the other hand, she
recognized that with themes, "If you like it, they'll like it. If you think it's dumb, they'll think it's dumb." She claimed she wasn't good at doing things thematically although her goal throughout the first and second years of this program was to plan more thematic units for her team that could be facilitated through the use of menus.

**Instruction.** Dana felt that as the instructor in the multiage classroom, her role was to stimulate curiosity. In portraying this role, she utilized a variety of whole group, small group and individualized approaches to instruction.

In her instruction, Dana stressed that she likes to present ideas in a manner which allows children to discover. She explained that it is "interesting to watch them and see what they want to know." This was probably one of the reasons she felt that she enjoyed teaching science. During a unit on butterflies, she required the students to draw pictures and maintain a journal about the butterflies stages, encouraging them to formulate their own conclusions. Dana related to her experiences with the daily survey questions. "The more you tell them, the more curious they become because the more they know about the world out there and the more they wonder."

As demonstrated by her use of survey questions, Dana liked to quiz the students about their thinking. Dana incorporated the use of a survey question into her daily routine to encourage students to think about why and how they arrived at their answers. She had a calendar with important dates and anniversaries, and from this she would ask the children a question about the topic of the day. For example, the query might be, "How many years ago do you think the Boston Tea Party was held?" When she told the
researcher about this particular question of the day, she chided herself because she had forgotten to use subtraction with the children to show how many years ago it had been.

Some of her survey questions, she reported, were questions that she knew no one could possibly answer. She encouraged different strategies for choosing answers, from elimination to asking a reliable source. Then, as a result of this thinking process, she often emphasized, “You have to have a reason for picking that answer.” She explained that children often seek the help of another student. She said, “If they can’t read [the survey question] they can go ask someone what it says . . . [This] forces them to learn to work together and to help each other out.” Dana stated she thinks it is more important to focus on the why and how of learning. After discussing the question of the day, she would ask the children to explain how they decided on their answer.

Dana reported that she is usually helping someone or working with a group during instructional time. The instruction is designed so that children manipulate objects half of the time most days. This entailed math manipulatives, puzzles, games, art projects, or any of her other center activities. She also stressed that “They’re not really playing, either.” In this environment, mistakes are expected. If any problems arise, Dana would tell the class it was something that they had to correct, and she didn’t care whose fault it was, she just wanted it “taken care of.”

She characterized her classroom as always being busy, frequently noisy, and definitely messy. She tried to encourage a sense of confidence in her students rather than a fear of failure. “If a student didn’t do their best, I’ll ask them to try again, saying I know you can do better.”
While she emphasized a discovery approach to learning in her classroom, she didn’t feel it was a guarantee that learning would automatically occur. She discussed the habits of one boy in particular who was prone to daydreaming, “I can’t afford the luxury of letting him go and try to discover the joy of knowledge because I think I would not see that until years.” With children that are not as self-directed as she would like, she maintained, “You don’t quite force them [to learn] but you have to keep on them.”

As indicated previously, Dana planned learning centers whereby different phases of human growth were addressed when the students entered her classroom in the morning. These include: art centers and a painting easel; sand, water and rice centers; Lincoln logs and Legos for building; and a computer and Geo Safari. She explained that during this center time, she had purposefully selected the groups of students so that they could work cooperatively.

Centers were also part of Dana’s classroom activities during reading time. While one group read with Dana, the others rotated to other centers. The centers included more language arts activities and the use of math manipulatives. Dana maintained that the students could choose from a variety of activities once they had completed their work during that time block. The students’ reading and writing instruction was sometimes, but not always, related to the current theme. Dana also organized group reading of the same title for those who like to read together and if multiple copies of the title existed. Instruction usually entailed activities with “lots of writing.”

When students read independently, Dana explained how she ensured that the material was written at their independent reading level. She firmly believed in starting
students at a low level and planning further instruction from that point. "I like teaching the one who is struggling," Dana stated. "I like helping. And I like unlocking that. I like to see that light and I notice all kinds of little itty bitty progress."

During a math lesson, Dana said, one of the objectives was to learn and name various shapes. She recalled that while discussing parallelograms, "We talked about a lot more things just doing this." While noting characteristics and attributes of various objects, she felt that the students had gained much more than the ability to name shapes. When teaching many of the math concepts, she explained that she often "kept going over it and over it whether they knew it or not." For example, during daily calendar activities, students would practice skip counting and naming coins. Through repetition, she felt they were learning and throughout this process, the students possessed the background knowledge to learn additional, related concepts. She explained that in a multiage classroom, "You do reinforce things that they are doing that you want them to do as soon as you see them doing it."

In every classroom, the need for proper role models exists, Dana felt. She clarified that these models should be "high enough to challenge yet attainable enough not to frustrate the children." In her nongraded, multiage mix of children, children are exposed to a variety of role models which include other students and other teachers. Working with desirable role models was facilitated by student participation in class projects. She explained how, as part of a literature extension to a book about a tree, the class had worked together to decorate a tree in the back of the school yard. The children had become very excited and the potential existed for some of the children to become
disruptive when she took them outside to drink hot chocolate under the tree. She felt that because of the modeling of appropriate behavior by some of her students, the children were able to proceed with this project without becoming too boisterous.

Dana referred to nongradedness as an arrangement that may be "a way to solve our problems." Dana's instructional techniques, such as the use of learning centers, repetition, and reinforcement, show how she used the nongraded, multiage arrangement to help students learn.

Assessment. Dana characterized the role of assessment in her nongraded classroom as, "Trying to keep track of things; trying to zero in on everything." Dana consistently responded to interview questions with concise responses. In her view of children learning and her role as evaluator, she commented, "If they can they do, if they can't they don't."

Conversations with children often served as one of her tools for assessment. "I ask them if they're ready to go on and ask them to show me their work." She reported that she doesn't check everything as she considers most activities to be practice. Mostly, she tries to check student work during the process but "sometimes that's just not possible." If she finds that someone "did a really good job I tell them, or I might mark one." Dana uses daily folders to organize the students daily work and she tried to check each students weekly. Folders are numbered, and she and most of the children have memorized each others' numbers. "I'll say number 15 and they'll say, Clarence, that's you."

The use of Marie Clay's (1993) running records played a pivotal role in Dana's assessment and reporting practices. She stressed that they are very important. She
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The use of Marie Clay’s (1993) running records played a pivotal role in Dana’s assessment and reporting practices. She stressed that they are very important. She
discussed their importance and explained she usually completes one for each student:

... every few weeks, it depends on if I think they are ready to go. If I am letting them read to get a strong feel for the level they are at, then I don't take one. If it's the first time they are in [a certain level and] I've moved them up, then I usually take one. Then that's how, part of what gives me [information for deciding] whether I need to put them back or whether we can go on... Usually we read a couple books at one level.

The majority of primary teachers in the Bellingham district, and each of the six primary teachers, attended a workshop the summer before to learn how to conduct observational assessments such as running records (Clay, 1993). Dana commented that she felt this training was very useful and felt it fit the need for having something standard for comparison across the district.

Nobody does anything the same. But at least we would have that in common as far as reading. And I think it was real important for the district because you need some kind of uniformity, especially in testing if you want to compare things.

When Dana completed a running record that would be noted on the nine-week grade card, she would use colored paper to identify its significance. Each report card included levels one through 20. Dana observed in November that one girl was "a 20 and several are not even at the first level yet." She stated that while this type of assessment does help the teacher identify student needs, "it doesn't check comprehension." Dana checked comprehension informally, through conversations with students, and through their participation in completing response logs.

The special education resource teacher spent part of her day in each of the primary classes. Dana recalled how the presence of another teacher enabled her to complete the
rigorous district-wide testing objectives. She said the resource teacher would manage the whole class while she “pulled out for assessment.” On the topic of district-wide testing, she wasn’t concerned that she hadn’t really taught certain geometric shapes . . . “If I don’t have any marks [to indicate mastery], nothing will happen. I think you have to be realistic.” She observed that the only tests she gives are spelling tests. While she might draw a line on a child’s paper to identify a problem, she stressed that she never put a number or letter grade on a paper.

Dana commented that she keeps journals on students that are experiencing difficulties in her classroom. As a member of the school’s Intervention Assistance Team, she had learned the importance of observing behavior and documenting observations. She noted, “I’ve kept documentation, especially in reading. Because I felt I needed more, [something] concrete.”

Use of materials. Dana used of a variety of materials during her center time to expose the students to a variety of stimuli. She explained, “Out of the week, they do the same thing two times, and so far they [the students] have not grown weary of any of it.” During the year, she felt she met the needs of the children with math, writing, and science centers. She had some that had arts and crafts and blocks for construction, noting that “It would be neat” to have real tools for the children to build with. She also lamented on her music center, which was part of the career unit the primary teachers had planned together. “I had to take the cymbals out of the music center!”

Five of the six teachers combined resources to present a career unit to their students. Many of the materials for this unit, and for many other centers, were comprised
of nonstandard school materials. Dana felt that she has an abundance of materials that she often sorted to keep them organized for student use. Dana relied on the use of manipulatives, such as pegs, puzzles, and sequence boards for many of her classroom activities.

The classroom library was well-stocked, Dana reported. At one point, Dana took some books out because there were too many; she claimed, "They didn't know what to read." The children were accustomed to reading books from a variety of sources. This included the basal readers, little books (Sunshine books from the Rigby Company), picture books, trade books and reference books.

Locating materials was not a problem for Dana as she borrowed many lower level books from the Chapter One resource room. "Everyone could have done that," she pointed out. She has multiple copies of some books so that students can read those together, "Which is something some of them enjoy."

Reading workbooks are also used in Dana's classroom. As she explained, her students "like workbooks. They're supposed to be so bad. My kids love doing workbooks. It teaches them to follow directions and you're asked, can they follow directions?"

To summarize, Dana felt her background as a special education teacher prepared her to teach for individual, continuous progress in the multiage classroom. While she used ability groups for math and reading, she met with readers individually one day each week. Dana team taught some of her math instruction with the other two members on her team. She was very reflective about her role as the instructor of a multiage classroom. She
emphasized metacognition in her classroom through the use of a daily survey question. Dana stressed that there was a greater potential for role models in the multiage classroom and these role models helped students reinforce their learning.

The Story of Roberta

Roberta was the vanguard for the change to nongradedness at Central Elementary. She explained that her desire to try nongradedness was bolstered by the support she received from the principal and from friend and fellow teacher, Dana. She felt strongly that after pursuing this “project” for almost six years, “The only thing I needed was experience and I couldn’t get it until I did it.”

Having taught first grade for fourteen years, Roberta had received her master’s degree in 1992 majoring in children’s literature and whole language. She felt that her graduate work and the many workshops she had attended over the years had prepared her to “work with children on more of an individual basis . . . [and with] developmentally appropriate practices.” Specifically, she cited the Activities Integrating Math and Science (AIMS) and Math Their Way workshops as being most helpful for enabling her to integrate curriculum, especially math and science. She had also been successful in earning various grants over the years which helped her to purchase more literature and materials for her classroom.

On discussing the change to a nongraded, multiage program, Roberta noted that “this is not a brand spanking new concept.” She discussed its rising popularity and stressed how it was “specific to the needs of our children.” She elaborated by saying that because there are many high-risk students at Central, this program should be a “great
benefit to lower-end students.” Two factors, Roberta felt, accounted for the decision to implement nongradedness: how research supports that nongradedness could potentially meet the needs of the Central students and the “enthusiasm and motivation of the staff.”

Roberta served as the spokesperson for the primary team at the spring board meeting that was held at the end of the first year of the program. While addressing the school board and top administrators, she thanked them for the opportunity to “update” them on the progress of their program and told them that with a year’s experience, “I think we have a better understanding of what direction we want to go and what structure we want to use in continuing to form our program.” She first spoke to the board about some of the problems that were encountered but then stated, “We feel confident that we will continue to improve these as our program evolves.” Then she spoke of the “expected and unexpected” benefits of nongradedness. She concluded by stressing that “Overall, we feel we had a very positive year and we are still very excited about the multiage program. It is changing and growing, but we feel it is the beginning of something very special and unique.”

Roberta’s Classroom Environment

To the left of the entry sat a round table. This table was often used for cutting papers, typing, or math manipulatives and puzzles. Toward the window and next to the bathroom sat her teacher’s desk. In the center, and lining the chalkboard on the interior wall, Roberta had pushed desks together in four separate clusters of four to six desks. In the far right corner along the interior wall was Roberta’s kidney-bean shaped work table where she often met with reading groups. In the back right was the whole group meeting
area. The parameters of this area were set by the windows, a cluster of desks, and book shelves.

The room was decorated with materials created by the children and teacher. An agenda on a dry erase board was usually perched in the reading corner. Pocket charts, hanging chart paper, and child-printed names of children hung in key spots. The children had printed their own names on charts to indicate mastery of various learning objectives, such as adding sums to the product of ten. A board space was left open for instructional use, such as a phonics lesson about “oi” blends. Tubs of materials were placed in the bookshelves and on the shelves beneath the window. Roberta organized student work into numbered cubby holes in the reading center which housed hundreds of books of varying sizes and genres (see Figure 4.5).
Figure 4.5: Roberta's classroom environment.
A Typical Day in Roberta’s Room

Roberta started her day off with “developmental centers” that she also labeled as “exploratory groups.” Each day these heterogeneously grouped students attended new centers with activities including art projects, block building, lacing, puzzles, and other activities “to develop memory and fine motor control.” She stipulated that “This is not dead time anymore. These children are actively engaged.” She felt it was important in that it represented “a time of free movement, social interactions, and [time] to interact with me.” Midway through the first year, she no longer selected the group members herself as she had decided to let the children choose which center activities they wished to pursue. She explained:

It really develops a lot of the cooperation skills. And then some of the children during that time would read science books and pick up on simple little experiments and then they needed something drawn, they went to the best drawer in the class and said “Draw us some fish.” And they kept coming up to me and kept asking for materials. I’d say go to the Art Center and see what you can find.

After spending 20 to 30 minutes at the centers, Roberta then held her morning meeting. The morning meeting included discussions of behavior and the awarding of stars. Then calendar activities served as the focal point for various story problems and other math objectives. Stories and the current theme were discussed at this time as well as the day’s agenda which would include special classes such as art, physical education, library and music.

Roberta explained that the time after the meeting was much more structured. During the next time block, she grouped students according to ability and they rotated
among four different language arts centers. These activities included free choice reading, guided reading with her, journal writing, handwriting, or completing a paper that related to the current theme. She pointed out that there were no morning recesses and students spent around 30 minutes at each center. "The morning goes very quickly," she reported.

She posited that the students grew tired more readily of the activities rather than the routine. She would often switch the materials to make the centers more interesting and more developmentally appropriate. She gave an example of how she had observed students becoming bored with spelling activities at her spelling center. Her response had been to include chalkboards and magna doodles as part of the spelling activities as she felt these were more developmentally appropriate for the students' needs.

After lunch, she usually met with the last reading group. Special classes followed until it was time for a fifteen minute recess at around 2:00. Math, science, or social studies would then be taught from 2:20 until the end of the day at 3:25.

The following demonstrates the group activity in Roberta's room:

Roberta was meeting with a group of seven children who were gathered around her kidney-bean shaped work table. One child read aloud to Roberta, who was taking notes as she read. The other children either read, wrote, or listened to the reader.

Four of the other children in the class sat at their desks, and the remainder of the class, approximately eleven or so, were situated around the reading corner. Two children copied spelling words, others drew, read, or colored with stencils.

While Roberta listened to individuals read, she often completed running records (Clay, 1993), and asked for individualized journal responses that related to the reader's story. She often scanned the room, looking for off-task behavior. At one point, she told two boys to separate.

When a child at her table asked why he can't read words like 'Michelle' does, Roberta kindly explained to him that
'Michelle just knows a lot of words already, while you still have to work at them. But you remember your words so good,' she praised him.

Roberta had adopted the use of menus after attending the winter conference with Nicole and Ruth. She explained that when the children worked on menus, they would be able to choose the children they could work with to accomplish various tasks, such as interviewing and making graphs. This time spent on menus replaced the second set of centers she had used earlier in the year, the language arts centers.

Roberta's Definition of Nongradedness

This section will be organized following Anderson and Pavan's (1993) six areas that were identified a priori: goals of schooling; organization and grouping schemes for teachers and students; curriculum; instruction; assessment and reporting practices; and use of materials.

Goals of schooling. Schools should include "broader boundaries" for children, Roberta posited. She explained how this would involve using the resources of the whole school so as to include it in the totality of a program from which "a child learns best." Roberta and the special education resource teachers were planning a program for a third grader to fluctuate between at least three different class settings: her room, the third grade teachers, and the resource room. Her rationale for this plan was that it would benefit the child by keeping the close ties with her, by moving on with his peers, and by receiving the specialized instruction the resource teacher would provide.

Roberta stated that one of the basic faiths that a school should be based upon is a "faith in children to be natural learners." She spoke of this faith repeatedly and this
influenced her approach to instruction, as will be explained later. With this faith in children, she also discussed the importance of bonding with children, building a trust, and forming a more “personal level” to her relationships with her students. As she explained to the school board in the spring of the first year, “If you can make one child’s life happier I think the whole thing is worthwhile.”

A main problem Roberta found in some of her students was that “They’re passive participants in their lives.” Therefore, she saw a need for more conversation and interaction to ensure that they become self-directed and self-motivated in aiming toward the goal of creating “life long learners” who therefore are able “to initiate learning and to initiate the process.” Roberta stressed that “Children should consider school their job and they should attend to it with a diligence.” In doing this, she felt it her responsibility to make problem solving and curriculum more “real life for them.” She felt that one goal of schools should be to create an atmosphere where “risk taking is encouraged.” This atmosphere must include a wide variety of materials, including an “emersion of print” and encourage exploration so that “children can investigate on their own.”

Roberta felt strongly that one of the goals for schools should be to have teachers advance and grow along with their students.

Life is a continuum. I think we’re always progressing . . . It’s important that progress is always there; that we are continuous learners as teachers . . . If you’ve arrived, there’s nothing left to do. Then you’re done. I don’t want to be done.

Organization. Roberta thought it was important that the exploratory groups were heterogeneously mixed according to ability at the beginning of each day. Similarly, her
whole group instruction was directed toward the heterogeneous composition of her entire class. Many times, the children were then broken into small groups which, for reading and math, might be ability grouped.

"Every child, even though they are in small groups, they are treated very individually. The [assessment using the] running record indicates this," Roberta stressed. While noting that ability grouping was used for reading and math, she explained that she saw it as "who had [mastered] the objectives and who doesn't [master objectives]." She admitted that in her teaching of reading especially, the grouping did not allow for as much flexibility as it ideally should. She believed that it would be "tough to have nonreaders with readers." She pointed out that during what she called "free reading time" students had opportunities to listen to a reader who modeled desirable reading behaviors.

Roberta was very content with her team of three teachers and thought they worked well together. She noted that there existed, "forty years of experience" among them. She felt the real value of team teaching was that:

... the collaboration comes from constantly trying to bounce things off each other, giving credibility to what we're doing, validating what each one of us is doing, and by sharing experiences, keeping the motivation high. ... the affirmation that we are doing a good thing and that this is a good program.

While Roberta eventually participated in team teaching for math, she explained her reluctant approach to team teaching. Early in the year, Roberta said her perception of team teaching and collaboration existed on a planning basis, sharing of materials, and planning units together. "We don't team teach in the true concept of the term, where we keep the same number of students between us and teach subjects to all of them," she
noted. Even though she later agreed to team teach for math instruction, she thought that she “didn’t have a handle on what they’re doing” and wondered if she was missing information about students’ progress. She noted emphatically that she would probably never consent to team teaching for reading instruction. She felt more possessive about her emergent readers as she admitted, “If I’m honest, it’s trust.” While professing to having respect and a high opinion of her colleagues, she explained that if she team taught for reading, “I don’t know what they’ve [the students have] done, and I need to see that day to day progress. I need to see them pursing their lips to make a sound.”

Curriculum. As discussed previously, the six teachers had created one multiage course of study that combined the district’s first and second grade courses of study. This effort had resulted in a checklist that summarized the multiage curriculum in the areas of math, reading, and language arts (See Appendix B). For science and social studies, the teachers had decided to teach the second grade curriculum the first year and the first grade the second year.

Roberta felt the curriculum should be topic oriented instead of grade oriented. She stressed that, “Instead of teaching grade one, you teach addition. You don’t teach grade one science, you teach plants. If you just take the grade one, grade two away, it really simplifies things greatly.”

Roberta felt strongly about integrating subject matter and teaching thematically. She explained how this approach to curriculum entailed “presenting subjects and topics to children rather than this for grade one and this for grade two, and you allow children just to respond and progress at what they can do.” This was why, she added, you have to be
more open ended, to allow for varying responses from the children of varying abilities and varying experiences. For example, once the class theme was bugs, a topic the whole class studied. Each child wrote their own book about spiders on their own level, she stressed. In a nongraded classroom she felt it was very important for the curriculum to include activities of varying levels.

Because of her training, Roberta felt very strongly about her ability to integrate math and science. She pointed out the broad concepts these disciplines share: problem solving, estimating, and forming predictions. Most importantly, she stressed that they must learn to think.

In comparing math to reading, she explained one of the reasons why she felt so possessive of her young readers. Because reading is “integrated” so much throughout the day, she wanted to be responsible for teaching reading to her own children. Unlike math, she views reading as a “scope and sequence” of “comprehensive” objectives. Math, on the other hand, is not that sequential which was why she did not mind team teaching and sharing her students for math instruction. She felt math was not as comprehensively organized in that “some can do higher objectives without some of the lower.” For example, she explained that a child might be able to add and subtract but might lack proficiency in sorting and classifying. Whereas in the area of reading, Roberta maintained that reading skills are not independent of one another but rather they “build upon the other.”

As a result of teaching in a nongraded, multiage classroom, Roberta maintained that her range of curriculum is now much broader. “I wonder now, if in other years, I
might not have unexpectedly held children back," she mused. "My horizon for children" has changed, she stated, adding that we now "have farther to go . . . I saw only a segment before. Now I feel I have a better view of more of an unending line . . . A ray instead of a segment." Curriculum should be individualized as she perceived her role as taking the students through developmental stages. This resulted in the need "to explore first in order to get to the abstract" stages of development.

Roberta maintained that learning can and does occur in spurts. "Some children go very quickly then slow down and other children go slow then speed up and you now see those developmental stages of children." She emphasized that her students were aware of this process and explained how they supported her in facilitating the development of a problematic child. She reported:

I was talking about Danny [with students] one day, saying ‘He’s bright. He just needs to settle down.’ And someone called out, ‘He’s starting to bloom!’ . . . I always ask them, ‘Now how many 16 year olds do you know who are still wearing diapers?’ They laugh and I remind them how ‘We all know where we’re going.’ They know they will all learn to read.

After she had begun to use menus, she felt her curriculum had the potential to become even more individualized. She explained how children would read books individually and then complete the corresponding literature extensions. For example, when the current topic was winter, the children read books on their own level and completed activities relating to winter. One activity required the students to interview others about their preference for gloves and complete a graph to summarize their results. An advantage of this approach was that the menus "are more geared to what the child is
working on and to try to reflect their ability to grasp the concepts that you’ve been introducing.”

Roberta stressed that the use of menus gave students choices and practice in decision making as they were able to do what they like first. The activities, she explained, were a mix of easier and harder tasks, and she pointed out that some children would automatically complete the easier tasks first. She felt “If everything you did all day long was hard, you wouldn’t want to do anything.” She also felt that choice was important as “If I were always told what to do, I would rebel.” She felt that as students began to try various activities, they became aware of their potential and as a result they learned more.

The curriculum should address the various needs of children “so the children will feel good about themselves.” She would often arrange centers for both developmental and instructional needs. During these center times, students were often grouped heterogeneously so that students could engage in cooperative learning.

While she had admitted to being bothered by off task behaviors, she felt that during these nonacademic times students were “improving social skills or working on their emotional needs.” She explained the need for a flexible curriculum, citing that calendar time often served as an open forum for various discussions and attempts at problem solving. “Why it can take anywhere from 20 - 40 minutes.” These lessons can come from various “valid” sources, she noted, adding that some days they might need to spend more time on writing “or really work on that reading problem.”

Concerns relating to classroom management represented another aspect of the curriculum that Roberta practiced. She explained that “We also have to teach working
together and cooperating and helping each other without telling the answers.” She felt the
students learned from playing games, something they did more of in the beginning of the
year. From this she stressed how they learned the important skill of taking turns and how
to help each other by pointing out mistakes. Roberta said she often told students “you
need to start working on your control now.” For some, this represented a goal for the
following year as in her curriculum, she made it clear that her expectations that related to
behavior were different for each age group. “I mostly just try to tell them that there will
be different expectations.”

Instruction. Roberta felt that while she characterized herself as still being “pretty
directive,” the instructor in the nongraded classroom needs to learn to share control. “I
think the nature of the beast is for us to be a facilitator rather than the sage on the stage.
We don’t have time for that anymore. Assigning students to be the teacher clearly
indicates I’m not the only one.” This facilitator has to be flexible enough to adapt to a lot
of different needs of her students, Roberta posited. “She needs to be able to let go a little
bit and allow students to take over to show their leadership skills and to allow for creative
thinking . . . There has to be a shift in teaching styles.” While children are encouraged to
learn from each other, Roberta’s instruction can be characterized as patient. “I assume that
they will learn some day. . . You have to have faith that they will, they can, and they do!”

Management “is real critical” to a successful multiage program, Roberta stressed,
explaining that she felt she had to be somewhat directive so that children would be able to
learn. She maintained, “The more time you spend teaching management the better your
class is going to be" She explained how she worked very hard on discipline and working together as a group which she felt resulted in a "very well behaved" class.

The majority of her instruction would begin with a whole group introduction and then small group instruction would follow, instruction that depended upon the needs of the children. Roberta used the term "cycling" to explain one aspect of her instruction. With the use of menus, she felt she was able to individualize her instruction more. Instead of having to conduct assessments and prepare materials for all the children, she would meet with children of varying levels in waves, or cycles. While the others worked independently, some of them were instructed by the teacher. She claimed that this facilitated "more teacher-student interaction." As she would confer with small groups or individuals during this time, Roberta felt these "conversations" enabled her to provide invaluable "feedback."

Manipulatives, singing, and movement-oriented lessons were often part of Roberta's instruction. She explained how some parts of her day were more structured than others, "They're children, and at times they'll need reminders, structure, and guidance." The morning, she felt, was much more structured and the afternoon was when she felt that, through a less structured environment, the children were encouraged to exhibit their tendencies as natural learners. She felt during that first year she had succeeded in creating among her students a "ceaseless love of books."

The pretesting of children's knowledge was an important part of her instruction. This guided her instruction as she often proceeded with "finding out what the child knows instead of presenting knowledge as though they know nothing." She stressed how
important it was for students to discover concepts for themselves. She posited that if teachers continually do not allow students to discover for themselves, "They'll never learn it, they'll just always expect someone will tell them."

Roberta felt it was important to present concepts in a concrete fashion before proceeding to the abstract. She gave the example of how, in math, some of her children had inferred the meanings of some math symbols.

I mean I never told them what a plus sign was or an equal sign. They, someone would say every once in awhile, 'What's those two lines?' And I'd say they're an equal sign they mean the same thing. But it was incredible to me because we didn't go through the workbook . . . we had just been doing Math Their Way but they seemed to internalize that whole process.

Roberta felt that her instruction was more "inquiry and process oriented." She elaborated that science, math, and social studies did not represent the memorizing of "finite facts" but rather students learned "more on a why basis rather than a factual basis."

For example, as Roberta used nuts to teach graphing skills, she emphasized the thinking process that is followed when graphing information. The following demonstrates how Roberta taught students to graph information:

'Let's see if we can remember all the different nuts, and not Mrs. R. either,' she joked, referring to herself as a nut. Different types of nuts were volunteered by the children and when a child handed Roberta the hammer, Danny called out in a gruff voice, 'It's Hammertime.' Roberta laughed, repeating, 'It's Hammertime.'

As Roberta rearranged materials on a table in the center of the room, she told the children that they would be able to taste the different nuts and then they would construct a graph to show the class's favorite nut. As she taped a large sheet of paper to the blackboard, she proceeded to quiz the class about the various components of a graph, stressing the functions and purposes of each component.
‘Think,’ she told the class. ‘What things do we have on a graph?’
‘Pictures,’ a child offered.
‘What kind? Can we have something besides pictures?’
Roberta quizzed.
When the children failed to respond, she told them.
‘Pictures show names, so we can have words instead of pictures.’
Then she wrote the names of the nuts on the bottom of the graph.
When she asked for more information, a child volunteered that ‘lines’ were also part of a graph. ‘What else do we need?’ she asked of a particular child who answered, ‘A key.’ They continued to finish the directions for completing a graph, comparing this day’s graph to the one they had created the day before.

Roberta thought that all phases of human growth were recognized in her classroom. She felt she facilitated an environment in which they were “being allowed to express themselves.” This was exhibited by her behavior toward Danny, a problematic student, and Jerry, an exceptionally talented artist. She was extremely patient with Danny, who required a lot of constant attention. Because of their special needs, she felt it was important to enable them “to express themselves.” Calling it “Jerry’s Gallery,” she continuously hung his beautiful creations outside her classroom door. She recognized that “People are all different... Children learn at different rates and there are different ways for how to learn.” Because of the attention she gave to Jerry’s art work, the desire to create works of art “became contagious,” Roberta noted. She added, “They all got into drawing. They started doing pictures for the cook, and she even created a gallery for their art work. They, too, wanted the attention and positive feedback for themselves.”

Roberta explained how she makes mistakes intentionally, allowing the children to correct her. Once, during a unit on dinosaurs, she kept forgetting the name on purpose. “What’s that name again,” she’d say to the children, with a puzzled look on her face.
“Stegosaurus,” they’d happily correct her. She discussed an interaction with a child that demonstrated her approach to mistakes. She explained, “One girl was crying about her spelling so I said to her, ‘Do I make mistakes?’ And she stopped and said, ‘All of the time.’ [Then I clarified], ‘Am I mad at you for your mistakes?’”

Assessment. Roberta felt that the use of running records (Clay, 1993) was very important for assessment in the multiage classroom. The frequency in which she completed individual running records depended on the ability level of the student. “The lower the group the more often I do them.” For what she referred to as her “best group,” she might do a running record once each week, whereas for her group of beginning readers, she usually took one every day. She used a pack of books leveled from 1-20 which were unfamiliar to the children until they were asked to read it “cold” so she could accurately determine their reading level. “I think it’s far more accurate than any standardized test.” During the second year of the program, Roberta had been required to administer reading “probes” that checked students’ fluency in reading. In comparing fluency checks to running records (Clay, 1993), she felt running records were an “excellent diagnostic tool” while the fluency probes were “quick and easy ways” to provide comparisons of one aspect of students’ reading achievement.

When discussing potential indicators of success for this program, she hoped that standardized tests would not be the sole criteria that would be used but rather that those evaluating the program should look at “real indicators of success and not artificial ones.” To clarify, she stressed that children’s real learning was demonstrated best by “authentic assessment.”
Roberta had started to become more comfortable using narratives to report the children’s progress. She explained how she has become “conversational” and how she “thought she would never” be able to complete narratives so easily and so fluently. She had heard how teachers spend hours and hours writing these narratives, yet to her it just seemed so “natural.” “I never imagined I would write in paragraph form about students and their progress,” she said.

She admitted that perhaps she was more complete in her record keeping for her older children than her younger ones. She said it was more important to have records and assessments thoroughly completed on “the ones I’m sending on.”

Use of materials. Roberta noted that children needed to be exposed to a variety of materials. Roberta stressed that it was imperative to match the materials to the children’s developmental levels. She recalled how she realized that the use of “chalkboards, magna-doodles, and magnetic letters” had proven to be much more motivational for the students. She felt that the “materials are evolving and changing as the needs of my classroom are.” She used trade books and worksheets that she would “pick and choose rather than just assigning” all students page numbers in a book. Stressing that the need existed for more materials that were self-pacing and individualized, she had ordered several that fit this description for the following year. She observed that these new materials were also “more creative and problem solving” oriented.

The materials that were used in her classroom and in the ideal multiage program should facilitate thinking and metacognition, Roberta felt.
We emphasize the process, ‘How’d you do that, ‘How’d you get that?’ Just trying to relate to everyday experience. It’s real important. One [child] was doing pattern blocks and I said, ‘What do you see?’ She said, ‘A square.’ But when I asked her why it was a square, she couldn’t tell me . . . So I need to prompt her, ‘Tell me what you see?’ I think the kind of materials we use do encourage that.

Roberta appreciated the help of the science resource teacher and the special education resource for obtaining additional materials. She liked having a variety available at the centers and thought a publishing center was important. She explained that now that she had older, more able students, she felt it was much more realistic as compared to the past when she just had first graders. One of her favorite centers was created by five of the six primary teachers so students could explore careers. Materials in these centers had provided the stimuli for “role playing” various careers.

In conclusion, Roberta had invested a great deal of thought and energy into the implementation of this program. She felt her master’s degree in whole language prepared her to teach in a multiage program. Even though she felt very prepared to begin this program, she had been amazed at how much more she had learned about child development. Roberta thought management was very critical to instruction in a successful multiage classroom, and her skill in this area had resulted in a well-behaved class. She discussed extensively how teachers needed to view students as “natural learners.”

The Story of Anne

For the two years prior to the implementation of the nongraded, multiage continuous progress program, Anne had served as a substitute teacher for Bellingham City Schools. First, she was hired as a permanent substitute kindergarten teacher at Central for
part of the year. Then she was hired to teach full-time kindergarten the following year. She collaborated with the researcher often during the second year. For many of the children in her multiage classroom, she had instructed them either as substitute kindergarten teacher or as their full-time kindergarten teacher the year before. When a first grade teacher retired, Anne filled this vacancy to teach in this nongraded, primary position.

Anne received her undergraduate and master’s degree from a neighboring state. Most of her experience was out of state also. She taught a variety of grade levels, mostly at the primary level, for a total of twelve years. After moving to Bellingham, she substitute taught in the Bellingham City Schools for one and a half years before being hired to teach kindergarten.

Anne often claimed that she used some of the principles for teaching multiage during her tenure as a second grade teacher. For example, she used cooperative learning strategies and the “buddy” system in the past with graded students as well as with her present nongraded, multiage students. Also, she had used learning centers and individualized instruction as a graded teacher. Anne reflected continuously about the differences between what was happening in her multiage classroom and what used to occur when she taught in a traditional, graded setting. She noted, “Some teachers have some of these qualities [that multiage teachers have] in a traditional program. They’re prime candidates for going multiage, they have the mind set to try it. They just have to incorporate it with different aged children.” Anne frequently returned to the state where she previously taught in which primary, multiage programs were mandated. She shared
some of her conversations she had with her teacher friends about multiage. She couldn’t believe that some of them did not keep the same students for more than one year, something she advocated strongly. “I tell them all the time that they’re missing the boat . . . They could choose to keep them, so I keep telling them how great it is.” The main problem she perceived with the experiences of her friends was that this change to multiage was forced on them. “I don’t think you can force it. Because if they don’t have that mind set, they will probably fail. Not fail, but at least be extremely frustrated at first.”

For the 1996-1997 school year, the new principal had decided to offer two graded classrooms, one first and one second, to the parents of the Central children. While Ruth was projected to teach first grade, Anne was going to be teaching second grade. Anne commented that in this straight, second grade situation, fewer role models would exist. Diversity, Anne felt, was an important ingredient in the multiage recipe and one that students in a nongraded situation benefitted from. Anne emphasized that if a multiage vacancy occurred, she would remain teaching in the primary, multiage program.

Anne had attended the Society for Developmental Education’s 1994 Multiage Conference along with the researcher, principal and participants Roberta, Renita and Nicole. Anne maintained, “It takes a lot of hard work, reading, and listening” to begin any new program. She had visited other multiage programs and felt she was more than ready when she began this one. She felt that “with any program, you have to get your feet wet before you can find what you really need.” Anne was always very positive and pleased with the program’s progress and with the progress her students were making. She felt that going into the program, the primary staff had read “a good amount of research,” and
had “support for what we were going to do and a good reason for going into it. We had the support of our principal and all of the staff that were going to be involved.” Anne advocated continuous progress not only on the part of the learner but also for teachers. She opined, “If you ever stop learning or improving your program, it’s time to stop teaching. We should always be learning more.”

Anne’s Classroom Environment

Anne had a room with no windows. In place of windows, Anne had filled the cinder block wall with commercially prepared decorations. The bulletin board, on the interior wall to the right as one entered the room, was usually decorated with commercially-made seasonal material and with a calendar. In the back of the room, to the far left, stacks of materials were perched above the lockers. A reading corner was opposite of the group meeting area and a cluster of desks and book shelves separated these two areas. The 22 desks were arranged in four clusters and Anne’s desk was situated back by the lockers. A kidney bean shaped table was next to her desk, toward the exterior wall, and a cart with a typewriter sat next to this table she used as her work table. Other tubs of materials were stacked against the exterior wall nearby (see Figure 4.6).
Figure 4.6: Anne's classroom environment.
A Typical Day in Anne’s Room

Anne felt that the atmosphere of a multiage classroom is like “the atmosphere that you experience in kindergarten. There’s more of that kind of freedom and movement.”

Anne described her class as being a very “social group” and she often let them “visit” upon their arrival at 8:45 a.m. She gave students the option of socializing, reading, or drawing by themselves. Since both the special education resource teacher and chapter reading specialist arrived at 9:15, she took care of lunch count, restroom visits, and announcements prior to their arrival. Anne then met with students while the resource teachers met with their identified students. During this time, Anne conferred with different reading groups for skill development or with individuals who were reading leveled books. Anne required the students to complete handwriting, spelling, and journal-writing activities as part of their morning routine. Once these tasks were completed, Anne offered students a choice. The choices consisted of either visiting the listening center, reading certain books, doing puzzles, or an activity related to the current season or theme.

After the resource teachers left, Anne met with the students from their groups. She felt, “They want to work with me, and that’s important that I touch base with them.” By 10:45, she has usually met with all of her children. After excusing them for a trip to the restroom, she would check their morning work “so that they’re held accountable for what they’re supposed to do.”

At this time, Anne read students’ journals and wrote her own responses. After this, she reassembled the whole class for calendar objectives and sharing time. At this time various math objectives were addressed and she also read to them after she had given
them an opportunity to share any noteworthy items. She explained that she had read a couple chapter books and, "We’ve done more picture type books. But we do a variety of things that could have to do with what we’re doing in social studies or science." She read to them until it was time for the lunch, midday break. She would then have either social studies or science until 1:30, when it was time for a special such as physical education, art, music, or library. On days in which the students did not have physical education they would break for an afternoon recess at around 2:10. Math was the subject she saved for the end of the day although she would “flip-flop math and social studies or science because I also have two Reading Recovery students that will get pulled out at the end of the day. And I don’t want them to miss math.”

The following provides an example of Anne teaching Science and using what she called “filler” time.

In the hallway, before Anne began to instruct the students, she told the researcher, ‘We got side-tracked yesterday talking about storms, so who knows what we’ll do today.’ Anne entered the room and called to the children who had already returned from their restroom break to join her at the whole group meeting area. While waiting for the rest of the class to return, she filled the time by quizzing the students about fractions. ‘The bottom number,’ she reminded them, ‘is how many there are in all. So let’s count.’ She counted the total number of students present and she then proceeded to guide the children to arrive at a fraction of 5/13 for the fraction of children dressed in pink. As three more students joined the group the next fraction they named together was 6/17 for those dressed in jeans. A traditional first grader was able to correctly identify the next fraction, 4/18.

Anne then began her science lesson as the remainder of the class filed in. ‘You guys did good thinking in fractions and now that we’re all here, it’s time for Science.’ She proceeded with this lesson by quizzing the students about safety during storms before leading the discussion to the topic of electric energy. She then told
the students they would be conducting an experiment with balloons. She demonstrated, telling them, ‘First thing is to blow it up. It helps to stretch it out. Then tie it in a knot. That might be difficult for some of you.’ Then she passed out balloons to the pairs and groups of threes that she had let them form on their own. Some of the children experienced difficulty with tying the balloons, so Anne tried to keep up with the demand for tying balloons. She called out to the whole group, ‘Only ask me if no one else around you can do it.’ After all balloons were tied, she continued her lesson about static electricity.

Anne’s Definition of Nongradedness

This section will be organized following Anderson and Pavan’s (1993) six areas that were identified a priori: goals of schooling; organization and grouping schemes for teachers and students; curriculum; instruction; assessment and reporting practices; and use of materials.

Goals of schooling. Anne stressed that she tried to foster independent thinking and student responsibility. She posited, “The teacher needs to try to turn more responsibility for what’s going on with the children . . . [and] encourage them to help each other, work together, and learn to teach others.” She elaborated, “We are pushing for more independence, children who are able to be self-starters.”

Another goal Anne felt was important was “down-playing competition.” She encouraged children to compete with themselves and to strive for improvement. Anne also tried to involve students in decision making. She felt it was important to give the children input into decisions such as class displays. She observed, “They have said to me, ‘This would be good for us to display.’ I have been very open to that.”
Anne felt that nongradedness “is a better way to prepare children for life in
general.” Preparing children for life was a very practical and important goal, she felt. She
explained:

You know in society . . . we do things with people who are not our
age. I rarely even ask people how old they are. You know you just
go with it and people can have the same interest and we have
friendships that cross those lines because we are interested in the
same things.

Organization. Anne reported that when she discussed multiage with other teachers
in Bellingham, she would point out to them that there were some ways in which you
taught the same. One of these ways was, she noted, was that “you still have reading
groups.” While Anne did ability group for reading and math, she felt that it was important
for groups to remain flexible. “We change groups; children change. I had a couple that
really turned on to reading, so we moved her [sic] to a different group.”

She stressed that her groups were both homogeneously and heterogeneously
arranged. “Sometimes it [the grouping] was by interests because of choices, sometimes
with friends, and sometimes we matched them. I like using pairs, especially with math
problems.” While she noted that she used homogeneously grouped arrangements of
children, it was “not everyday” that she used these groupings of children. She theorized
that in the future, she would like to involve more kindergarten children in the program,
making group compositions more flexible and temporary.

The students often worked with those who sat in their same cluster as they
completed morning work and group work for science and social studies. On one
occasion, Anne noted that one girl in particular was easily frustrated and that she needed
to change the composition of her clusters. "I tried to put her where people would be more helpful to her." As a result of this change, the child was more successful in her activities. Anne was also pleased with how readily her students formed alliances. She noted, "We have boys and girls who mix. A lot of best friends in my room were a boy and a girl."

Anne was very content with her team members, Dana and Roberta. She explained that a main benefit of team teaching was "that each teacher doesn’t have to go through so much preparation." Her team’s collaboration was facilitated by weekly planning during their joint planning session on Friday afternoons and the sharing of materials for experiments and content areas materials such as Big Books. "We also just talk in general about how things are going with reading groups . . You know, what about your slower readers, how are you getting them going." She credited Roberta for explaining how to teach students "chunking." Using this strategy, students were encouraged to look for symbols to form chunks of sounds before blending a whole word. This, Anne noted, was an option to "sounding it out."

Anne contended that she did not advocate total departmentalization as part of her approach to team teaching. She felt this would require the teacher to teach too many students. She posited, "I think it takes away the security and getting to know your children very well." Anne was content with her team’s approach to teaching math. During the second year of the program, her team had decided to switch for math three days a week instead of the two days per week that they had tried the first year.

Curriculum. As discussed previously, the six teachers had created one multiage course of study that combined the district’s first and second grade courses of study. This
effort had resulted in a checklist that summarized the multiage curriculum in the areas of math, reading, and language arts (see Appendix B). For science and social studies, the teachers had decided to teach the second grade curriculum the first year and the first grade the second year.

Anne explained how the continuous progress of the individual is her primary concern. She stated, “I don’t want to push them past their understanding. I want them to understand what they’re doing.” In teaching children to read, she used ability groups, but she said she also used leveled books for individuals. In teaching individuals, she said she just tried to take them “as far as they can go.” “Skills are only done in groups,” she said. In discussing her approach to curriculum, she contended, “We’re more individualistic by definition but there are also some traditional teachers who are more individualistic than others. Perhaps that’s more of a style issue or belief rather than a result of the [nongraded] structure.”

The curriculum should be “child centered” Anne contended, stating “I don’t know if you could force a child to learn if they don’t want to. You have to try to make the learning interesting and enjoyable so that they want to.” She felt it was important to remain flexible enough to allow the child to dictate curriculum and sequence. Certain themes, she felt, should be taught that are based solely on the interests of the child. In her program, she and her team had planned a unit on dinosaurs, noting it was not part of the district’s curriculum but was based on the interests of the children.

Anne thought the curriculum should always be interesting and relevant to students. “I work real hard to always have something worthwhile available, not just busy work.”
She felt the aesthetic, physical, social, and emotional needs of each child were met by her and by the special teachers in art, music, and physical education. In her own classroom, she explained how she used centers such as puppet theater and building blocks to help meet different needs. She noted that the use of resource teachers, from special education and the district’s science resource specialist, was important for providing important curricular experiences.

Anne felt that the nonacademic aspects of the curriculum were vital components of nongradedness. “We do try to cover emotional and social development as well as academic areas,” Anne stated. She explained, “The emphasis is on cooperation and helping each other.” She felt it was important to teach values such as respect. “Respect is one of our rules” that is talked about “on almost a daily basis,” she stressed. Anne recognized the social tendencies of her class and she gave them opportunities to express their social and emotional needs. She posited, “I feel like, you can’t stifle that. It’ll come out anyway.”

Anne thought that teaching students to think for themselves was another important aspect of the curriculum. She often encouraged the students during group work to be more discriminating about their answers and not to always accept the answers their neighbor has come up with. She would ask, “What makes you think he’s right and you’re wrong... Think for yourself. If you think you’re right, perhaps you are.” She also would discuss with the children how to handle annoyances. “I have talked to the children about saying to someone, ‘You are bothering me, please don’t do that now.’”
Anne recognized that part of the curriculum should entail self-initiated projects and a sense of caring for their community. While she could not state this objective was mastered by her students, she stated, “I think they’re beginning” to make strides toward this goal. She cited two examples in that her students have become responsible for cleaning scuff marks in the hall and picking up garbage on the playground.

**Instruction.** Anne was responsible for coining the phrase which summarizes the teacher’s role in the multiage classroom, “I’m the big teacher and you’re all mini-teachers.” She maintained that the teacher served more as a guide and that students “can ask each other questions and get more information to reach a conclusion.”

She felt it was important for the teacher to use questioning strategies in such a way that the teacher is “guiding them or questioning them to help them figure it out for themselves.” Also, her questioning served to help her “find out what they already know and build on that.” Anne maintained that her children provide input and “give a lot of suggestions about activities they wanted to pursue. She felt her students were very inquisitive and gave the example of one boy’s tendencies.

I have a very bright boy in my room who’s always saying ‘I have a question.’ And I say, ‘I hope I have an answer.’ Because I’m afraid he’s going to ask me a question I won’t have a clue about. But that’s okay because then we just try and find out.

Because of the varying ranges of abilities and interests that exist in a multiage classroom, Anne stated that she tried to give “assignments that are open ended so that children can go further or just as far as they are able.” She felt she facilitated instruction so that children are actively engaged. “There is always something to get them interested or
involved," she stressed. Anne felt that in keeping children involved, it was imperative to provide students with concrete experiences before introducing them to abstract concepts. She maintained that, especially in teaching math concepts, she used many math manipulatives as part of her centers.

Assessment. Anne used the same report card as the rest of the primary team. For reporting progress to parents, she maintained that this checklist was much more useful as letter grades, "really didn't tell them very much. They'll actually have a lot more information." She opined, "Ours is neat because we mark them satisfactory, with the teacher's help, or not yet, which implies that we expect them to be able to do it. It's so much nicer than no way or unsatisfactory."

She also felt that the Reading Recovery (Clay, 1993) methods and other frequently administered assessments were very helpful in providing "substantial documentation" and were a major part of the students' portfolios. Such "documentation," for example, running records (Clay, 1993) and math and language arts rubrics, provided teachers and parents with "a clear and truer picture" of their [children's] capabilities. She explained that while their formal progress report was a checklist, her interim report was written in the form of a narrative report.

An important aspect of assessment in the multiage classroom, Anne stressed, was that she was basically "not grading anything. I go around and check things over, but I just make suggestions and tell them how they need to do this better or encourage them to do more." She elaborated, "I definitely do not put any letter or number grades on their papers."
Anne explained that the parents have enjoyed viewing their children’s portfolios. She felt they have realized their value as they “compare it with what they did in the past and what they’re doing now.” Student portfolios included “samples of student writing, art work and assessments that we do as far as math and language assessments.” Anne did not feel standardized tests were valid for assessing her children’s achievement. She claimed, “I’m not sure that’s a good measure.”

Use of materials. Anne felt that variety is important noting, “We do have a nice variety.” She explained how “the children don’t keep books in their desks” and only “used them as a reference.” She would often copy practice pages “from an old math book” and did the same from the basal reading series.

Anne stressed that it was important to have different kinds of learning centers, such as math manipulatives, language arts centers such as the puppet theater and reading corner, and building blocks. As much as possible, Anne posited it was important to “cover all the intelligences,” referring to Gardner’s (1990) theories on multiple intelligences.

Anne observed that her class size, which was 22 for most of the year, and the physical size of her classroom made it “easy to arrange” for center activities. She noted that having “28 or 29 would make a big difference” in trying to manage materials for such large numbers of students.

To summarize, Anne was a kindergarten teacher before volunteering to teach in this multiage program. She was very reflective about the differences between a homogeneous, graded classroom and a heterogeneous, nongraded classroom. She
enjoyed having some of the same students for more than one year and felt the multiage arrangement enabled the students to learn from each other. Anne often told her students, “I’m the big teacher; you’re all mini-teachers.” When the new principal replaced a multiage unit with a second grade classroom, Anne agreed to teach it. However, she told the principal that she would miss the diversity of the multiage class and that she felt fewer role models would exist in the graded classroom.

Cross-Case Analysis of Research Question #1

The cross-case analysis is a distilled examination of the six stories. It is presented to compare and contrast the responses of the participants. This analysis incorporated information reported in the individual stories and information that was part of the data collected by the writer but not reported in each individual story.

The first research question asked, As the teachers attempt to apply their knowledge of the definition of a nongraded, multiage continuous progress program, do they vary in their implementation? Since it was divided among six categories, how the teachers varied will be presented in the form of the six questions that were presented in chapter one.

How Do Teachers Vary According to Their Goals of Schooling?

The main goal of the nongraded, multiage program was to teach for the continuous progress of the individual students, as implied by the title of this program. The participants in this study identified goals that they perceived as being desirable outcomes and the procedures for attaining certain outcomes.
Each of the six teachers commented on how the goals of schools should be to provide realistic, real life experiences for the children. For example, Renita gave the example of how when they learned to count money, she would teach this in the context of going to the store and ensuring that proper transactions occurred. Anne felt that the multi-age classroom was much like society in that students formed alliances based on interests, not on age or grade level.

The six teachers described the ideal classroom environment. They all felt that such an environment should stimulate curiosity and exploration. Nicole posited that children should enjoy school while Dana called for a "stress free" environment. They felt children should feel uninhibited to take risks and that the atmosphere should be noncompetitive and nonthreatening. Such an environment, Dana claimed, would enable students to reach their full potential for learning.

Another important goal that each of the six teachers felt strongly about was that students should become more responsible for their own learning. Anne claimed that students should become "self-starters" while Ruth suggested that students must learn to "develop their own learning styles." During this process, it was imperative that students practiced decision making skills as the "ultimate goal," according to Dana, is for students to "want to learn on their own."

An appreciation of diversity and differences in others should be valued and celebrated, the six teachers believed, and this was much easier to facilitate in a classroom where students of varying interests, ages, and abilities merged. Dana maintained that children should be "allowed to be who they are." As her classroom had a few boys who
exhibited special needs, Roberta felt her children had learned to become very "accepting of others." Nicole argued that appreciating the diversity among countries and cultures should be stressed in schools.

Two ideas were presented by only some of the teachers. First, both Roberta and Ruth raised the idea that one of the goals of schools should be to encourage teachers to continuously learn from the students. As Ruth reflected on her experiences as a factory worker, she stressed that "quality" was more important than "quantity" and that in the context of the classroom, quality assurance would only be enhanced if teachers continually looked at the product, the child, for guidance. Roberta also felt that when teachers stop learning from students, they will no longer be effective educators.

Roberta was the only participant to discuss how a goal of schools should be to extend the "boundaries" from which students can benefit. She discussed the assumption that if "children are natural learners," then the school should extend the ceilings and floors that traditionally bind their learning. These "broader boundaries," Roberta felt, would include all available resources in attempting to achieve what was best each situation. She gave the example of a boy with special needs who was projected to spend his third grade with three different teachers. "We've got to start thinking beyond the four walls of the classroom," Roberta claimed.

How Do Teachers Vary According to the Organization of Teachers and Students?

Each of the six teachers varied in their approaches to the grouping of students for instruction. All of the teachers stressed the need to group students heterogeneously during the day which they did in the various content areas and during center time
activities. However, for reading instruction and sometimes math instruction, four of the
teachers held meetings with ability groups on a regular basis. The other two, Dana and
Renita, attempted to alternate their reading groups periodically. For example, Dana
explained that on Wednesdays, she would meet with students randomly and address their
individual reading needs. Renita grouped her students for skills, such as report writing,
and then the group composition would change according to another need, such as story
writing. Only one of the teams, the team of Dana, Roberta, and Anne, departmentalized
their instruction for the students across their team. They had grouped the students
according to their mastery of math objectives and felt it had been a very successful
endeavor.

Each of the teachers agreed that team teaching was important for teaching in a
multiage program as it helped them to not only share ideas, but also pool resources. Five
of the six teachers had successfully planned and implemented a career unit. Each teacher
collected materials for a center that related to a career, such as electronics or business, and
used the center for one week in their classroom. Anne summarized the importance of team
teaching as she pointed out their efforts to plan jointly on a weekly basis, share teaching
strategies, and to share materials for language arts and science experiments.

Since the grouping of students constituted a challenge for some of the teachers,
this topic will be addressed more in the cross-case analysis of question two.

**How Do Teachers Vary According to Their Perceptions About the Curriculum?**

The teachers had organized the content for the multiage curriculum by combining
the district’s first and second grades’ courses of study. They had developed a checklist to
synthesize the multiage curriculum for math, reading, and language arts and had taught the
second grade science and social studies curriculum the first year of the program and the
first grade science and social studies curriculum the second year. As much as possible, the
teachers tried to integrate curriculum objectives according to themes. For example, as the
students learned about electricity, they also learned about careers, one of the objectives in
the social studies curriculum.

Each of the six teachers felt that the nongraded curriculum should be
individualized, child centered, and integrated across the curriculum using thematic units.
Anne explained that the continuous progress of the individual student was her main
concern in considering curriculum. In arguing that children’s interests should influence
curricular decisions, Ruth maintained, “You don’t know what a child will do when there’s
a high interest.” Dana felt that in some instances, thematic teaching could be irrelevant
and contrived. She stressed the importance enabling the students to make meaningful
connections across the curriculum.

Because of the various ability and interest levels present in a multiage classroom,
all of the teachers stressed that teachers “teach to the top.” That is, when material is
presented to the whole group, the lesson is targeted for the older children in the room.
Ruth had struggled with this approach and discovered in February of the first year of the
program that she needed to focus more on the objectives included in the second grade
curriculum. All of the teachers agreed that with this approach, even if first year students
didn’t quite “get it” the first time, they had another year to master the objectives.
Roberta maintained that in a multiage classroom, you “teach topics, not subjects.” Once a topic was introduced, developmentally appropriate activities would follow. She gave the example of how instead of teaching math or science, the lessons would focus on addition or plants. Renita stated that teaching thematically kept students’ interest levels high as they could relate to the theme on a personal level. She also felt that while the present theme was a constant for all children, it was also a basis from which she could individualize her instruction.

While all of the teachers had dabbled with the use of menus to organize student curriculum, Nicole was probably the main advocate of their use. They all agreed that the menu served to help them individualize instruction as they could create them for different levels. The menus also would include activities relating to the current theme. Anne’s use of a menu system was not as extensive as Nicole’s as she explained that her menu consisted of a list of the activities the students knew they were responsible for completing.

The teachers felt that by offering choice and variety as part of the multiage curriculum, they were addressing students’ unique needs and interests. Each of the teachers agreed that while providing choices, they increased student motivation and improved the students’ ability to make decisions. During the day, students could choose which activities to complete first, whom they might work with, and participate in “free choice” activities at one of the centers. Renita stressed that students could always choose from two or three activities to complete at each of her learning centers. Both Anne and Ruth gave examples of students noticing other classmates pursuing activities they might want to try, such as multiplication or a particular story. Such requests would always be
honored. While agreeing that choice was important, Dana felt that students can be given too much choice.

Each of the six participants felt that nonacademic aspects of the curriculum were important considerations in a nongraded, multiage program. In this particular area of curriculum, the teachers felt teaching students "how to act" was vital to the smooth operation of classroom management. During observations and conversations during interviews, each of the participants explained how they purposefully taught their students how to work cooperatively, budget their time, follow directions, and solve problems. The best examples witnessed by the researcher included how in Renita's classroom the students made smooth transitions moving from center to center and in Ruth's classroom a student had vomited without causing a disruption.

Nicole discussed how problem solving was an important skill in the nonacademic curriculum. For example, she would present a problem to the class, such as how to act for a substitute teacher, and together they would discuss solutions. Each of the six participants believed strongly that in teaching children how to behave in their multiage classroom, learning the "Ask-three-before-you-ask-me" rule was an important objective in this nonacademic curriculum.

The teachers varied in how they approached the language arts component of the curriculum. Renita and Nicole felt strongly about the use of three different spelling lists and the rote teaching and testing of spelling. Both felt spelling should be approached on more of an individualized basis and as part of their writing. During the first year of the program, neither one administered spelling tests on a regular basis although Nicole had
decided to test for spelling achievement during the second year of the program. She felt this gave them needed practice in taking tests. The teachers also varied in their approach to literacy. This will be addressed in the next section on instruction.

How Do Teachers Vary in Their Delivery of Instruction?

In their approaches to instruction, all six participants used the term “facilitator” to describe the role they play as teacher in the multiage classroom. Each of them believed that as a facilitator, they encouraged children to become more responsible for their own learning and to learn from other children and using various resources. As facilitators, they felt they encouraged discovery learning, inquiry, inductive thinking, and process learning. With the use of open ended prompts, they felt using this type of instruction enabled the children of varying abilities and interests to respond in a developmentally appropriate way. They also maintained that through this type of instruction, students were more likely to learn to take risks and focus on the why and how of various concepts.

Learning centers were used extensively throughout the six classrooms. These centers included many activities with manipulatives and were very “hands on.” While such small group instruction dominated part of the day, the instruction also included whole group instruction and individual instruction with children.

In a previous section that related to organization, the researcher noted that the teachers varied widely in their use of individualized instruction. Roberta, Dana, and Renita were able to individualize their approach to the language arts’ curriculum as they consistently met with children more to discuss the individual titles they read. Dana was the only teacher that reported meeting with individuals on a weekly basis. While the rest of
the teachers may have met with students individually when they used leveled books for assessment, they did not explain doing so on a regular basis. This problem will be discussed further in the cross-case analysis of the second research question.

How Do Teachers Vary in Their Assessments?

Each of the six teachers used the same checklists and report card that they had developed the summer before commencing with nongradedness. The checklists were used to guide the continuous progress of students in the areas of math and language arts. In addition to the checklists, the one assessment they relied on most heavily was the use of running records (Clay, 1993). None of the teachers felt that standardized tests were valid measures of their students' achievement. Renita posited that the assessment process was "critical to multiage" and Anne contended that children in a multiage program receive "substantial documentation" which clearly indicate their strengths and weaknesses.

Four of the six teachers discussed the use of portfolio assessment. Nicole and Renita used portfolios most extensively of the six and Nicole explained how she had incorporated a portfolio day into her monthly schedule. Renita had shared with the board of education how she utilized two different portfolios: one that she sent on to other teachers and one that students took home at the end of the year. Both Anne and Roberta kept samples of students' work which they felt was a meager attempt on their own part of participating in portfolio assessment. Nicole admitted that during the second year of the program, neither the new administration nor the third grade teachers seemed to value the work she had completed on portfolios. This caused her to be less industrious in maintaining them with the same effort and zeal she had exhibited the first year.
The teachers varied in how they involved the students in the assessment process. Nicole had often reviewed children's progress on the checklists and discussed their report cards with them. Renita, who kept a very visible and organized assessment notebook, claimed her students knew where the notebook was at all times and were aware of its contents. She conferred with students on a weekly basis to discuss their progress. Dana explained that her intermittent conversations with students were very important to her assessment process. Ruth stated that while they were rather informal, she tried to meet and confer with individual students on a daily basis. Both Anne and Renita felt that conducting weekly conferences was very difficult to accomplish.

Where the teachers varied most widely in their approach to assessment was in the regularity in which they conducted running records (Clay, 1993). Roberta maintained that in some instances, she would complete one on a daily basis, depending on the needs and ability of the child. While Dana, Anne, and Renita were comfortable and diligent about completing running records (Clay), Nicole and Ruth admitted that, during the first year of the program, they had often waited until the nine weeks report period to complete them on all of the students. However, during the second year of the program, Ruth and Nicole acknowledged that they had become much more comfortable with completing running records (Clay) and completed them much more regularly.

**How Do Teachers Vary in Their Use of Materials?**

Many similarities existed in the type and amount of materials the teachers had available in their nongraded, multiage classrooms. Each of the teachers had stocked their shelves with various manipulatives and games. They all felt the need to supply students
with stimuli relating to the theory of Gardner's multiple intelligences (1990) and with materials that encouraged self-direction. They attempted to provide students with experiences that fulfilled their aesthetic, physical, and social need. Such activities included art centers, building blocks, and materials that included role playing. They all had ample supplies of various genres of books and each class had encyclopedias. Each stressed the need to use texts as resources. Due to the efforts of the two Reading Recovery teachers in the building, each teacher had a supply of leveled Reading Recovery titles. Each room also had at least one computer; Renita and Nicole had two computers in their rooms.

The teachers varied in their use of the basal reader and workbooks. The basal reader constituted a large part of the reading curriculum in the classes of Ruth, Anne, and Nicole. Ruth claimed she relied heavily on the basal and workbook for her first year students. Nicole, Anne, and Dana each stated that they would occasionally borrow from old math and reading workbooks. Dana defended her choice claiming her students liked the workbooks. She also felt using workbooks gave them needed practice in following directions.

While they all agreed that variety was most important in arranging materials in the multiage classroom, Roberta pointed out that most importantly, materials must match the developmental level of the multiage students. Ruth and Roberta felt that they should be materials that encouraged "self-direction" on the part of the students while Nicole thought they should be materials that could provide immediate feedback to students.
Cross-Case Analysis of Research Question #2

The second research question asked, What are the perceived challenges which emerge when a nongraded, multiage continuous progress program is implemented? In all, the researcher identified the emergence of eight different types of challenges that resulted during the implementation of a nongraded, multiage continuous progress program. They will be presented according to the following categories: administrative challenges; challenges with assessment; organizational challenges; curricular and instructional challenges; the need for more materials; challenges resulting from the complexity of nongradedness; increased preparation; and undesirable student behavior.

Administrative Challenges

Numerous problems with the administration were perceived by the six participants, especially in the second year of the program when a new principal and new superintendent were hired. During the first year of the program, the main challenge caused by the administration was due to their district's standardized testing policy. The teachers resented having to separate their second graders from their first graders, nor did they think it was a valid measure of their students' abilities. Renita complained:

We work so hard to develop the idea of family and all year we haven't even talked about grade levels and now we are down to testing. And I'm having to say that the second year students that are going to third grade have to be split off from these kids to take the test.

Dana protested:

It [the standardized testing] is a bad experience to have to put them through . . . [I wonder] how they are going to feel about themselves when they are done. I have spent all year taking them on from
where they were, encouraging them, and now I am going to say, 'What, you can't do this?'

When some of the teachers expressed their frustrations to the superintendent and board of education at a meeting in the spring of 1995, the administration claimed they were thinking of no longer testing second graders. However, during the 1995-1996 school year, the administration changed as a new principal, assistant superintendent, and superintendent were named. In the second year of the program, the nongraded teachers were still required to administer standardized tests to any of the former first graders that they had transferred or passed to second grade for that year.

Roberta cited problems with the district’s vague retention policy as even though their students were with them for two years, the administration wanted to know who they were passing, retaining, or transferring. When she wanted to retain more students, and therefore prevent them from taking a standardized test the second year, the administration told her she could not retain that many students. She felt that because the policy on retention was so vague, she was powerless to back up her claim that some of her first year students needed to be classified as first year students for more than one year.

During the second year of the program, the teachers felt very defensive about their program and began to wonder about its longevity. Anne felt that the new principal’s positivistic approach toward the assessment of primary children caused the principal to think poorly of nongradedness. For example, the new principal had decided that they should abandon the report card they had devised and use the same report card the other
first and second grade teachers were using. This would provide a basis for comparison which, in Anne’s words, would be comparing “apples to oranges.”

Ruth felt that it was “horrible” that the administration had approved their program as a pilot without funding it adequately. She observed that an additional primary teacher was hired without providing her with the necessary resources. She felt this place the teachers in a difficult position. She thought that the teachers were expected to “prove . . . [their] point on a shoestring.”

During the second year of the program, the new administration had decided to create two straight, graded classrooms to replace two primary multiage classrooms. Thus, Ruth was scheduled to teach a first grade and Anne would teach second grade. Ruth characterized her projected class as “offering a choice” to parents as she described how she would teach this first grade class in a “more traditional” manner. She explained that it would involve less small group, independent work and more “whole group, teacher directed” learning. Ruth noted that the new principal had allowed a kindergarten teacher to create the class roster based on the kindergarten teacher’s opinion of which students could work best in a multiage classroom or in a classroom that was much more teacher directed.

Challenges with Assessment

Each of the teachers admitted it was a struggle to maintain individual documentation on students. This struggle included the effort to maintain student portfolios. The teachers felt it was a challenge to be able to meet and confer with individual students as they all expressed a desire to involve the students more in the
evaluation process and in establishing their own learning goals. Both Nicole and Ruth admitted that they did not become comfortable or proficient with completing running records (Clay, 1993) until the second year of the program.

Ruth maintained that their present report card did not provide enough information for the parents. She felt a report card should identify for parents specific ways for helping their children. Anne and Dana felt that their present report card did not evaluate the whole child as certain areas, such as aesthetic and physical development, were not part of the evaluation.

Nicole raised two additional issues relating to assessment and evaluation. First, she felt that all six of the teachers needed to make more of an effort to be consistent in their evaluation as she was unsure as to the level of achievement that constituted mastery in the evaluation process. Secondly, she had extended a great deal of effort into maintaining portfolios with her students. However, during the second year of the program, she found that her efforts may have been wasted as no one seemed to use the information and the administration did not monitor or seem to value this type of assessment.

Organizational Challenges

In organizing students for instruction, four of the six teachers admitted to experiencing difficulty with trying to create flexible, nonpermanent groups of children. Ruth expressed that she was still locked into the three groups of high, medium and low ability students. Nicole, Roberta, and Anne each expressed a desire to have more flexible groups. Roberta felt that she had become so dependent on small group instruction that it caused her to individualize less than she would have liked.
Two of the teachers found it challenging to instruct their classrooms using small group instruction. Nicole posited that because of "personality conflicts" or because the students were unsure of their tasks, it was sometimes difficult for her to keep all groups working productively. Ruth also felt that it was a challenge to "teach the subject so that both groups got the best out of it." She expressed a desire to learn how to keep children working more independently and productively.

Because the six teachers were split into two smaller teams of three, Renita felt it was a real drawback that the six did not collaborate more. As Anne pointed out, in trying to effectively team teach, "Scheduling is a big problem."

Curricular and Instructional Challenges

Because curriculum and instruction are often interrelated, these challenges are grouped together as they demonstrate some difficulties teachers experienced in teaching to the multiage curriculum.

One of the most pressing challenges that was identified by the teachers related to individualizing the curriculum and instruction for the multiage children. Each of the six teachers felt it was difficult to involve these primary children in being responsible for their own work. Anne felt she would like to involve the students more in setting their own goals. Dana was in agreement with this idea and thought it was a challenge for students to complete self-initiated projects. Ruth was concerned with whether or not all the individual students in her class were doing their best work. Renita had wished she could individualize her spelling instruction and noted that the main challenge lay in that there are so many different areas of curriculum that need to be individualized.
Three of the teachers were concerned about the third grade curriculum. Dana felt that they would be instructed by teachers who did not adhere to the "continuous progress philosophy." Ruth noted that in the third grade, there are more pencil and paper activities and less "freedom of movement." Nicole was dismayed to find that two of her very bright students who had moved onto third grade were not being challenged. She cited how they had completed the same research on the planets that they had done for her and, basically, they were the same reports.

Anne, Roberta, and Ruth felt it was a challenge to ensure that they were addressing all phases of curriculum, especially the one for the second grade course of study. Roberta noted that, after teaching first grade for 14 years, she knew it well, and she would be anxious until she experienced that same familiarity with the second grade part of the curriculum.

Teaching the reading or math for the multiage curriculum posed challenges for three of the teachers. Both Anne and Nicole felt that while they were comfortable in diagnosing the reading errors their young readers made, they would like to know more about how to correct certain reading problems, such as problems with decoding. Dana worried that her students received enough math instruction throughout the day. However, once she and her team had decided to departmentalize the teaching of math, she felt their needs were being met.

In attempting to teach the curriculum thematically, Nicole and Renita felt that there were still difficulties to overcome. Nicole felt their themes should be "broader" in scope.
Renita felt that too many times, their thematic units had been "thrown together" and that if they were going to teach thematically, then all six of them needed to plan together more.

All of the teachers subscribed to Gardner's (1990) theory of teaching to the multiple intelligences. Both Ruth and Nicole felt strongly that in teaching multiage children, it was very challenging to meet the variety of interests and learning styles that the children possessed. Renita and Ruth felt that they needed to pull in more resources and speakers from the community to provide students with different experiences.

Several other isolated challenges were identified by the teachers. Roberta and Renita noted that they felt they had allowed their classrooms to become too teacher directed at times. Roberta also pondered whether or not the curriculum was "developmentally sound." She posited that because of the problems with her first year problematic student, something was amiss. She was the only teacher who felt that a multiage composition of kindergarten, first and second graders was desirable. With other kindergartners in her multiage classroom, she thought, students like Danny might not feel as frustrated.

Anne explained that it had taken time for her to get used to the "higher noise level" that was due to increased student interaction in her multiage classroom. Ruth admitted that she was perplexed sometimes to find her students wasting time and exhibiting off task behaviors.

The Need for More Materials

Five of the participants expressed a need for more materials to serve the varying needs of the children in their multiage classrooms. Each of the teachers believed that
Gardner’s (1990) theory of multiple intelligences implied a need for materials that would meet children’s aesthetic, physical, social, and emotional needs. For the primary age children, many materials, such as art materials, sand, and clay, were easily consumed.

Ruth vocalized that she though it was “horrible” to add a new teacher, Renita, and not supply her with needed resources. Ruth noted, and Renita agreed, that Renita had to “beg and borrow all year long.” Renita, Nicole, and Anne felt that more materials were needed for the emergent reader. They felt that many of their emergent readers needed additional instruction with lower-level books.

Roberta thought she lacked materials for her more capable students. She felt she needed to challenge and interest them with materials that were creative and self-pacing. Ruth felt more materials that encourage self-direction and independent work were needed. Each of the teachers would like more technology in their classrooms, such as multimedia computers with printers.

Challenges Resulting from the Complexity of Nongradedness

The history of nongradedness has been a prolific and problematic one, as addressed in chapter one. This inherent complexity represented a challenge and a source of frustration for the teachers. Four of the participants raised issues that demonstrate the complexities surrounding the definition of nongradedness in three ways. First, as documented by the cross-case analysis of the first research question, teachers varied in their implementation of nongradedness. It will be shown in this section that the teachers varied concerning the use of nongradedness for struggling students. Second, some of the teachers identified teaching strategies that they felt were critical to having a successful
multiage program. They felt the challenge was for teachers to be able to successfully incorporate these strategies into their nongraded program. Third, the teachers experienced difficulties educating and convincing the new principal that nongradedness was a necessary and effective educational program.

Dana felt that other teachers were making a mistake promoting certain children that were struggling in the primary unit. In her opinion and definition of nongradedness, the program should ensure that certain children would be given additional time to fulfill the objectives of the primary curriculum. Thus, if some students needed three years, then they should remain in the program rather than being sent on to third grade. Dana provided examples of the type of students she felt would benefit from spending additional time in the primary program.

Dana was concerned about each student's lack of academic progress and their personal habits. She explained that one boy had been a very disruptive student and while his behavior was better, it was "not necessarily good." Another boy needed badly to "experience success" with school, Dana believed. She told the researcher that the "chances of him finishing high school are not very good." She added that "if he went on to third grade, everything would be too hard. He would be overwhelmed." She spoke of another girl who, if she were in a second grade, "would be doing nothing. In fact, she doesn't even do much first grade work." Lastly, she discussed another girl who "may be a good candidate to keep" for additional time. She knew her family well, and spoke of the girl's potential, knowing that she needed time to develop. Thus, her view of curriculum was that its purpose was to serve the needs of the children and to give them whatever time
they needed, even if it meant more time in the primary unit. She believed strongly that there were many other children in the other primary classes that were like the ones she described, yet they were being sent to third grade. As the teachers had mixed views on the retention policy for their program, this demonstrated another complexity of the nongraded definition.

Both Renita and Nicole maintained that certain teaching strategies were integral components of the nongraded definition. As Nicole posited, a multiage classroom would not be as motivating if the teacher did not use a “hands on” approach to teaching science. While stressing that multiage classrooms did not use textbooks, Renita believed that the whole language philosophy was compatible with teaching in this type of setting. Dana reported that when she and Roberta attended a conference on multiage two years before the program began, the presenter had discussed the importance of team teaching and whole language in preparing to teach in a multiage classroom. Each of the teachers acknowledged the importance of addressing various student learning styles, multiple intelligences (Gardner, 1990), and ongoing and continuous assessment as being important parts of the definition of nongradedness. These various essential components of nongradedness, as noted by some of the teachers, demonstrated that the complex definition of nongradedness can result in various challenges for those trying to teach multiage children.

Lastly, the teachers did not feel they had successfully explained the multiage philosophy or definition to the new principal. For the 1996-1997 school year, two less multiage units were being offered. Roberta and Dana thought that if they were able to
proceed with multiage for at least two more years, many of the complex issues would become less enigmatic. To summarize, data analysis revealed that the complexities surrounding the definition of nongradedness can be a source of frustrations and challenges.

**Increased Preparation**

The teachers all agreed that starting a new program required additional preparation. As each of the teachers had volunteered to pilot this program, this was not perceived as a major challenge. The teachers had devoted a great deal of time the summer before the implementation of this program creating checklists and a report card that combined the first and second grade curricula and planning thematic units. Additionally, these teachers discovered that teaching in a multiage classroom required more preparation than teaching in a traditional classroom. Dana summarized this challenge when she noted how she felt a "responsibility to teach so many things." The teachers found that because of the need to individualize and plan for small group instruction, planning was more extensive than if they were simply planning for whole group instruction.

**Undesirable Student Behavior**

Ruth was the only teacher to raise this issue. She had experienced difficulties with her older students the first year of the program, many of whom were transferees. She wondered if their behavior and lack of progress was due to the presence of the first graders as she felt she was not exposing the second graders to enough of the second grade curriculum. Ruth also voiced the concern that, during the second year of the program, some of her children in the multiage classroom were not anxious to help others. She also
found it a challenge to eliminate the competitive environment in her classroom and wished for students that were more intrinsically motivated.

Cross-Case Analysis of Research Question #3

The third research question that guided this study asked, What are the perceived benefits which emerge when a nongraded, multiage continuous progress program is implemented? The six teachers perceived benefits across seven different categories that resulted during the implementation of a nongraded, multiage continuous progress program: supportive classroom environment; learning various roles; development of students’ social and emotional aspects; time; knowledge of students; higher expectations, and variety and choice.

Supportive Classroom Environment

The six participants felt that children in a nongraded, multiage classroom benefitted from the type of support they received from each other. As Anne told her students, she was the “big teacher” and they were all “mini teachers.” Roberta claimed that it was like having “22 teachers in the room” with her. Renita posited that “if they get stuck” her students have a “support group” to help with solutions. The following classroom activity in Nicole’s classroom illustrates how students helped and learned from each other.

Two girls of different abilities had been working together to complete an activity with the newspaper. When they showed the researcher their menus, it was obvious that tasks of varying difficulty were expected of them. However, the more able child had been able to assist the less capable child in completing her required tasks. The less capable child told the researcher, ‘We get to make silly putty. Not the whole class, just us. ‘Cuz we was doing good on our folders.’
Dana and Nicole pointed out that in such a supportive environment, students receive more immediate feedback. Nicole felt that the teaching that existed in her multiage classroom was similar to the teaching that exists in families by which older children mentor their siblings. As a result of such support, student learning is enhanced, the teachers believed. Nicole was pleased to discover that when students completed projects, such as the making of pop-up books, students were able to help each other, making the completion of the task much easier. Ruth noted that such support was evident, especially when students worked together on the computer.

Each of the six teachers described a classroom climate that was more productive as a result of the support the multiage children extended to one another. They described the children in this atmosphere as being busy and actively engaged the majority of time. Dana explained how as students learn to become independent workers, they learn “to use their time wisely.” Ruth explained how at times, her students became “engrossed” in their present tasks. Five of the teachers felt that students were better behaved as they noted fewer discipline problems as compared with previous years of teaching at Central.

Renita described how students were able to pursue tasks “without teacher intervention.” Because of the help students were able to receive from each other, Dana felt this enabled her to trust them to complete so much more work independently because of the potential support from others. She explained:

If they can’t read something . . . if there is a direction or something that they can’t read they can go ask someone what it says. In the survey question that they have everyday, it forces them to learn to work together and to help each other out.

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As a result of this atmosphere, Dana and Roberta felt that students were more inquisitive. Roberta gave the example of how her multiage classroom had worked together to plan her birthday party. Anne pointed out that cooperation, rather than competition, was emphasized in her multiage classroom.

**Learning Various Roles**

The six participants all believed that children are more likely to assume leadership roles in a multiage classroom. Nicole discussed how one child had become less disruptive because he perceived himself as a "leader and a mentor." Anne, Renita, Nicole, and Dana theorized that because of the inherent diversity in a multiage class, this composition made it more likely for students to be able to become leaders. As Nicole perceived, the students had the opportunity to witness both "expert and novice" characteristics in the same setting.

Roberta pointed out that in a nongraded, multiage classroom, students were able to achieve rank "regardless of ability." In comparing the children in a multiage classroom to siblings of varying ages, she posited that in this scenario, but not in a family, everyone became an "elder." Renita observed that many of the children in her class were the only children in their families. She felt their exposure to the multiage classroom had benefitted them in that they had learned to lead and cooperate. Renita theorized that these were characteristics that the stereotypical "only child" sometimes lacked.

Teachers also perceived that in a multiage classroom, there is more of an opportunity for children to serve as and be exposed to proper role models. Dana felt that the students learned many positive characteristics through modeling, such as cooperation
instead of competition. Roberta thought the multiage classroom presented an opportunity
for students to learn more readily from other role models. She gave the example of
struggling readers who did not seem to become frustrated because they witnessed so much
reading going on around them, and they knew they would eventually learn to read. Renita
felt the younger children benefitted from the older students' examples as they learned to
emulate the helpfulness of the older children.

Nicole, Ruth, and Anne each expressed how much they felt their children enjoyed
serving as teachers. Ruth felt the children had enjoyed sharing all the "things they know." Anne maintained that achievement was enhanced as she pointed out that learning is not
fully developed "until you teach it to somebody else."

The Development of Students' Social and Emotional Aspects

Each of the teachers felt that the students in their classrooms were better adjusted
and happier as a result of being in a multiage classroom. Nicole stated she had witnessed
both social and academic growth. While noting that her children seemed happy and
confident, Anne further contended this program "bolsters their self esteem." She added
that she felt her children enjoy school and experience less anxiety, mostly because they
know the teacher so well. Roberta also considered the program a "self esteem booster.”
She discussed how she had "bonded" with a vexatious child who had no mother at home.

He’s not experienced . . . close relationships with people. But
because I had him last year, I kept him as part of our multiage this
year and the difference it has made is phenomenal. And I think a
great deal of it has to do with that steady relationship with me.
The teachers all felt that many friendships had formed between the children and students were comfortable in this environment. Ruth observed that younger children would eagerly demonstrate to the older children some of the concepts they had learned. Ruth and Renita posited that the children were more likely to take risks in their instruction. Ruth maintained that there was "no fear of failure here." Renita felt that children were more likely to become risk takers because of the support they received not only from her but from the other children in the room. Dana explained that in a multiage classroom, children were never isolated, there was always someone they could work with. She felt that because the philosophy of multiage is to respect the individual tendencies of children, they are "allowed to be who they are" and this contributes to better social and emotional stability.

Ruth and Roberta both maintained that the children are more tolerant and accepting of others in a multiage classroom. Roberta often spoke of her problematic students that the other students had learned to be patient with and support. Roberta felt that in this program, she had witnessed the blooming of children who had earned the opportunity to "shed a negative image" that they might have carried with them to second grade if they were in a traditional, graded program.

Anne, Renita, and Dana felt strongly that in a multiage classroom, children of lower ability receive more opportunities to serve as helpers and leaders, thereby raising their self esteem. Anne felt that in a traditional classroom, these same students would not experience opportunities to lead and to help. Renita pointed out that she would purposefully select a less able student to serve the role of tutor in appropriate situations.
In a traditional classroom, Renita posited, that "division" of "A and F students" is much more evident.

**Time**

When some of the teachers were asked by the superintendent to discuss what they liked best about nongradedness at the spring of 1995 board meeting, Anne told him and the board of education:

I think that one advantage is really getting to know the children by having the children for two years. You're able to spend time really getting to know them, learning their various idiosyncrasies and where they are. Children need that security and continuity, it's especially important for young children. Basically, the children know you, and they know what to expect.

The teachers felt strongly that since they would have most of their students for at least two years, time was an inherent benefit in the structure of the multiage program. Each of the teachers emphasized that it was beneficial to have two school years to accomplish learning goals and objectives. They also felt that multiage served as a viable alternative to retention since many of their first grade students would have been potential failures. The subject of retention was previously discussed as representing one of the challenges caused by the complex nongraded definition. In this study, some of the teachers had retained students for an additional third year in the primary program. Dana and Renita were the only teachers that kept students for an extra year as they felt the students would benefit from having more time in the primary program.

Anne expressed that as a teacher, you "have more invested" in the students as a result of being responsible for their learning for at least two years. Roberta felt more
compelled to “stay on top of things” because of the time invested in her students. She also shared that she felt more patient in that she had time to observe the “incubation process” that children experience in their development. She explained how the experience of teaching in a multiage program has “opened . . . [her] eyes” to the growth and development of primary children.

Because the teacher does not have to push the students toward meeting the superficially imposed grade level standards in the time of one year, Nicole felt she was able to create a climate in which children could compete with themselves. Ruth felt that as a result of having more time to teach her students, she was more likely to grasp teachable moments. She explained that multiage teachers do not worry as much about students reaching a particular level of achievement at a particular time.

Renita, Roberta, Anne, and Dana each discussed the relationships and bonds they had established with children as a result of having additional time with children in their multiage classroom. Anne felt that primary children benefitted from the “continuity and security” that they received as a result of the time spent with her. Renita and Roberta thought that the time that they had spent with their students contributed significantly to the social and emotional bonds they had developed with their students. Dana had kept a child for an additional year as he had progressed slowly until she had discovered his learning style and tendencies. Dana predicted that the child would probably regress if she passed him as the third grade teacher would “waste time” trying to get to know him and his various idiosyncracies.
Knowledge of Students

The teachers perceived that spending more time with children increased the teachers' ability to gain in-depth knowledge about their students. Thus, this greater knowledge constituted another benefit. Each of the teachers believed that they had become more aware of their students' strengths and weaknesses as a result of the implementation of a nongraded program.

Their philosophy of teaching for continuous progress may explain why each of the teachers became so aware of each students' capabilities. Roberta contended that due to the assessments that are conducted in teaching for continuous progress, children's exact "needs are known" and a "more accurate gauge" of the child's progress is available. Teachers in a multiage program must individualize or progress will suffer. As Nicole pointed out, the teacher is much more aware of student progress in terms of "academics, behavior, and socialization." Ruth noted that knowing her students' personalities and abilities made it much easier for her to individualize instruction. While Anne stated that she knew her students well enough to ascertain "where they are and who to push," Dana maintained that the main advantage of the multiage, continuous progress program is that the teacher always "knows what's next" in anticipating children's development.

Each teacher thought that most importantly, teaching in a multiage classroom was synonymous with teaching to the individual. "It is the child first," surmised Dana. Three of the teachers, Renita, Dana, and Anne, made references to "watching" children perform various tasks and how these observations enhanced their awareness of student capabilities. Anne shared how her class would celebrate signs of individual growth. Roberta felt that
in her classroom, students worked hard toward achieving their full potential. Roberta explained how she was surprised to learn she knew her students well enough to effortlessly complete narrative reports on their progress.

Higher Expectations

Each of the teachers felt that in a multiage classroom, their expectations for student achievement were higher. Because they often taught the curriculum of the older students, they explained that their expectations for children’s performance were based upon the children’s true potential. Dana reflected that this approach was similar to the one room schoolhouses whereby concepts that were presented to older students were often assimilated by the younger students, too. Renita maintained that when she taught a whole group lesson, concepts had “filtered down” to the younger students.

Roberta explained how she evolved into becoming truly child centered in the teaching of multiage children. Before, she felt she had taught according to the “ceilings and floors” that were implied by grade-level standards. Robert thought, “There are no beginning points and no ending points [in a nongraded class] as they progress more and they expand more.” Anne felt that her younger students were presented with “a vision of what’s to come and that could be motivational in that you know where you are headed."

Each of the teachers offered concrete examples of how students had benefitted from the higher expectations that were implied in their classrooms. Ruth had younger children learning cursive writing while Nicole felt some of her students had learned to use encyclopedias and word processing on the computer because of the expectations held for other students. Renita offered the example of younger children learning the concept of
alphabetical order while Anne noted that she had some traditional first graders learning regrouping and multiplication, lessons they would probably never have been introduced to in a traditional first grade classroom.

Renita pointed out that the older students were also expected to work to their full potential. Because of the philosophy of teaching for continuous progress, the instruction does not come to a halt due to superficial, grade-level standards. Both Renita and Nicole had discussed giving their second grade students third grade work because of their goal for continuous progress.

**Variety and Choice**

The teachers perceived that variety and choice were necessary components of their nongraded definition. Each of the teachers thought that with the wide range of interests and abilities that existed in their classrooms, it was imperative that they offer variety and choices to their students. They each felt that students benefitted and enjoyed being able to choose and have variety as part of their multiage experience.

The multiage students were exposed to a variety of teaching styles from the teachers who instructed them. As both teams engaged in the team teaching of various thematic units, the students were exposed to the teaching styles of the other teachers on their team. Each classroom was also visited by resource teachers that worked with individuals and small groups.

Nicole explained how she would present open-ended tasks that would enable students to respond in a developmentally appropriate manner. For example, students might reply to a writing prompt with a picture and a short caption while others might write
“novellas.” Renita, Anne, and Roberta maintained that they allowed the children to choose the curriculum they wanted to pursue at various times. For example, students in Anne’s class chose to learn multiplication, even though Anne had not introduced it to them. Similarly, a child in Roberta’s class began teaching herself cursive print. Renita stressed that she encouraged children to pursue divergent responses to the projects she assigned. She gave the example how when students were writing form letters, some children would deviate from the form and produce their own letter. Nicole and Renita felt that the decision making which students engaged in to select items for their portfolios helped their development.

During part of Roberta’s morning routine, the students chose their own groups to pursue activities such as reading science books and doing experiments or choosing to work with whatever materials were available. She explained how this decision had evolved.

I don’t assign them anymore. Looking back, that was necessary, that was good. It gave the children instruction or routine and an organization to the class. Now they have that. I just say, ‘Any center you want.’ And it is interesting to see what they choose... They are multiage, mixed groups.

Four of the teachers discussed how they used menus to enable students to engage in making choices. Students were able to choose which activity they would complete first and with whom they wanted to work. Roberta felt having these choices was very motivational as she admitted that she would hate to be told what to do all of the time. Ruth posited that the multiage classroom was a better setting for encouraging problem solving and decision making than graded classrooms. In graded classrooms, she felt the
teacher was so concerned with meeting grade level objectives that the teacher did not enjoy enough flexibility to offer variety and choice.

In this chapter, the research findings were presented as six stories of the six participating teachers including a brief description of each teacher's background, classroom environment, and typical day. Then, the three research questions were addressed. After the researcher presented each teacher's unique approach to nongradedness, a cross-case analysis of the three research questions explained how the teachers varied in their approaches to nongradedness and the perceived challenges and benefits that resulted from the implementation of a nongraded, multiage continuous progress program.
CHAPTER 5

DISCUSSION

In this final chapter, a brief summary of the first four chapters will be provided. Then, conclusions including the tensions, concerns, and themes that emerged from this study will follow. Finally, issues that suggest questions for further research will conclude this discussion.

Summary

The focus of this study was to examine the perceptions of six teachers as they engaged in the implementation of a nongraded, multiage continuous progress program. Specifically, the questions guiding this study related to the participants' definition of nongradedness and their perceived challenges and benefits that accompanied the innovation. Educators and policy makers may gain valuable insights by considering the struggles and successes of these six teachers as they began their multiage program. As discussed in the first two chapters, the creation of a multiage program is not as rudimentary as placing children of varying ages into the same classroom. The implementation of a nongraded program is a complex process in which teachers approach curriculum, create instruction, and evaluate students in a way that reflects the humanistic philosophy of nongradedness.
In chapter one of this study, the researcher presented problems concerning the past definitions that were applied to nongradedness. Researchers found that teachers once used terms such as ability grouping, homogeneous grouping, and team teaching to loosely define nongradedness. Because of these problems with defining nongradedness in the past, a definition to guide this study was offered in chapter one and explained further in chapter two. Citing the works of Robert Anderson (1995) and Robert Anderson and Barbara Pavan (1993), this definition entailed six categories: goals of schooling; organization of students and teachers; curriculum; instruction; assessment; and use of materials in the nongraded, multiage classroom.

The review of research in chapter two included a presentation of the history of nongradedness. What is presently known about the topic of nongradedness was organized and discussed. In relation to the research questions guiding this study, the definition of authentic nongradedness was explained further and research was presented that cited prior challenges and benefits that past programs had experienced. Challenges cited in the review of literature included insufficient teacher education, heavy work loads, high class size, and the requirement of advanced professional skills on the part of the teacher. Other challenges dealt with implementation concerns and the complexities surrounding nongradedness. The benefits cited in the review of literature were presented in three areas: teacher and student satisfaction; the benefit of extra time; and studies where gains in student achievement were found.

The methodology for this study, qualitative research, was discussed in chapter three. Few studies had examined nongradedness using a qualitative approach and the
researcher explained the rationale for using this methodology to study a nongraded, multiage continuous progress program. For an entire year, the researcher conducted both interviews and observations of the six teachers to collect data that corresponded to the three research questions that guided this study. The research questions were: As the teachers attempt to apply their knowledge of the definition of a nongraded, multiage continuous progress program, do they vary in their implementation? What are the perceived challenges which emerge when a nongraded, multiage continuous progress program is implemented? What are the perceived benefits which emerge when a nongraded, multiage continuous progress program is implemented?

In chapter four, the stories of the six participants and a cross-case analysis of the three research questions were revealed. The researcher discussed the variations that existed among the teachers in their approach to nongradedness and the challenges and benefits that emerged from this study. The perceived challenges that emerged were discussed according to eight different categories: administrative challenges; challenges with assessment; organizational challenges; curricular and instructional challenges; the need for more materials; challenges resulting from the complexity of nongradedness; increased preparation; and undesirable student behavior. The seven benefits that emerged were: a supportive classroom environment; students learning various roles; the development of students' social and emotional aspects; the benefit of more time with students; teachers gaining a greater knowledge of students; teachers having higher expectations of students, and exposure to variety and choice.
Conclusions

The intent of this study was to examine teacher perceptions during the implementation of a nongraded, multiage continuous progress program. The findings of this research supported the conclusion that during the implementation process, the six teachers varied in their definition of nongradedness and they also perceived various challenges and benefits. Previous attempts at nongradedness have supported the notion that the complex nongraded definition has been misunderstood and oversimplified. For this reason, an operational definition was used to guide this study. Through observations and interviews, the researcher found that the six participants exhibited various consistencies and inconsistencies in their application of the nongraded definition. By analyzing these consistencies and inconsistencies, the researcher learned the distinct characteristics of the six teachers' nongraded definition. The challenges and benefits that emerged from this study were a result of the teachers' perceptions of the struggles and successes they faced as they applied their definition of nongradedness.

Some of the challenges and benefits will be highlighted as a basis for discussion in the next section. First, some of the challenges will be presented as tensions that have implications for classroom management and programs of preservice and inservice teacher education. After that, the implications that the six teachers' preparation presented will be discussed. Then, the challenges that were caused by the administration will be presented in conjunction with the implications this challenge poses for educational reform. Finally, some of the benefits that were perceived by the teachers will be offered as they relate to the theme of student satisfaction.
Tensions Presenting Implications for Classroom Management and Teacher Education

Some of the challenges that emerged from this study presented implications for teacher education programs, educators, and policy makers. In the following section, they will be highlighted as tensions. The teachers experienced various tensions as they were challenged by trying to accomplish certain goals that they knew were important to the nongraded definition. These tensions suggested implications for classroom management strategies for multiage teachers as well as the preservice and inservice programs of teacher education that may help teachers resolve such tensions. Four tensions that will be discussed in this section include: tensions surrounding the grouping of students; tensions concerning assessment; tensions pertaining to individualized instruction; and tensions with integrating instruction.

Tensions surrounding the grouping of students. The teachers at Central Elementary varied in their organizational approach that dealt with the grouping of children. Some of the teachers had difficulty forming groups that were flexible and non-permanent in composition while one teacher admitted to relying predominantly on the use of high, medium, and low-ability groups. All six teachers believed children should be organized in temporary homogeneous and heterogeneous arrangements during the course of the day. However, only two of the teachers changed their grouping compositions on a regular basis. The tension that existed was caused by the knowledge that the teachers wanted to create more flexible groups, yet they struggled to accomplish this.

In a discussion on authentic nongradedness, Robert Anderson (1995) stressed that the grouping of students is critical to the operational definition of any nongraded program.
According to the operational definition guiding this study, grouping and subgrouping patterns should be extremely flexible as "learners are grouped and regrouped on the basis of one specific task or interest and groups are disbanded when that objective is reached" (Anderson, 1995; Anderson & Pavan, 1993). However, creating such groups is not always easy to accomplish. In a study of a nongraded project in New York City, the authors found that the grouping of children represented one of the main challenges in beginning their program (Jarvis & Zak, 1989). The data collected in this study of Central teachers provided further evidence that creating flexible student groups can be difficult to achieve.

The findings of this research suggested that as teachers struggled with meeting the varying interests and needs of their multiage students, they needed better classroom management methods for incorporating more flexible grouping schemes into their routine. One Central teacher purposefully used Wednesdays as the day for meeting with groups that were different from the groups she met with on other days. Another teacher discussed the creation of flexible groups that was formulated on a specific need or interest. For example, she had used both homogeneous and heterogeneous ability groups to help students learn how to write reports. It appears that teachers can effectively manage more flexible and temporary groups by utilizing different grouping patterns on a particular day of the week or purposefully creating groups on the basis of different needs and interests. Therefore, the grouping of students becomes an important consideration for the multiage teachers' classroom management strategies.
Some of the Central teachers used an approach to classroom management they referred to as menus (see Appendix A). Menus present a management tool that could help teachers organize their grouping patterns with students. For example, teachers could devise a system that would address the various student groups formed on the basis of students' specific interests and needs. On this menu, the tasks might include, “Meet with report-writing group on Thursday after morning meeting” or “Meet with book discussion group on Wednesday after lunch.” Therefore, students would be meeting on a regular basis with temporarily assembled groups that were based upon their needs and interests. The teachers had learned about menus at a professional conference that they had attended voluntarily. This suggests that useful topics and techniques, such as menus, might be incorporated into preservice and inservice teacher education programs so that teachers are exposed to worthwhile classroom management techniques.

The issues surrounding classroom management are not limited to the type of instructional tools that teachers might employ. Classroom management can also entail the teaching of specific student behaviors. For example, each of the teachers in this study stressed how important it was for them to teach students “how to act” in their multiage classrooms. The researcher referred to these classroom management issues as nonacademic aspects of the curriculum. The learning objectives included teaching students how to tutor, solve problems, follow classroom routines, and proceed with self-initiated projects. These perceptions about the importance of these classroom management strategies suggested that for preservice and inservice teacher education programs, instructional time should not only be devoted to teaching content-area methods.
but also to teaching classroom management strategies that will facilitate the mastery of nonacademic objectives.

Lastly, the teachers in this study varied in their use of grouping schemes for literacy instruction. They varied in their use of literature, leveled books, basal readers and workbooks. The teachers also differed in their use of individualized literacy instruction and spelling instruction. The conflict that must be addressed by teacher education programs is that while teachers know that the three-group approach to teaching reading is poor reading instruction, some appear to be unable to abandon these tendencies (Hall & Cunningham, 1992). The results of this study suggested that if teachers could learn better classroom management techniques, they might escape the habitual three-group approach to reading.

**Tensions concerning assessment.** The teachers felt that maintaining individual documentation on each of their students represented a challenge. As a classroom management issue, they also wished they had spent more time conferring with their students regarding assessments. Each of the six teachers relied on checklists (see Appendix B) and running records (Clay, 1993) for compiling the documentation that they felt was needed in a multiage classroom. Some of the teachers identified various challenges with the report card. One teacher felt that the report card, which was a checklist, did not supply enough information for parents to help their children improve. Two of the teachers noted that the report card did provide an evaluation of the child’s progress in all areas. They felt that they might include an assessment of student progress in aesthetic and physical development. One teacher felt that the six teachers should work
to be more uniform and consistent in their assessments. The six teachers also varied in their use of portfolio assessment.

The study of Central teachers suggested that the teachers’ difficulties in performing regular assessments of student progress paralleled the teachers’ difficulties with trying to utilize flexible grouping patterns. Anderson and Pavan (1993) stressed that multiage teachers should involve students in the assessment process and use “multiple sources,” such as portfolios, for documenting student progress (p. 89). As the teachers varied in their ability to involve students in the assessment process and the degree and regularity in which they completed running records (Clay, 1993), these results suggested that the teachers struggled with conducting the type of assessments they felt were needed in their multiage classrooms.

Previous research identified that assessment is a main part of the nongraded definition and important for teaching for continuous progress (Anderson & Pavan, 1993). These authors maintained that assessment should consider all five areas of the child’s development: aesthetic, physical, cognitive, social, and emotional growth (Anderson & Pavan). However, assessment is an area that educators have struggled with during other innovations. A previous study of an innovation in literacy instruction revealed that teachers were challenged by their attempts to document and assess student progress (Scharer, 1992c). The results of the current study suggested that while teachers recognized the importance of continuous and persistent evaluation of all phases of development of the primary child, it was a challenge to do so.
The tensions that the teachers experienced as they attempted to conduct the type of assessments that were important for multiage children suggested that teachers needed more support to resolve these tensions. In chapter two, Gaustad’s (1996) ideas for assessment in the multiage classroom were presented. Gaustad maintained that tools of authentic assessment, such as observations, anecdotal records, rating scales, systematic observational assessments, paper-and-pencil tests, frequent conversations with students, and portfolios, were appropriate methods for documenting student progress in a multiage classroom. In this study, the Central teachers used different types of assessments to varying degrees. However, they felt challenged to incorporate assessment into their routine; they each expressed never having enough time. Therefore, as part of their approach to classroom management, they might explore ways to incorporate the authentic assessments advocated by Gaustad into their routine. The implication for teacher education programs is that teachers must not only be familiar with various types of assessment, they must also be prepared with classroom management strategies that will enable these assessments to become part of class routine.

In closing, assessment is a very critical component of any nongraded, multiage continuous progress program. As the teachers struggled with this issue, its importance suggested a need for administrative support. This will be discussed further in the section on challenges caused by the administration.

**Tensions pertaining to individualized instruction.** Anderson and Pavan (1993) stressed that the curriculum of the ideal nongraded program is child-centered as it is based upon the child’s “unique needs, interests, abilities, learning rates, styles, patterns” (pp. 80-
The results of the current study documented that as each teacher facilitated instruction through whole-group, small-group, and occasional individualized instruction, they felt challenged by their inability to individualize instruction. In the ideal nongraded classroom, all phases of individual child development are considered when planning instruction (Anderson & Pavan). However, if the Central teachers were not meeting with individual learners on a regular basis, then it is highly unlikely that they were considering all phases of development and individual learning styles.

The data collected in this study documented that only one teacher met with individual students on a regular basis. She organized her schedule so that every Wednesday, she met with individuals to provide instruction, select books for further reading, and discuss reading progress. However, her implementation of individualized instruction was limited to the subject of reading. Perhaps other teachers that would attempt to implement nongradedness would find that in individualizing their instruction, they could encompass other areas, in addition to reading, in which the child would benefit from individual instruction. For example, if a child was struggling with certain math concepts or even nonacademic aspects of the curriculum, the student might benefit from receiving individual attention to these areas.

The ability to individualize instruction in all areas of the curriculum has proven to be problematic, as documented by the current study. An important observation about nongradedness that was offered in chapter two summarizes the instructional demands the multiage teacher faces:
A teacher cannot ignore developmental differences in students nor be ill-prepared for a day's instruction. Demands on teacher time require well developed organizational skills. The multigrade classroom is not for the timid, inexperienced, or untrained teacher. (Miller, 1991, p. 3)

One of the Central teachers, who was not projected to teach in the multiage program for the 1996-1997 school year, admitted that she was not an organized person. One of the conclusions that might be drawn is that her lack of organizational skills, which Miller (1991) stressed were vital for teaching multiage children, was one of the reasons why she was no longer scheduled to teach a nongraded classroom. Thus, for those that would attempt to implement nongradedness, they would be wise to consider how their organizational skills would affect their ability to teach in a multiage classroom.

The individualization of literacy instruction has been addressed by previous studies. As the teachers in the current study varied in their approaches to literacy instruction, this suggests an area of concern for potential multiage teachers. Researchers and theorists maintained that for the teaching of literacy in the nongraded, multiage classroom, teachers subscribing to the whole language philosophy (Goodman, K., 1989; Goodman, Y., 1989) are thought to be better suited for nongradedness (Anderson & Pavan, 1993; Chase & Doan, 1994). In addition to whole language, principles which support Marie Clay's Reading Recovery (1993) have been endorsed for nongraded programs because of the way in which the teacher is able to meet the needs of the individual (Anderson & Pavan, 1993). Hall and Cunningham (1992) advocated a multimethod, multilevel approach for first grade reading instruction that enables teachers to individualize reading instruction.
By learning more about these approaches to literacy, teachers might become more proficient in attending to the instructional needs of their multiage students.

Considering that teachers in this study struggled with individualizing their instruction, the results suggest the need for better classroom management and implications for programs of teacher education. As addressed previously, using a classroom management technique, such as menus, might enable teachers to create flexible groups and individualize their instruction. Programs of both preservice and inservice teacher education might examine their efforts to expose students to management strategies that enable teachers to individualize and to literacy instruction that also serves this goal.

**Tensions with integrating instruction.** Anderson and Pavan (1993) maintained that “broad thematic units integrating several subject matter disciplines are utilized” in the ideal nongraded classroom (p. 81). One of the Central teachers explained that the multiage curriculum was more theme oriented than grade oriented. She stressed that, “Instead of teaching grade one math, you teach addition. You don’t teach grade one science, you teach plants.”

The tension that surfaced in regard to integrated instruction was that while the teachers in this study recognized the importance of integrating their instruction, they felt challenged to integrate the curriculum more. The Central teachers believed that they facilitated a type of instruction that encouraged the students to make meaningful connections. In doing so, they tried to avoid the type of fragmented skills’ instruction that has dominated primary classrooms for the past several years (Gaustad, 1996).
Each of the teachers planned instruction using thematic units to varying degrees. According to one of the teachers, a goal for the summer after the first year of the program was to plan more thematic units. Considering that the value of thematic and integrated learning has been given greater consideration in recent years and has been linked with recent findings on brain activity (Caine & Caine, 1990) the value of this type of instruction presents considerations for potential nongraded teachers.

The type of instruction that characterizes thematic, integrated instruction is important to not only nongradedness but to other areas of education as well. Movements in math, language arts, and science education are all straying from the emphasis of skill acquisition and rote learning, also known as “surface knowledge” (Caine & Caine, p. 7). This type of instruction that encourages integration is also known as brain-based education and is becoming more prevalent as educators become aware of the fascinating capabilities the brain encompasses. While surface knowledge consists of the type of knowledge and specific skills a robot may be capable of, meaningful knowledge is much more forgiving; rather, it is anything that makes sense. For example, “A child who appreciates a plant as a miracle approaches the study of plants differently from a child who engages in a task” (Caine & Caine, p. 7). Thematic and integrated teaching take advantage of the brain’s ability to make meaningful connections. Brain-based education involves anything the teacher can do to ensure that students’ experiences increase their ability to extract meaning. The challenge for the teacher is to orchestrate lifelike and appropriate
experiences which include a “tolerance for ambiguity; problem solving; questioning; patterning . . . [and] use of metaphor, similes, and demonstrations” (Caine & Caine, 1990, p. 8).

The results of this study suggested that for those implementing nongradedness, teachers must consider how the research of Caine and Caine (1990) supports the use of thematic teaching which is important to the nongraded definition. As thematic teaching and brain-based education become more prevalent, programs of teacher education might provide teachers with both the means for integrating instruction as well as the rationale, which would inform teachers about brain-based education.

In closing, four tensions were discussed in light of the implications they suggested for classroom management strategies and for preservice and inservice teacher education programs. In the next section, the six teachers’ reflections about their preparation will be presented.

Preparation Concerns

The Central teachers’ perceptions about the type of preparation needed to begin a nongraded, multiage continuous progress program contributed to the identification of the type of support potential multiage teachers may need. Those attempting nongradedness should heed the six participants’ comments about preparation. These six teachers reviewed the body of literature that was available on this subject, attended professional conferences, and visited other multiage programs to get answers to their most pressing questions. These teachers also identified various resources, such as Activities Integrating Math and Science, Math Their Way, and Reading Recovery tools from Marie Clay’s An Observation
Survey of Early Literacy Achievement (1993) that were critical for teaching in a multiage classroom. Also, some of the teachers raised the possibility that teachers who subscribed to the whole language philosophy were more prepared to teach in a multiage classroom. Two of the teachers felt their preservice preparation, one as a special education teacher, the other as a psychology minor, had made them better prepared for teaching in a nongraded, multiage classroom.

Therefore, potential multiage teachers might begin with a self-assessment of their abilities to successfully implement a nongraded curriculum before commencing with their own program. For example, if they do not have the ability to teach for continuous progress, conduct regular assessments, or integrate across the curriculum, nongradedness might prove to be a difficult endeavor. The results from this study suggested that visiting other multiage programs, attending multiage conferences, and creating study groups to review current classroom management techniques and new instructional methods in the various content areas will provide some support for the potential multiage teacher.

These results also seem to support the notion that the preservice training that some of the teachers received had a bearing on their abilities to teach in a nongraded, multiage program. Researchers and theorists posited that a major shortcoming of colleges and universities has been their failure to introduce preservice teachers to nongradedness (Gayfer, 1991; Lewis, 1969; Miller, 1991). Miller contended that teacher education programs have trained teachers to teach in single grades only. Therefore, teacher education programs might expose their students to the concept of the nongraded, multiage continuous progress program.
Challenges Caused by the Administration: Implications for Educational Reform

The data in this study suggested that the administration was the source of various challenges. During the first year of the program, one complaint against the administration was that they forced them to comply with the district’s standardized testing policy. Robert Anderson (1995) stressed it is imperative for Boards of Education to provide the type of support that could involve obtaining “waivers regarding requirements and practices from the State Department of Education” (p. 1). In this case, the teachers were not even able to waive their own local boards’ policies. Other evidence of a lack of administrative support was that five of the teachers felt that they were not furnished with adequate materials to begin a new program. One teacher felt that it was “horrible” for the administration to approve a pilot program without proper funding.

The shift of administration may have contributed to some of the perceived challenges. During the first year of the program, both the superintendent and principal were very supportive of this program. The principal had attended a summer conference with four of the teachers and the superintendent had maintained that his experiences teaching in a developmentally appropriate curriculum provided him with an understanding and appreciation of nongradedness. Unfortunately, this support did not last long for these dedicated and hard-working teachers as during the second year of the program, the administrative personnel changed.

The majority of problems with the administration can be attributed to the challenges that emerged in relation to the new principal. In the second year of the program, the new principal required them to abandon the primary report card they had
created in favor of the school district's first and second grade report cards. She also
decided to drop two multiage units and offer, in their place, one first and one second grade
class. During the second year, the teachers felt defensive about their program and began
to wonder about its future. As one of the teachers pointed out, the new administration did
not seem to value authentic assessment. Some of the teachers believed that the new
principal was relying on standardized tests rather than the teachers' methods of
documentation to examine the program's effectiveness. Thus, they were not receiving the
type of support and "waivers" that Robert Anderson (1995) encouraged.

The frustrations the six teachers experienced may have been due to what Michael
Fullan has termed "the implementation dip" (cited in Sykes, 1996, p. 467). As participants
in the implementation process, the teachers suffered from the problems and confusion that
are typical in the early phases of an innovation. Sykes (1996) described reform-minded
professional development which emphasizes dialogue and feedback, stressing that if
teachers persist in problem solving for improvement, they have a much better chance of
succeeding. The implication is that teachers and administrators should engage in
diagnostic problem solving while a reform is in progress. Such reflection should involve
the examination of the factors that impede or promote the process. In this case, such
reflection would help teachers and administrators identify, clarify, and reevaluate the
problems and issues that surrounded the innovation. As Otto (1969) observed, "If a
nongraded program is to fulfill its mission, many related facets of the internal organization
of the school must be altered simultaneously" (p. 126). It appears that if teachers and
administrators are given the opportunity to engage in a problem-solving approach,
teachers might overcome the resultant obstacles of innovation. If such opportunities occur during a common planning time while school is in session, the teachers might perceive this as an example of administrative support. Unfortunately, the teachers in the present study felt frustrated by the administration's failure to address their concerns.

Fullan and Miles (1992) corroborated the contention that in dealing with change and the problems that accompany it, educators and policy makers should adhere to a diagnostic approach to problem solving. This suggests that the administrators and teachers in this study might benefit from engaging in the problem-solving process to resolve the tensions that were identified in the current study. For example, the teachers were frustrated by the new principal's positivistic approach toward the evaluation of their program. They were especially distressed by her reliance on standardized tests to document their program's effectiveness. As discussed in earlier chapters, there are limitations with using standardized tests to document the achievement of primary age children. However, if the teachers and administrators in Bellingham City Schools would follow a diagnostic approach to problem solving, they would seek different ways for evaluating the program's effectiveness. In chapter two, Gaustad's (1996) ideas for assessment in the multiage classroom were presented. Gaustad maintained that tools of authentic assessment provided appropriate methods for documenting student progress in a multiage classroom. Gaustad also advocated systematic observational assessments such as Marie Clay's (1993) assessment tools for evaluating student achievement. Therefore, if administrators are seeking ways to document the achievement of students in these multiage classrooms, they should utilize more authentic assessments and provide the
necessary support that will enable their teachers to do so. As Fullan and Miles stated, “It’s important to note that successful schools did not have fewer problems than other schools - they just coped with them better” (p. 750).

Researchers and theorists agree that we are at a critical juncture in educational reform and attempts at reform in the United States must not fail (Clark & Astuto, 1994). For reforms to be successful, they need full cooperation and support. Clark and Astuto contended, “External agencies should be worrying about how they can help and support these school units - not about how they can dominate them” (Clark & Astuto, p. 520). As in the case of this reform at Central Elementary, it may soon come to an end if the administration continues to show signs of opposition. In The Predictable Failure of Education Reform, Sarason (1990) maintained that those who try to implement changes in schools are doomed for failure because “any effort at reform has to have as its goal a change in existing power relationships in the system” (p. 46). Teachers must be empowered to institute the type of change that is often more lasting and more meaningful, local change (Fullan & Miles, 1992; Gough, 1994). The teachers in this study had volunteered to implement nongradedness; this was not a mandated change. Therefore, if they are truly empowered, they should be respected and supported in their efforts. Such empowerment might include collaboration with the administration to engage in a mutual problem-solving process as advocated by Sykes (1996), Fullan and Miles.

Reforms have little chance of being successful until the change process itself is better understood (Fullan & Miles, 1992). Some basic characteristics of change are that it is full of problems, uncertainties, is “resource-hungry,” and is “a journey, not a blueprint”
(Fullan & Miles, pp. 750 - 752). In this study, the data have shown that problems were identified and the journey was not without challenges. Also, one of the challenges that emerged in this study was that teachers perceived a need for more materials, especially for their emergent readers. Therefore, this innovation was typical of the change process described by Fullan and Miles. For those who would attempt nongradedness in their schools, they would be wise to consider the characteristics of change such as the perceived problems caused by the administration, the lack of materials, the tensions the teachers experienced and the other challenges that emerged as a result of the current study. Also, if teachers and administrators are going to engage in a problem-solving approach to educational reform, they might consider that change is often a slow process.

**Student Satisfaction: A Desirable Outcome of Nongradedness**

Some of the benefits that emerged from this study suggested that the overall theme of student satisfaction existed in these multiage classrooms. Teachers consistently perceived that their students were satisfied and comfortable. Previous research revealed overwhelming evidence that students in nongraded classrooms experience greater degrees of satisfaction than students in graded classrooms. Way (1981) found that nongraded classrooms experienced significantly higher scores in the area of happiness and satisfaction. This was corroborated by Pratt’s (1983) contention that the multiage arrangement improves children’s social and emotional well being. Additionally, Miller (1990) reviewed 21 studies which addressed student attitudes and social relationships and reported that multiage students outperformed single-graded students 81 percent of the time.
The contribution of the current study is that while past researchers have claimed that students in nongraded classrooms generally experience greater degrees of satisfaction, this current research suggested some specific reasons why students in a nongraded, multiage classroom might experience improved student affect. For example, data collected from the present study suggested that the theme of student satisfaction may be related to four of the perceived benefits: a supportive classroom environment, the students learning to portray various roles, the development of students' social and emotional aspects, and the exposure of students to variety and choice. In this section, all four perceived benefits will be discussed separately before recommendations are presented.

First, the type of support that children in a multiage classroom receive was suggested by the review of research in chapter two. The resultant data of a study that examined student behavior in a nongraded setting showed that students implemented three types of strategies as they worked together: modeling, tutoring, and pairing/sharing (Dever, Zila & Manzano, 1994). Fromberg (1989) maintained that the multiage classroom, in which the teacher facilitates the learning of children from different ages, interests, and abilities, is a natural environment for peer tutoring. The results of this study suggested that as the nongraded teacher strives to keep all of her multiage students on task and actively engaged, it is imperative that students seek help from sources other than the teacher. The Central teachers believed that the diversity that existed in their multiage classrooms facilitated an exchange of services among the students.

In addition to the teacher, other students were capable of providing proper support and scaffolding their learning. As one teacher had observed, the multiage classroom was
like having “22 teachers in the room” with her. The six teachers felt that because of the increased support they received from one another, students learned to work productively and independently.

Second, the six participants in the current study perceived that students in this program had benefitted from learning to portray various roles. They felt students had learned to lead, cooperate, help others, and serve as mentors and tutors. Most importantly, some of the teachers pointed out that low ability students were able to assume various roles that, in a traditional classroom, they might not have been exposed to because of their lack of ability. Therefore, all students, not just the bright ones, are able to engage in helping behaviors, the teachers believed. One teacher observed that, regardless of ability, each student eventually achieves the rank and privileges of being an “elder.”

Other existing research supported the notion that students in multiage classes enjoy and benefit from portraying various roles. Hunter (1992) contended that in the nongraded setting students are able to assume different roles which “is impossible at home; but at school it is not only possible but highly desirable” (p. 20). In a study of gifted children in a nongraded school, Hafenstein, Jordan, and Tucker (1993) reported that teachers felt that growth in students’ leadership skills had occurred as a result of the change to a nongraded, multiage program. Thus, for students that enjoy being a helper, a leader, and engaging in other cooperative behavior, the results of this study suggested that such students would benefit from being able to portray these different roles.

Third, the teachers perceived that students’ social and emotional development was enhanced by their involvement in this multiage program. The teachers spoke of the
relationships and bonding that they had developed with their students. Also, they felt that friendships and filial relationships had been formed among the students. Two of the teachers felt strongly that their children's self esteem had risen as a result of their participation in this program.

Four, the six teachers in this study felt that students benefitted from the variety and choice that they were exposed to in their multiage classrooms. Ideally, the nongraded school "strives to increase the variability of individual differences rather than to stress conformity" (Anderson & Pavan, 1993, p. 76). Similarly, "common assigned tasks encourage, suggest, and allow variability" (Anderson & Pavan, p. 76). The teachers in this study were very aware of the diversity that existed in their classrooms. They felt they encouraged creativity and unique thinking as they recognized the distinctive characteristics of their multiage children. The results of this study indicated that the teachers perceived themselves as facilitators that encouraged children to become more responsible for their own learning and to learn from other children and using a variety of sources.

To summarize, these four perceived benefits that emerged from this study suggested a theme of student satisfaction. The six teachers believed that students benefitted from the support they received from each other and learning to portray various roles. The teachers also believe that students' social and emotional development was enhanced and that the students enjoyed the variety and choice that characterized their multiage classrooms.

The emerging theme of student satisfaction is an important consideration for potential multiage educators and policy makers. While student satisfaction is a desirable
outcome, potential multiage teachers should strive to replicate this outcome. This study suggested that as teachers work toward a goal, such as student satisfaction, they might use the four benefits to serve as outcomes for attempting to reach this goal. In the assessment of student learning in the multiage classroom, Gaustad (1996) stressed that compiling a list of desirable outcomes "is only the first step in a challenging process" (p. 25). The results of this study suggested that the various benefits that might contribute to overall student satisfaction represent some of the objectives and performance criteria needed for assessment in a multiage classroom.

In attempting to replicate the type of student satisfaction that was perceived by the teachers in this study, the first step would be to develop a "consensus among educators on the exact meaning of assessment criteria" (Gaustad, p. 26). For example, teachers might develop a rating scale in which they agree on the type of student behavior that leads to the four benefits that emerged in this study. In general, the rating scale that indicates students' level of mastery would relate to overall student satisfaction. Specifically, the items could relate to the benefits that the Central teachers believed led to student satisfaction, such as the supportive classroom environment they felt existed. A scale might include such behaviors as "Student seeks genuine help that is more than copying others" or "Student scaffolds learning by hinting at rather than telling answers." Similarly, this rating scale could help teachers monitor student progress toward another perceived benefit, the learning of various roles. The items referring to this objective might read: "Student portrays the role of leader" and "Student is able to serve in more than one role." The items referring to the development of social and emotional aspects could state:

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“Student is able to make friends” or “Student is confident enough to try new things.” In evaluating the students’ ability to partake in variety and choice, suggested items include: “Student is excited when new activities are introduced” or “Student enjoys making choices.”

As potential multiage teachers collaborate on the performance criteria for rating scales, they should be cautioned that the use of rating scales can be overwhelming. However, the process of creating them is just as valuable as the tool itself as this endeavor often serves to provide a “theoretical context” for those engaged in the process (Gaustad, 1996, p. 29). Gaustad (1996) stressed that authentic assessments, such as rating scales, must be developed as part of an “ongoing process of discussion and mutual learning with colleagues” (p. 37).

In closing, the theme of student satisfaction is a desirable outcome for those wishing to implement their own nongraded program. The researcher presented four benefits that emerged from this study to suggest why students in nongraded, multiage programs might experience greater student affect. Also, as outlined by Gaustad’s (1996) suggestions for authentic assessment in the multiage classroom, the researcher suggested the use of a rating scale to evaluate a multiage program’s ability to replicate the perceived benefits that emerged from the present study.

Questions for Further Research

This study focused on teachers’ perceptions as they engaged in the implementation of a nongraded, multiage continuous progress program. Further topics for research remain concerning the issues surrounding a reform such as nongradedness. Also, in
deference to the limitations of this study as discussed in chapter three, a replication in another site might provide a broader context for the examination of data across different sites and perspectives.

Various issues arose during this study that suggested questions for further study. While these issues were not the primary focus of this study, they presented implications for researchers, educators, and policy makers contemplating nongradedness. Three issues will be discussed in this section before the questions for further research are listed.

First, data were not collected to support the claim that student achievement was facilitated as a result of the implementation of a nongraded, multiage continuous progress program. At best, teachers discussed how they felt the program had positively affected the individual progress of certain students in their classrooms. Therefore, it was beyond the scope of this study to conclude that participation in the nongraded program at Central contributed to gains in student achievement. However, the results of this study may provide some evidence of reasons why students in nongraded classrooms outperform students in graded classrooms. The teachers in this study felt that their philosophy of teaching for continuous progress and the additional time spent with children contributed to a greater knowledge of their students' potential. Also, some of the teachers felt that, having had most of their students for two years, the students were familiar with their expectations and could spend more time pursuing academic objectives rather than learning classroom regimen. The teachers also perceived that they held higher expectations for their students as some of the first year students were learning objectives that exceeded
grade-level standards. Therefore, the issues surrounding the question of student achievement provide a topic for further research.

Secondly, the teachers emphasized that student cooperation and intrinsic motivation were important attributes of a multiage classroom. Yet, they still relied upon characteristics of extrinsic motivation for behavior management in the form of behavior charts, prizes, and parties that encouraged competition among the children. The issue is that while their views on cooperation and motivation represented a departure from traditional thinking, some of their actions were typical of past assumptions about motivation. That is, in reality, they did not implement some of the principles they perceived to be important for nongradedness.

At various times, the teachers exhibited attributes of behaviorism, an approach to motivation that has exhibited a longstanding effect on learning theory in education. Behaviorists have maintained that children could be manipulated by creating conditions which help them to experience pleasure and avoid pain. The problem with those basic assumptions that require incentives and control mechanisms are that they conflict with "motivation theory and with principles of human growth and development" (Clark & Astuto, 1994, p. 515). These authors cited Abraham Maslow's theory of self-actualization to contrast the idea that human beings strive for personal fulfillment as opposed to the notion that people are unmotivated and disinterested in their own achievements and development (Clark & Astuto). They maintained that "true motivators are linked to personal growth and achievement" (Clark & Astuto, p. 515).
New ways, which discount traditional underlying assumptions, have grown together to become the core of the principles and philosophy of nongradedness. Goodlad and Anderson (1987) claimed that grade-mindedness “is based upon notions of motivation, of human development, and of human organization that are almost entirely outdated” (p. 162). In the atmosphere of cooperation among students and the collegiality of team teaching which characterizes the nongraded program, assumptions about motivation are the glue that holds the nongraded philosophy together. Unfortunately, many in the past have argued that competition for grades and threats of nonpromotion were needed to motivate students (Goodlad & Anderson, 1987). Clark and Astuto (1994) posed the question of whether or not competition is actually conducive for creating desirable learning conditions and contended that:

Self motivation is sustained when individuals maintain a sense of their own efficacy and work in a context in which people help one another develop skills, take risks, and challenge standard operating procedures. Competitive environments isolate people; cooperative environments bring people together and protect diversity, experience, preference, and interest. (p. 516)

The views of human potential and human motivation are considered to be much more perceptive and complete in the 1990's (Anderson & Pavan, 1993; Ramey & Ramey, 1994). Children are viewed as being eager to learn and capable of experiencing success in school. Early childhood specialists agreed that the most salient learning experiences “occur in the context of informal interaction and activities rather than through formal group instruction” (Katz, 1992, p. 201). Furthermore, fundamental principles for creating positive learning environments help to illuminate how children make meaning out of their
world. The four principles which were outlined by Ramey and Ramey (1994) for establishing this climate are that:

1) The child see that he or she has an effect on the environment,
2) the child be embedded in a responsive environment,
3) the environment be one that is sufficiently interesting and complex to capture and hold the child’s attention, [and]
4) the environment be trustworthy and comprehensible from the child’s vantage point. (p. 198)

The teachers in this study attempted to create the type of informal, less-structured environment advocated by theorists Katz (1992) and Ramey and Ramey (1994). They created instruction that was child-centered and they deviated from formal whole-group instruction, using learning centers and cooperative learning strategies daily. However, the issue is that while they attempted to facilitate instruction that encouraged cooperation and intrinsic motivation, they also utilized behavioristic tendencies that promoted competition and extrinsic motivation on the part of the students. Thus, while their perceptions included a high regard for intrinsic motivation, they continued to emphasize, in reality, extrinsic motivators. This tension of believing in one ideology and practicing another suggests implications for those contemplating nongradedness and for further research.

Lastly, a challenge that emerged in this study entailed the recognition of the complexity of nongradedness. Previous research addressed the complex issues surrounding past attempts with nongradedness. One study documented that the complex nongraded definition comprised critical components that were a challenge to implement simultaneously (Aagaard, Coe, Moore and Kannapel, 1994). Another study found that teachers’ misunderstanding of nongradedness constituted one of the main problems that
was encountered during the implementation process (Appalachia Educational Laboratory & Kentucky Education Association, 1991). In McLouglin's (1969) study of nongradedness, he noted that many changes to nongradedness had been a change in structure only and attempts to change instructional methods had not occurred. The teachers were not able to apply the complex definition of nongradedness. Rather, they simply instituted an organizational change, failing to incorporate the critical components that contribute to nongradedness.

The data collected in the current study suggested that some of the challenges they experienced were due to the complex nature of nongradedness. As the six teachers struggled to apply their definition of nongradedness, these tensions illuminated the notion that nongradedness is not a rudimentary endeavor. For example, some of the teachers opined that in their definition of nongradedness, a hands-on approach to math and science instruction was critical and that the whole language philosophy provided a good foundation for literacy in the nongraded classroom. Another example of the complex issues that surround nongradedness is that the teachers varied in how they viewed the role of retention in their nongraded program. While one teacher felt that to retain a child in her classroom for a third year would result in a repeat of curriculum, another teacher thought that keeping children for an additional year was an option that should be exercised more often. Another teacher noted that the multiage teachers and administrators needed to develop a retention policy that adhered to the goals of their multiage program. The last example of the complexities that teachers in this study perceived related to the principal that had joined the Central staff in the second year of the program. Some of the Central
teachers posited that they had failed to enlist the support of the new principal because she
did not quite understand the complex issues surrounding nongradedness.

While previous research on nongradedness indicated that various problems could
be anticipated, the results of the current study further illuminated the complex issues that
might arise when nongradedness is implemented. The findings of this research seem to
suggest that a careful examination of the challenges and issues might reveal whether or not
the potential teachers that would be practicing nongradedness are indeed making the type
of transition that is more than an organizational change. Thus, the complex nature of
nongradedness is an issue providing implications for further research.

In reference to the conclusions that were highlighted earlier in this chapter and the
three previous issues, the following possibilities for future research are offered:

1. How does the implementation of a nongraded, multiage continuous progress
   program affect student achievement? How might factors identified in this
   study, such as teachers having more time with students, higher expectations,
   and knowledge of students, interact with achievement gains?

2. How can teachers teach in a way that successfully promotes intrinsic motivation
   and cooperation rather than extrinsic motivation and competition?

3. How can the complexities surrounding an attempt at educational reform such
   as nongradedness be examined so that the contributing components are
   understood and adhered to by all participants?
4. How can teachers become effective classroom managers that are able to individualize instruction, create flexible, temporary student groups, and document student progress?

5. Would current trends in education, such as whole language, cooperative learning, peer mediation, conflict resolution, authentic assessment, and thematic teaching, be more effective in a nongraded rather than graded setting?

6. How can policy makers and administrators ensure that reform efforts are able to proceed and enjoy a higher rate of success?

7. How does the implementation of a nongraded, multiage continuous progress program affect student satisfaction? How might the factors identified in this study, such as a supportive environment, students learning to portray various roles, and exposure to variety and choice, affect gains in student satisfaction?

8. Is there a relationship between student satisfaction and student achievement within a nongraded setting?


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APPENDIX A

AN EXAMPLE OF A MENU
Menu

☐ Comprehension Questions
☐ Birthday Story
☐ Newspaper Paper
☐ Uniform Measuring
☐ Kinds of Weather
☐ Draw a flag
☐ Tile Card
☐ Windy Tape
☐ Wear and Use

A la carte

Centers

Handwriting

Safety Book

Dessert

☐ Sidewalk Chalk

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APPENDIX B

READING, LANGUAGE ARTS, AND MATH CHECKLISTS
### PRIMARY PROGRAM - JULY, 1994

**OBJECTIVES TO INCLUDE ON TEACHER CHECKLIST**

**READING LEVEL:**

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**READING SKILLS:**

- Can rhyme words
- Identifies letters: Capital/Lowercase
- Recognizes beginning sounds/ending sounds
- Attends to stories read aloud
- Reads a familiar story orally with fluency and/or expression
- Attacks unknown words using
  - Meaning
  - Structure
  - Visual
- Recognizes high frequency words in context
- Self-corrects when miscues interfere with meaning
- Reads quietly for a sustained period of time
- Name/discuss main idea of story
- Name/discuss characters of story
- Completes projects relating to books and/or theme
- Restates sequence of events within a story
- Shows knowledge of short/long vowels

**COMMENTS:**

__________________________________________________________________________

__________________________________________________________________________

**WRITING SKILLS:**

- Writes first/last name
- Uses conventions of print
  - Directionality
  - Correct spacing
  - Correct letter formation-manuscript/cursive
  - Uses a capital at the beginning of a sentence
  - Uses a capital for proper nouns
  - Uses correct ending punctuation

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CORRECTLY USES APOSTROPHE/QUOTATION MARKS/COMMAS

__ DRAWS A PICTURE AND:
  __ DICTATES A TEXT
  __ WRITES RANDOM LETTERS
  __ WRITES BEGINNING SOUNDS
  __ WRITES BEGINNING AND LAST SOUNDS
  __ WRITES WORDS SPELLED PHONETICALLY
  __ WRITES A SENTENCE
  __ WRITES APPROPRIATELY TO ABILITY LEVEL
  __ IS ABLE TO READ WHAT HE/SHE HAS WRITTEN
  __ SPELLS HIGH FREQUENCY WORDS IN WRITING ACTIVITIES

__ USES DESCRIPTIVE WORDS
__ WRITES A SEQUENCE OF EVENTS/SERIES OF IDEAS
__ WRITES TO COMMUNICATE:
  __ LETTERS/NOTES
  __ REPORTS
  __ JOURNAL
__ EDITS FOR MEANING/MECHANICS

COMMENTS: ____________________________

_______________________________

LISTENING/VISUAL SKILLS:

__ DEMONSTRATES RESPECT FOR A SPEAKER
__ FOLLOWS ORAL DIRECTIONS WITH 2 OR MORE STEPS
__ INTERPRETS SIMPLE GRAPH

COMMENTS: ____________________________

_______________________________

ORAL SKILLS:

__ SPEAKS CLEARLY AND EFFECTIVELY
__ PARTICIPATES IN DISCUSSION
__ RETELLS A STORY OR RELATES AN EXPERIENCE
__ GIVES AN ORAL REPORT RELATED TO CLASS THEME/TOPIC

COMMENTS: ____________________________

_______________________________
<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Learning Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-01</td>
<td>student can sort objects by:</td>
</tr>
<tr>
<td>1-02</td>
<td>student can complete a pattern in a number sequence to 100</td>
</tr>
<tr>
<td>2-01</td>
<td>student will correctly choose the symbol + or - to fit a given problem</td>
</tr>
<tr>
<td>2-02</td>
<td>student will choose the information needed to solve a problem</td>
</tr>
<tr>
<td>2-03</td>
<td>student will choose the appropriate notation for symbolizing a problem</td>
</tr>
<tr>
<td>3-01</td>
<td>student will arrange numerals to 12 in order</td>
</tr>
<tr>
<td>3-02</td>
<td>student will identify and use ordinal numbers to 12th</td>
</tr>
<tr>
<td>3-03</td>
<td>student will identify, count, and write numbers to 100</td>
</tr>
<tr>
<td>3-04</td>
<td>student will identify and write numbers to 999</td>
</tr>
<tr>
<td>3-05</td>
<td>student will identify place value through 99</td>
</tr>
<tr>
<td>3-06</td>
<td>student will identify place value through 999</td>
</tr>
<tr>
<td>3-07</td>
<td>student will identify numerals as greater than or less than through 100</td>
</tr>
<tr>
<td>3-08</td>
<td>student will use the symbols &lt; and &gt; in comparing numbers to 99</td>
</tr>
<tr>
<td>3-09</td>
<td>student will skip count by:</td>
</tr>
<tr>
<td>3-10</td>
<td>student will add numbers using manipulatives</td>
</tr>
<tr>
<td>3-11</td>
<td>student will subtract numbers using manipulatives</td>
</tr>
<tr>
<td>3-12</td>
<td>student will model a written problem with manipulatives</td>
</tr>
<tr>
<td>3-13</td>
<td>student will describe the operations of addition and subtraction in words</td>
</tr>
<tr>
<td>3-14</td>
<td>student will add two- and three-digit numbers correctly</td>
</tr>
<tr>
<td>3-15</td>
<td>student will subtract two- and three-digit numbers correctly</td>
</tr>
<tr>
<td>3-16</td>
<td>student will produce the correct mathematical equation when given a real-life situation to solve</td>
</tr>
<tr>
<td>3-17</td>
<td>student will identify fractional parts of whole objects</td>
</tr>
<tr>
<td>3-18</td>
<td>student will identify fractional parts of sets</td>
</tr>
</tbody>
</table>
___ 4-01 student will identify 2-dimensional shapes on 3-dimensional objects
___ 4-02 student will name likenesses and differences when comparing 2-dimensional shapes
___ 4-03 student will correctly name shapes: hexagon, trapezoid, square, triangle, and parallelogram
___ 4-04 student will create and identify open and closed curves, interior and exterior
___ 4-05 student will use tangram and pattern block pieces to complete a puzzle
___ 4-06 student will identify likenesses and differences in 3-dimensional objects
___ 5-01 student will model a given oral problem situation with manipulatives
___ 5-02 student will model a given oral problem situation by writing a mathematical equation
___ 6-01 student will identify and state the value of coins penny, nickel, dime, quarter
___ 6-02 student will count a collection of coins
___ 6-03 student will compare and/or determine length, capacity, and weight
___ 6-04 student will measure lengths using standard units
___ 6-05 student will tell time to the hour and half-hour
___ 6-06 student will tell time to the nearest 15-minute interval
___ 6-07 student will recognize, name, and identify the days of the week
___ 6-08 student will name the months of the year
___ 7-01 student will compare two sets of given objects
___ 7-02 student will estimate the value of a collection of coins
___ 7-03 student will estimate the solution in addition and subtraction problems
___ 7-04 student will mentally count on to determine a sum to 12
___ 7-05 student will mentally count back to determine a difference of numbers to 12
___ 8-01 student will identify the chances of an event occurring as high chance, equal chance, or no chance
___ 8-02 student will use picture bar graphs to identify needed information