Of tilting earths, ruler swans, and fighting mosquitoes:

First graders writing nonfiction

DISSERTATION

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

By
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Graduate Program in Education
Language, Education and Society

The Ohio State University
2012

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Abstract

Using discourse analysis methodology, this dissertation describes the literacy practices of first grade students as they engaged in researching, writing and illustrating nonfiction. The research focused on two instructional units on writing nonfiction that included a poster unit and a research report unit. The data consisted of 27 days of video recording, covering two periods of time during the 2009-2010 academic school year. This study generates grounded theoretical constructs about the nature of nonfiction writing as it is socially constructed through the interactions and language of first grade classroom participants. These constructs include: ways to conceptualize nonfiction writing for early elementary students; a conception of learning as a social and interactive process; and a model of pedagogy as a socially constructed process conducted through language-in-use. Key to this model are the ways in which the teacher guided acquisition of the cultural literacy practices through a complementary didactic/play process, the ways in which students came to understand and take up the identity of being a nonfiction writer and how the practices were recontextualized over time as students engaged in more academically sophisticated writing. I consider this work as adding to current research describing the social and cultural complexity of young children’s lives in school, attending, in
particular, to how children construct knowledge about different reading and writing practices and genres.
Acknowledgments

“It takes a village to raise a child” is a saying often heard in early childhood and elementary classrooms, and this project has been about one such “village” or community that “raised” nonfiction writers. Likewise the project itself has been “raised” by a “village” of people I would like to thank.

First and foremost I want to thank the teacher and the students of the classroom community who invited me into their classroom and shared their time, their conversations, and their enthusiastic learning with me. Thanks for letting me be a “grandmother” researcher with you!

My advisor, David Bloome has been unfaltering in his support, providing guidance as I navigated the shoals of the doctoral program, rigorous critique to shape me as a scholar, and models of teaching that are a source of inspiration to me. Likewise, my committee, Laurie Katz, Barbara Kiefer and Elaine Richardson, has been generous with their encouragement and advice, making me feel a part of the academic community.

I have also been fortunate to have been surrounded by many friends and “cheerleaders” who have helped me through this process. My writing buddies, Marlene Beierle and Caitlin Ryan have provided me with mentor texts, supported me through my first research presentation, and given me many opportunities to think out loud. I also thank my colleagues, Huili Hong, Nicole Luthy, Audra Slocum, Valdeni Reis and
SangHee Ryu for their encouragement as we have journeyed together. I thank my
Scrabble buddies, Linda Erven and Lola Steinhart, my LC3 buddies, Jean Chamberlain,
Lynn Davis and Trish Walz, my CAWP buddies, Robin Holland and Kevin Cordi, and
my friends, Diane Hymans, Barb Northrup, Deb Parker and Anne Sylvan for reminding
me to breathe, for listening to me patiently and for providing me with opportunities to
take a break and remember that there is a world out there. My Words with Friends
buddies, Debbie Honigberg, Fiona Ellis and Cathy Lincourt, likewise, have helped
preserve my sanity and my ego by letting me win. And a special shout out to my walking
buddies, Larry and Kay Helman, who are faithfully waiting every morning at 6:15 am;
they have been patient listeners and supporters, never walking so fast that I can’t talk!

I remember Marie Clay, Charlotte Huck, Martha King and Moira McKenzie.
They were an important part of my history—my educational DNA, if you will. I would
not have pursued this path had I not had them as mentors.

Last but not least, I want to thank my family. My parents, Paul and Joan Ingram,
set me on an educational path many years ago and continue to cheer me on. My son,
Stuart, cleaned out and painted his room so that I could have my own place to write while
he was living in Cincinnati pursuing two advanced degrees of his own. My daughter,
Emily, has provided meals, TV shows when I was sick, and unending good humor
throughout this process. And finally, my dear husband, Bruce, who has been unwavering
in his belief that I could do this. He has been a constant source of formatting help,
technological support, writing advice and common sense. I give you all my thanks and
love. I couldn’t have done it without you.
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CHAPTER 1: FRAMING THE STUDY

This dissertation is concerned with the construction of opportunities to support the classroom and literacy practices of young students as they write nonfiction. The study is oriented to developing grounded theoretical constructs (i.e., “grounded in particular pieces of data that are sorted and interrelated in order to understand the dimensions and dynamics of some phenomenon as it is enacted by intentional social actors in some time and place”, Dyson and Genishi, p. 82) with regard to nonfiction writing and young children. Classroom language plays an important part in this work as it is used by the first-grade students and the teachers to engage in the literacy practices associated with their co-constructed understanding of the genre of nonfiction and the composing processes associated with it.

This chapter includes an introduction that describes how I became interested in the topic and a rationale for the study’s importance. It also includes the theoretical framework for the study, the research questions and a brief overview of where the study took place, and a description of the data collection process.

Introduction

My study arises from my interest in nonfiction for young children, my reading of the research related to the use of nonfiction in early childhood classrooms, and my own experience as a first grade teacher. My introduction to nonfiction literature for children opened my eyes to the literary characteristics and qualities of this genre as I came to
understand that children’s nonfiction was about more than just writing the facts. Moreover, as I studied the wide variety of books that were categorized as children’s nonfiction, I was also struck by the fantastical and unreal elements that characterized many of these books, and I began to wonder why it was “acceptable for school buses to fly, animals to speak and rocks to tell their life stories” (Kiefer & Wilson, 2011, p. 291) and how this affected the ways in which young children came to understand the genre of nonfiction.

There are many studies that suggest the use of nonfiction with young children is a valuable classroom practice. Reading and writing nonfiction offers opportunities for children to develop conceptual understandings and acquire scientific language in a familiar picture book format which may inform the nonfiction writing that they produce. Teachers and children take on the language and register of science as they construct their conceptual understandings and negotiate the meaning of the technical vocabulary contained within nonfiction texts (Duke & Kays, 1998; Pappas et al., 2003, 2007, 2009; Tolentino, 2007).

Similarly, recent reports (Zwang, 2011) indicating that the preschool and kindergarten years set the foundation for future learning, underline the importance of young children being provided with opportunities to read and write nonfiction in school. Moreover, the nonfiction guidelines of the Common Core State Standards where 50% of all reading and one-third of all writing should be nonfiction by fourth grade, suggest that teachers need to include nonfiction even in the earliest years of schooling.

Nevertheless, recent research indicates that despite recommendations to provide nonfiction books in classroom libraries and time to read and discuss such books, these
practices and materials are still lacking in many early elementary classrooms (Duke, 2000; Pentimonti et al., 2010; Yopp & Yopp, 2006). This research cites a multitude of reasons why teachers choose not to use information books in classrooms—reasons ranging from their own preferences to their perceived preferences of students. In any event, there is no doubt that the use of information books with young children is challenging for a number of reasons. For many children, and especially those learning English as a new language, the vocabulary of nonfiction (Hadaway, Vardell & Young, 2002; Pappas, Varelas, and Kokkino, 2007; Pappas, Varelas, & Rife, 2003) is an issue. Also, the concepts introduced in the books may be unfamiliar to many early readers. Moreover, the syntax and linguistic features used in the information text register (e.g., timeless verb use, generic nouns, pronoun references), the text features of information books (e.g., diagrams, labels, captions), and the structures employed in the writing (e.g., comparative/contrastive, descriptive, cyclical constructions) are all markedly different from the more common narrative structure of early childhood classrooms.

My own experience as an early elementary classroom teacher for 30 years resonated with the research I read. I, too, resisted using information books in my classroom for reasons ranging from my own preference and comfort with storybooks to my perceived preferences of students. I found the vocabulary and conceptual load heavy for early readers and writers. Moreover, the syntax and linguistic features used in the information text register, the text features of information books, and the structures employed in the writing all contributed to my discomfort with reading such books aloud or using them in reading groups.
Then I met Janey Jones (all names are pseudonyms), who read and wrote nonfiction throughout the school year with her first grade students. I began talking with her about the books that she was reading with her students and the writing they were doing. When visiting her classroom, I fell into conversations with her students where they blended science with fantasy, and the real with the pretend, as they constructed understandings of the genre of nonfiction and the new information they were reading. I found myself considering the gaps between the research I had been reading and the practice they reported on, between my own teaching and the teaching in Janey’s classroom. I began to wonder how to develop my own theoretical knowledge and understanding of the social and literacy practices young children use as they construct their understandings of the genre of nonfiction and of nonfiction writing.

Research on Nonfiction in Early Childhood Education

I begin with an explanation of the term “nonfiction” because it is such a contested word in the research literature. “Nonfiction” has been used across time and disciplines to describe a specific genre in literary studies. Generally the term is used to indicate any text that is not fiction including the subgenre of biography. However, in educational research other terms crop up. For instance, the term “non-narrative” is used to describe these texts in relationship to “narrative” texts or texts that tell a story (Chapman, 1995; Newkirk, 1987). Other terms include “expository text” (Cox, et al., 1991; Hall, et al., 2005; McGee, 1982), “literary nonfiction” (Moss, 2008), science trade books, and “informational storybooks” (Leal, 1993).

In the research from the last three decades it has been more common to find the terms “information” or “informational picture books” to describe books being used in
classrooms for read-alouds, reading instruction or as part of content area instruction (particularly in science). Several recent researchers have even created frameworks in order to discriminate more finely the forms these picture books might take (e.g., Donovan and Smolkin, 2002; Pappas, 2006).

While these categorizations may provide nuanced ways of describing nonfiction for young children, for the purposes of this study, I am using the term nonfiction or nonfiction picture book for two reasons. Firstly, over time writing studies have shifted to the use of this term (also using information and research) to describe the nonfiction writing young children do. Secondly, from my experience in the first grade classroom and from my observations of other early childhood classrooms, the term nonfiction comes closest to capturing the understanding that teachers and children have when writing this genre. As author Penny Colman (2007) writes: “Nonfiction is writing about reality (real people, places, events, ideas, feelings, things) in which nothing is made up” (p. 260). Echoing Colman’s words, many teachers of young children use similar language (e.g., real, not made up, not fake) when describing nonfiction to their students.

To date, while research in early childhood education looks at foundational skills of which nonfiction is a part, there is very little research specifically focused on how young students come to understand nonfiction and write their own nonfiction texts. This dearth of research has been grounded, in part, in the debate about the suitability of nonfiction books for young readers and writers. Earlier research argued that young children were much more comfortable with texts that use a story grammar and therefore should not be expected to engage with nonfiction (Shine & Roser, 1999) and these arguments have had some effect on practice in early childhood classrooms. However,
under the sway of standardized testing and accountability regimens (e.g., NCLB, RttT, CCSS), teachers have been encouraged to teach nonfiction in earlier grades as the basis for future grades where children are given nonfiction passages to read and respond to as well the nonfiction writing required in content area tests. In light of these practical testing recommendations, subsequent research has provided evidence that students are quite capable of hearing and talking about nonfiction (Tower, 2002; Duke & Kays, 1998; Gallas, 2001; Oyler, 1996; Sipe, 2008; Whitin, 2007; Whitin and Whitin, 2008).

Nevertheless, despite recommendations to provide nonfiction books in classroom libraries and time to read and discuss such books, these practices and materials are still lacking in many early elementary classrooms (Duke, 2000; Yopp and Yopp, 2006; Pentimonti et al., 2010).

Recent research is also making it increasingly clear that, although the use of nonfiction books with young children is challenging for a number of reasons, there are many reasons to use nonfiction with young children. Work by Varelas and Pappas (2006) and Pappas et al. (2007) showed that exposing young children (second graders and ELL students) to scientific writing in nonfiction texts provided opportunities for children to develop conceptual understandings and acquire scientific language in a familiar picture book format which may inform the nonfiction writing that they produce. Other research suggests that teachers and children take on the language and register of science as they construct their conceptual understandings and negotiate the meaning of the disciplinary vocabulary contained within nonfiction texts (Duke & Kays, 1998; Hadaway, Vardell, & Young, 2002; Pappas et al., 2003, 2007, 2009; Tolentino, 2007).
So, while research indicates the benefits of children interacting with these types of texts, a gap in our knowledge remains regarding how participants in a classroom come to construct understandings for writing nonfiction texts and how they take up and display these understandings. To date very few researchers have conducted studies of young children writing nonfiction (examples of such studies include Gallas, 2001; Jenkins & Earle, 1996; Oyler, 1996; Pappas, et al., 2009; Read, 2001; Varelas, et al., 2008; Whitin, 2007; Wollman-Bonilla, 2000). In much of this research instruction in nonfiction writing is limited or associated only with science lessons (Gallas, 2001; Pappas, et al., 2009; Read, 2001; Varelas, et al., 2008; Whitin, 2007; Wollman-Bonilla, 2000); further, only a few of the studies address the social and cultural aspects the classrooms (Gallas, 2001; Jenkins and Earle, 1996; Many et al., 1995; Whitin, 2007). Further, while earlier research with older students composing nonfiction texts while using sources (Langer & Applebee, 1987; Spivey, 1990; and Many et al., 1995) may provide some instructional direction as teachers work with young students, this work provides little information about the ways in which classroom participants socially construct and publicly display their knowledge. Finally, I have found no studies that specifically address how young children socially construct their understandings of the genre and its associated structures. My work will attempt to address these gaps in order to develop theoretical knowledge of the social and literacy practices young children use as they construct their understandings of the genre of nonfiction and of nonfiction writing and how these understandings change over time.

Social Constructionism

I use social constructionism as the overarching theoretical framework for my study. Social constructionism suggests that there are no universal truths or realities; rather
all understandings of what counts as knowledge are built through relationships within communities. Gergen (1999) states:

As proposed, what we take to be knowledge of the world grows from relationship, and is embedded not within individual minds but within interpretive or communal traditions. In effect, there is a way in which constructionist dialogues celebrate relationship as opposed to the individual, connection over isolation, and communion over antagonism (p. 22).

Some of the “contours” (p. 46) of social construction include the following assumptions:

- semiotic sign systems including language are themselves social constructions and therefore arbitrary (p. 47);
- language and other sign systems gain meaning from the way they are used in relationships that include not just humans but also the natural environment (p. 48);
- through “generative discourses” future understandings and actions can be transformed (p. 49); and
- there is a constant need to reflect on one’s own understandings of reality, pausing to question the natural premises inherent in any framework in order to grapple with alternative perspectives/realities (p. 50).

Within the context of my work, then, this theoretical framework helps me understand that all meaning is made as people act and react with each other: “This is to suggest that we remove meaning from the heads of individuals, and locate it within the ways in which we go on together” (1999, p. 145, italics in text). In other words, through the relationships and actions occurring within classroom communities, understanding is
constructed; moreover, there is a history to the joint constructions which occur over time (p. 146).

Moreover, there is a strong emphasis in social constructionism on language and other systems of representation: “there is no independent territory called ‘mind’ that demands attention. There is action, and action is constituted within and gains its intelligibility through relationship....we attribute thought or reason to people depending on the way they talk and otherwise act. Reason, then, is not distinguishable from effective rhetoric; thinking is essentially the ability to argue well” (133). Thus, action is most often accomplished through language.

Gergen discusses Bakhtin in describing how social constructionists view language as dialogic; that is, all utterances are “double-voiced” reflecting meanings carried forward from past dialogues that are then carried forward by the current dialogue (p. 131). In this view every utterance or text is a refraction of its previous uses and its uses in the future. Moreover, language is heteroglossic, reflecting multiple perspectives and, even within the same culture, much diversity. So as people work to “get on together” they use language to create shared understandings and values. Sometimes, this construction relies on *centripetal force* (from Bakhtin), “the tendency for our practices of communication to become singular—repetitive and conventional” (p. 81). At other times, however, language may become *centrifugal*, the force that represents disorder, and “a tendency for new words and actions to enter spontaneously into any relationships, possibly threatening, possibly transforming” (p. 82).

Thus, social constructionism emphasizes the place of language as a tool that helps participants publically construct understanding. Learning and understanding are not in
someone’s head, but rather in the relationships built through interactions between people, tools and symbols. Further, learning evolves in a public display of knowledge; that is, the task required for the public display generates the representation of the knowledge. Participants take up the resources of others to varying degrees, transforming them in the process (Bakhtin, 1981). In this way they reproduce as well as renew culture, acting on situations in social and historical ways (Bloome, 2008).

Classroom Culture and Cultural Models

As described above social constructionism locates the construction of understanding and knowledge within the social contexts of a classroom community and the relationships constructed within that community. It seems reasonable, then, to argue that, as people act and react together to build relationships with other people, they construct shared meanings and understandings. Following the work of Agar (2006), Gumperz (1982), Heath (1983), Hymes (1974) and Green (1993) among others, I call these meanings and understandings a “classroom community cultural model.” These cultural models are patterned ways of using “language to achieve goals, to learn, and to participate in the everyday activities of the classroom” (Green, 1983, p. 184). Through the ways in which participants “go on together”, the classroom community “develops shared patterned ways of engaging in life together, of seeing and interpreting the patterned ways of life, of holding members accountable to the norms and expectations of such life and of making sense out of the world around them” (Zaharlick & Green, 1991, p. 210). Or as Goodenough (2003) puts it, the group constructs “criteria for categorizing phenomena as meaningful …deciding what can be…deciding how one feels about things
(preferences and values)…deciding what to do about things…deciding how to go about doing things, and the skills needed to perform acceptably” (p. 6).

These views suggest, then, that a classroom or community culture is being constructed through the ongoing and social actions and interactions of the participants. These “shared patterned ways of ‘going on together’” as they are constructed in the everyday life of the classroom constitute a set of patterns for developing a cultural model of writing for this particular classroom. In turn, the development of a concept of a cultural model allows me to identify the “constellation of concepts, values, perceptions, practices shared by a community, which forms a particular vision of reality that is the basis of the way a community organises itself” (Capra, 1997, p. 6). Moreover, a cultural model helps me look for how the “set of ideas and beliefs about knowledge, knowing, language, and authority, which act as a filter, influenc[e] how a group perceives and makes sense of ideas and events” (p. 6). In this particular classroom, for instance, nonfiction was understood to be writing about factual information. In order to produce such writing the first graders from this classroom over two distinct periods of times and producing two different products were involved in the following activities which they constructed, acquired and took up: asking and answering questions; using sources; authoring texts; and producing nonfiction visual representations (including illustrations). These were the parts of the “constellation” or a series of cultural models which formed this particular community’s view of what it meant to be a nonfiction writer.

Within the classroom community, then, we have culturally shared, socially constructed ways of “thinking, perceiving, believing, acting, feeling, evaluating,” and using language (Goodenough, 1971)—what I am calling here cultural models. Most
often, in classroom communities, these ways of being together and constructing meaning are revealed through a public display of understanding and the routines in which the participants engage; that is, the task required for the public display or to use the routine generate understanding which is revealed through the use of language. In this way, I emphasize the place of language as a tool that helps participants publically construct understanding. Moreover, such public construction of understanding is governed by culturally determined rules (Green, 1983) or elements of social practice (van Leeuwen, 2008). Within these constraints participants take up the resources of others to varying degrees, transforming them in the process (cf., Bakhtin, 1981); they also hold each other accountable for certain ways of acting given the activities in which they are involved (Green, 1983). In these ways they reproduce as well as renew the culture, acting on situations in social and historical ways (Bloome, 2008).

Aspects and Dimensions of a Cultural Model

Although I am looking at a particular cultural model of what it means to be a writer of nonfiction in a particular classroom and how the model is taken up, adapted and changed across time, in looking for research to describe and provide a method to do this, I found nothing in the scholarship on cultural models that seemed to provide coverage of the multiple aspects and dimensions I was observing in my data. Therefore I turned to the scholarship on social practices which describes similar practices although from a different theoretical perspective. Van Leeuwen’s (2008) construct of the elements of a social practice provided me with a way to describe how a cultural model for being a nonfiction writer was constructed and taken up by classroom participants.
Van Leeuwen (2008) defines social practice as “what people do” (p. 4) and suggests that “all, texts, all representations of the world and what is going on in it, however abstract, should be interpreted as representations of social practices” (p. 5). He identifies eight elements included in social practices, or “socially regulated ways of doing things” (p. 6): participants, actions, performance modes, presentation styles, times, locations, resources (including tools and materials), and eligibility conditions for participants, locations and resources. In recontextualization, the linguistic or other semiotic elements of a social practice are transformed (p. 12). For my purposes I adapt the elements of social practice based on van Leeuwen’s work; however, my perspective is not of a particular social practice situated in a particular context but rather of how, as participants in this classroom take on a cultural model of being a nonfiction writer, the model is taken up and evolved across multiple contexts.

Building on van Leeuwen’s elements of a social practice, I developed the following heuristic to begin to describe a cultural model of being a nonfiction writer.
Table 1.1 Adaptation of elements of a social practice—Framework for being a nonfiction writer

<table>
<thead>
<tr>
<th>Locations</th>
<th>Times</th>
<th>Participants</th>
<th>Actions</th>
<th>Groupings</th>
<th>Language and discourse style</th>
<th>Resources and tools</th>
<th>Values and feelings</th>
</tr>
</thead>
</table>
| In the classroom:  
  • at tables  
  • on the floor  
  • in the book center  
In the school library | Writing Workshop time; Celebration events | students and adults working in this classroom; the intended audience for the writing | asking and answering questions (researching); using sources; using words and making authorial decisions; using visuals; publishing | whole class; small groups; one on one with an adult; parallel play | serious; playful; Wow! | books; Internet searches; other people; local knowledge and background experiences; acting out with movements, and/or objects; playing games | learning about the topic of writing; accuracy; acting like an author; having choices; learning and helping others learn |
Locations for writing included the large rug area by the door of the classroom where students sat during mini-lessons with the teacher and during whole group sharing time. When students were working on their writing they sat at tables, on the floor around the room and in the book center. At other times, students went to the school library to find books to use in answering their questions; on one occasion, I found the class seated at the computers in the center of the school library illustrating a page from their research report using an illustration software program called Pixie. Each student was then recorded reading their writing for a podcast of their report that was posted to the school’s intranet with their illustration.

Time was a relatively constant aspect in this model. Writing occurred daily during Writing Workshop, a 30-60 minute period of time which took place almost every afternoon depending on the classroom schedule. However, students also sometimes wrote, as nonfiction writers, during the Daily 5 choice time which occurred in the morning as part of Reading Workshop. Further, there were other times when children’s writing was shared and typically these celebrations did not occur as part of the Writing Workshop time. The major celebration I documented was the one that occurred at the end of the pond research report project when parents were invited to the classroom to hear the reports presented.

Participants included all the students and the adults who worked with them in the classroom setting. There was little mobility in this classroom (only one student moved out and two moved in during the course of the school year) so the student population was fairly stable. The teacher and researcher were also a constant. There were, upon occasion, other teachers who came into the classroom for a short period of time to work with either
a specific group of students (e.g., the English Language Learner teacher) or to work with all the students on a particular aspect of their writing presentation (e.g., the technology teacher). There were also three caregivers who came in during the research report writing project to work with students. These women came in to help students at least once a week for several weeks and tended to work with the same group of children which was generally defined by the child they were connected to and a few of that child’s friends. While this group comprised the immediate participants for the nonfiction writers, there was another participant often referred to—the audience. This participant varied and at various times included the other students in the classroom (e.g., during sharing time), students and teachers walking by in the hallways, the principal and parents and community members.

The *actions* I observed and coded across all the data included: asking questions and answering questions (researching); using sources; and writing and illustrating nonfiction products for the purpose of publicly displaying knowledge whether in note form or as a finished product. Asking and answering questions was latterly referred to as doing research and was the basis of both nonfiction writing projects that I observed. The variety of sources students had available to them is addressed as part of materials and tools; however, the use of sources included actions like finding the right book to answer your question, using the table of contents or glossary to locate information, using the text as a mentor for your own writing, etc. The final goal for the nonfiction projects was a published product that included writing and illustrations; however, there were intermediary pieces of writing that were included throughout this process including “I Wonder” questions and Discovery Journals.
Groupings included: times where students were gathered together seated on the rug in front of the teacher (and on occasion the researcher) for a whole group lesson or mini-lesson; small groups of students gathered to work with the teacher, researcher or other adult helper; and one-on-one conferences with one of the adults in the room. It is important to note that, in most cases when students were working in a group with an adult, they were working independently and the adult was checking in with them on a one-on-one basis. In general, I didn’t observe students working collaboratively; rather when they were working in a space side by side, they might talk about unrelated subjects, or “play around”; but generally their interactions were more like the parallel play of early childhood with little interaction focused on the writing or reading that they were doing. There were some exceptions to this general trend, however, when someone shared some piece of information that had an effect in some specific ways on other students’ research and/or writing (e.g., Hector and the fighting mosquitoes which I discuss in Chapter 5).

The language and discourse styles in my data were represented by the discourse and language used in videotaped lessons with the teacher or in conferences with myself. The tone was generally serious as students worked through the research process, writing down questions and answers. However the teacher often talked about Wow! research—information that made you say “wow” and this entered into the language of the students. There was also some playfulness in the language and style of the participants. Finally, students also acted out some of their information, using their bodies or rulers, for instance, to represent some of the information they have researched. What also became apparent across the data was how the students took up the idea that they had ownership
over their topic; this was expressed in explicit language but also through non-verbal actions.

The *resources and tools* made available to students were varied. Tools for writing included paper, Discovery Journals, file cards for “I Wonder” questions, pencils, erasers, staplers, tape, pencil sharpeners and markers. Crayons, paint and other media were also introduced when illustrating. Tools for research included books from the classroom library and the school library, class created charts constructed during whole class lessons (these described the characteristics of nonfiction and the text features associated with nonfiction), white papers or print-outs from the Internet that the teacher provided for students, and some materials brought from home. Students also made use of their own lived experiences, knowledge from popular culture (movies and cartoons), other people in and out of school, as well as some information from their several fieldtrips to the local pond.

Although my adaptation of van Leeuwen’s dimensions provided a framework of elements I could use to analyze and describe a cultural model of being a nonfiction writer, it did not fully capture all that I was observing across time. In referring back to scholarly work on cultural models, and building on Goodenough’s definition of culture, I found that, for my purposes, I could combine the heuristic of the elements taken from van Leeuwen’s social practice with Goodenough’s socially constructed ways of being. Thus, believing, or deciding what can be, was represented by time, location and participants, while acting or deciding how to go about doing things was represented by action. Deciding what to do about things and what “skills” were needed and/or useful fit under resources. Moreover ways of using language also included resources and tools as well as
ways of thinking—representing not just the choices of what to do but also how to meet the expectations of the cultural model. Based on Goodenough I also included the ways of feeling and valuing as part of the dimensions of this cultural model of being a nonfiction writer adding an element that was not reflected in van Leeuwen’s framework.

Table 1.2 Combined elements from Van Leeuwen and Goodenough

<table>
<thead>
<tr>
<th>Van Leeuwen’s elements of a social practice</th>
<th>Goodenough’s cultural ways of being</th>
</tr>
</thead>
<tbody>
<tr>
<td>time, location, participants, groupings</td>
<td>believing and deciding what can be</td>
</tr>
<tr>
<td>action</td>
<td>what to do about things</td>
</tr>
<tr>
<td>resources and tools</td>
<td>how to go about doing things and the skills needed to perform acceptably</td>
</tr>
<tr>
<td>language</td>
<td>how one feels (preferences and values) and what counts as meaningful</td>
</tr>
</tbody>
</table>

Addressing feelings and preferences in this model allows me to focus on salient aspects of particular events. So, for example in some interactions in whole group settings, Janey talked about nonfiction so that students came to understand that it was for asking and learning about information or real facts, perceiving what was meaningful and possible. Further, she modeled ways to express emotion when reading and hearing nonfiction, setting up expectations for students to react to nonfiction writing in certain ways. Students came to understand that the questions people ask about nonfiction topics were interesting, and they publicly displayed this understanding with “ohs” and “ahs”
since this was an expectation for how one feels about nonfiction. Finally, they understood
that the reasons for asking and answering questions was in order to think and learn about
new and interesting things; thus, one had to evaluate questions to make sure they were
“good” questions or ones that would help students and readers learn.

Having analyzed the data in terms of these combined elements, I arrived at the
following aspects of this cultural model of being a nonfiction writer:

• writing with questions;
• writing with sources;
• writing with words or authoring; and embedded within the other three,
• writing with visuals.

Although heuristically these aspects are examined separately, in fact they often came
together and were integrated in such a way that dividing them seems very artificial.
Further, as I analyzed the data across time, I noticed certain repeated patterns in each
aspect; for the purposes of my model I labeled these patterns as dimensions. These
dimensions reflected the elements of action, language, value and resources from the
combined model (Chart 1.2) as they were constructed and taken up within specific
aspects of the cultural model; moreover, these dimensions were recontextualized across
the two units of study that comprise the data. Finally, I have conceptualized the aspect of
the cultural model called “writing with visuals” as embedded within the other aspects
since “writing with visuals” added to and highlighted them but did not stand alone; that
is, students never wrote only with visual representations but always had words
accompanying the sketches, illustrations and other visual features.
Figure 1.1. A cultural model of being a nonfiction writer

**Writing with Questions**
- asking questions around a topic of interest to the writer
- asking questions to which the writer does not know the answer
- answering questions accurately
- writing the answers in one's own words to convey information
- using visuals to read and research

**Writing with Sources**
- using print sources (books, Internet)
- using people considered to be authoritative
- using one's own local knowledge and lived experience
- using movement
- using material objects
- building a repertoire of nonfiction visual features

**Writing with Words**
- using one's own words when writing
- using nonfiction vocabulary accurately
- writing information using mentor texts as models
- making decisions based on awareness of audience
- using visuals in writing and publication
Research Questions

As introduced above, this research centers on exploring nonfiction writing in the context of a first-grade classroom. In particular, there are two areas of interest to me: how do first grade students construct an understanding of the genre of nonfiction; and how do first grade students construct an understanding of how to compose nonfiction writing. Thus, my specific focus is twofold. Firstly, I am interested in examining how first grade students construct and take up the nonfiction genre when writing; secondly, I am interested in how these understandings are constructed socially (in relationships) and discursively during whole group instruction by the teacher and during interactions between the classroom participants.

My overarching research question is: What cultural models are constructed by participants in a classroom as they socially and discursively come to understand the genre of nonfiction and the composing processes associated with it; and how do they acquire, take up and recontextualize the practices of the cultural models made available to them as they write nonfiction?

My specific questions address the following conceptual issues:

- Previous research has shown that young children have some understanding of what nonfiction is (e.g., Chapman, 1995; Donovan, 2001; Donovan & Smolkin, 2002; Newkirk, 1987; Pappas et al., 2009; Wollman-Bonilla, 2000). For instance, research has shown that young children make a distinction between nonfiction and fiction in their writing from an early age producing texts that contain many of the features of nonfiction (Chapman, 1995; Newkirk, 1987). As students construct an understanding of the components of this genre (i.e., fact versus fiction,
nonfiction text and visual features and structures, and other possibilities inherent in nonfiction), how do they take up this knowledge about the genre of nonfiction in their discourse and their writing? How is this knowledge constructed within the context of classroom writing time and what are students doing with the knowledge?

- Research suggests that there are a variety of composing processes that older students use when they write from sources to compose a piece of nonfiction writing. These processes range from cognitive strategies like paraphrasing, summarizing and synthesizing (e.g., Spivey, 1990; Langer & Applebee, 1987) to more rhetorical concerns like awareness of audience and understanding of the writing task (Greene, 1993, 1995; Many, Fyfe, Lewis, & Mitchell, 1996; McGinley, 1992; Nelson & Hayes, 1988). What metacognitive and rhetorical composing practices do first graders take up when they write nonfiction texts and how do they come to construct their knowledge of what these processes are?

- We know older students’ compositions draw from a variety of sources: print texts (often these are privileged above all other sources), their own background knowledge, primary source material, observation, experiment and oral discourse and interactions with others. What sources (e.g., mentor and research texts, teachers’ mini-lessons, students’ talk, and students’ own local knowledge and background experience) do young nonfiction writers take up as they research and write nonfiction? How do these sources support or constrain how students construct their understanding of being a nonfiction writer?
Overview of the Study

In this study I describe how a teacher talks into being what it means to be a nonfiction writer as she reads and writes in front of students, modeling, scaffolding and mediating the expectations and assumptions constructed as part of an evolving model of nonfiction writing. I discuss how language indexed participants’ understandings of nonfiction and nonfiction writing as well as how language indicates change—that is, how did the language first grade students use to construct an understanding of the genre of nonfiction and the composing processes associated with it change over time and across contexts?

Through a lens focused on writing I analyze the classroom talk and the many texts participants produced as they wrote nonfiction. These texts included the traditional school-texts of reading and writing; but they also included oral interactions (e.g., teaching mini-lessons and conferences) and read alouds, performative texts, and drawings and other visual representations. In this study, these multiple texts were seen as nested within the framework of the genre of nonfiction and the academic content that was the subject of the writing. Through this analysis I looked for how the socially constructed meanings of nonfiction and nonfiction writing were made visible.

Location

This first grade classroom is situated in a suburban school district of a large Midwestern city. All of the 24 students remained in the room all afternoon for Writing Workshop (Calkins, 1983; Fletcher, 1992; Graves, 2003; Ray, 1999); however, during the morning, several students were “pulled out” for instruction in reading and writing with the English as a Second Language (ESL) teacher. The 30-60 minute Writing Workshop
period typically began with a mini-lesson, followed by time spent reading and writing and often ended with a whole class sharing time.

The walls of this classroom contained a great deal of nonfiction text including a child-illustrated alphabet, color and number word charts, a word wall, and an ever changing number of charts representing topics being studied, or processes being used at any given time. The classroom library also reflected Janey’s interest in nonfiction. One side of the classroom library had several bookshelves lined with plastic baskets full of books which were labeled according to nonfiction topics like weather, space, water, etc. Nonfiction books also lined the chalk ledge behind the easel.

Data Collection

I gathered data from video recordings, fieldnotes and videologs during observations made on twenty-seven days from November 2009 to May 2010. Taken together there are two main bodies of data collected across two units of study: a poster writing unit which began in November and ended right before the winter break in December; and a research report writing unit which began at the end of March and concluded with a “pond museum” celebration in May. There was additional data gathered during a family history project at the end of the school year which is not included in this dissertation. There was also an additional nonfiction writing project that occurred during February during which I did not collect any data due to scheduling issues.

The data used in this dissertation follow a number of students as they moved through instructional sequences that included reading and being read nonfiction, researching questions and producing nonfiction writing. They record how an understanding of writing nonfiction was “talked, written, and acted into being” (Santa
Barbara Discourse Group, 1992) and propose theories concerning how participants, through classroom discourses, constructed cultural models that reflected practices or were reflected in practices. Such an examination of the practices surrounding the literacy events of the classroom begins to “define who does what with written language, with whom, when, where, how and with what significance and meaning” (Bloome, 2005, p. 51) as they construct understandings of being nonfiction writers. In turn, an examination of how classroom participants act and react during literacy events provides information on how understandings of nonfiction writing change over time and context.

Before going further, it is important to note the limitations of this study. I looked at the understandings that were constructed over time by the participants of one particular classroom during one particular academic school year. In no way do I claim that this study can be generalized to all classrooms; rather through this study I attempt to generate theoretical constructs which may have some use in more generalized ways but are grounded in the work of this particular site. Further, there are many issues to investigate in any study of the literacy practices of young students as they write nonfiction; this study does not attempt to cover all of them. Indeed there are many issues that I have not even addressed including but not limited to issues related to English Language Learners (ELL), heteronormativity in classrooms, science instruction and gender issues as they relate to young children.

Organization

Chapter 2 contextualizes my study within sociocognitive and sociocultural theories that frame research done with school age students reading and writing
nonfiction. Specifically, I explore how nonfiction has been characterized in the field of children’s literature, and the ways in which it has been used in schools.

Chapter 3 describes the methodology used to design this study and to collect and analyze the data. This chapter also provides the methodological warrants or theories that guided my use of discourse analysis within the ethnographic perspective.

Chapters 4 and 5 present data and analyses delineating the aspects of the cultural model for being a nonfiction writer. Chapter 4 details the dimensions associated with the work of being a researcher. Chapter 5 looks at the dimensions associated with writing and producing a final written product. Discourse analysis in both chapters explores the way in which participants acquired, took up and recontextualized social and academic language associated with the dimensions of a cultural model of being a nonfiction writer.

Chapter 6 discusses conclusions and findings. Based on the detailed descriptions from Chapters 4 and 5 I provide a way of conceptualizing nonfiction writing for early elementary students from the perspective of learning as social and interactive processes. Further, I describe a model of pedagogy which is socially constructed and taken up through language-in-use as students write nonfiction.
CHAPTER 2: REVIEW OF RELATED RESEARCH

Nonfiction in Early Childhood Education

Over the past three decades there have been many research studies undertaken looking at young children’s capacities to differentiate nonfiction as a genre as well as how they read and write nonfiction texts. At the heart of many of these studies are the ways in which “nonfiction” is conceptualized. The word “nonfiction” has been used across time and disciplines to describe a specific genre in literary studies. Generally the term is used to indicate any text that is not fiction and includes the subgenre of biography; sometimes the term “non-narrative” is used to describe these texts in relationship to narrative texts (Chapman, 1995; Newkirk, 1987). Other terms that crop up include “expository text” (Cox, et al., 1991; Hall, et al., 2005; McGee, 1982), “literary nonfiction” (Moss, 2008), and “informational storybooks” (Leal, 1993). Meanwhile, the Library of Congress catalogs such books under the label “juvenile literature”—any book written for readers under the age of eighteen.

Recent science initiatives have introduced the term “science trade books” to refer to nonfiction with specific content for teaching science. Other recent researchers have refined the general term information books in order to discriminate more finely the forms such books might take. Smolkin and Donovan (2004) argue that, within the framework of information books, there exist four subgenres that range from providing information as part of a fictional story to more report-like or chronological formats. Pappas (2006) also
examined the range of information texts available for children and, like Smolkin and Donovan, identified subgenres among information books. She termed these books atypical or hybrid, pointing out that in many cases several genres are combined; so, for instance, a poem may be used as the frame for the information presented or fantastical elements, like magic school buses or flying cats, may appear. Meanwhile in classrooms it has been most common to find the terms “information” or “informational books” to describe storybooks being used for read-alouds, reading instruction or as part of content area instruction (particularly in the areas of science and social studies).

Thus, there seems to be no end to the terms used to describe “nonfiction” for young children. Science trade books, information books, hybrid information books, expository texts, non-narrative, non-fiction—all attempts to conceptualize “nonfiction” and to express nuances found in the texts themselves and in the stances of researchers. Although in my study I use the word “nonfiction,” in this review of the research on reading and writing nonfiction, I retain the researcher’s language in order to represent how the term is defined and where it fits into a conceptual framework. So, in looking at research done with reading aloud to young children or work done incorporating picture books into content curriculum the terms “information” or “informational books” is often used; and sometimes these studies refer to “information storybooks” or “science trade books”. Contrast this to studies of reading where, perhaps because they focus on rhetorical text structures like cause-effect or problem-solution, the term “expository text” is often used. Finally in writing studies there seems to be a shift across time in the terms used. In the earliest studies “non-narrative” was often used; in later studies, “nonfiction”,

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“information” and “research” are all used to describe the nonfiction writing young children do.

From the list of terms above, it seems evident that the concept of nonfiction in books for young children is blurry; equally blurry is how nonfiction books are defined by educators and used in classrooms. In order to get a rounded picture of how young children write nonfiction, in the following I examine how studies that look at reading aloud to young children have conceptualized nonfiction as a genre as well as how writing studies have done this. I also look at some of the work that has been done on teacher stance toward nonfiction to inform my understanding of how nonfiction is situated in classroom practices. I then look at work done with writing nonfiction with older students. Oddly, there seems to be no relationship between nonfiction writing in early childhood classrooms and what is required in middle or high school and college. While this is not to suggest that the literacy practices appropriate for older students are necessarily suitable for younger students, nevertheless, these studies provide some pedagogical information that frames the nonfiction writing of the students in early childhood classrooms.

Nonfiction in Early Childhood Classrooms

Reading Aloud Nonfiction

From work done with reading aloud and pretend reading it seems clear that exposing young children to information books offers opportunities for them to develop conceptual understandings, acquire scientific language in a familiar storybook format, and begin to acquire a register of “scientific discourse” (Duke & Kays, 1998; Maloch, 2008; Pappas et al., 2003, 2007, 2006; Tolentino, 2007). Specifically, research on
information book read-alouds shows that there is an increase in children’s language
ability associated with dialogic or interactive book-sharing (Price, 2009; Purcell-Gates et
al., 2007).

Teacher support of students when reading information texts seems to be higher, as
teachers try to compensate for the conceptual and vocabulary load (Smolkin & Donovan,
2000); in that regard, then, the talk that surrounds information book read alouds often
differs from narrative read alouds. Price et al. (2009) explored the number of extratextual
utterances (talk that surrounded the actual reading of the text) that were made by parents
and children as they read narrative and information texts. They found “robust differences
in the amounts and types of extratextual talk that occur when parents and preschool-age
children share [narrative] storybooks and expository books” (p. 190). Likewise in studies
by Shine and Roser (1999) and Tower (2002), preschoolers’ responses during discussions
with teachers reflected the language and text structures of the read aloud genres; in the
case of information books, this included the use of timeless verbs, generic nouns, and
pronoun references used in the text.

In work done with reading comprehension (Hall et al., 2005; McGee, 1982),
researchers indicated that explicit instruction in the text structures of information texts
(cause-effect, description, sequence or procedure, enumeration, problem/solution, and
compare/contrast) improved reading comprehension as measured by recall of facts.
Students’ comprehension also improved when they were shown how to use nonfiction
textual features, clue words and graphic organizers (Hall, et al., 2005). While this work
was mainly done in the context of reading instruction, I believe that it also points to the
type of support that young readers need as they listen to nonfiction read aloud.
However, studies on the use of information books in reading instruction continue to indicate that there is a dearth of information books in classroom libraries and in texts used for reading instruction or read alouds (Duke, 2000; Moss, 2008). Despite the call to include more nonfiction in classroom instruction, a recent study of the number of nonfiction books in early childhood classrooms found that early childhood teachers rarely used informational genres in the preschool classrooms and when they did they tended to use hybrid texts where the information was relayed in a story format (Pentimonti, et al., 2010).

**Writing Nonfiction**

Since nonfiction books in classroom libraries and read alouds are so underrepresented as compared to fiction, it comes as no surprise to find that young students do not ordinarily write information texts of their own choice (Chapman, 1995; Jenkins & Earle, 1996; Oyler, 1996). Instead students’ choices when writing are predominantly narrative stories, even when they are hearing and seeing information books as part of instruction and being invited to write information texts. There have been various explanations offered for this predilection for story. One group argues that narrative is primary for young children (Nystrand, 2006; Shine & Roser, 1999)—the genre of choice for retelling, reading and writing. Another group of researchers suggest, instead, the need to balance the preponderance of story narratives in the classroom reading program in order to familiarize young students with the language and structures of nonfiction genres (Duke, 2000; Kamberelis, 1999; Tower, 2002).

What does seem to be clear from the research, however, is that, if children are given models of information texts and provided with instruction and opportunities in
authentic settings to write information texts, they are able to do so. Whether in research settings, where students research and write information texts or in more naturalistic settings, young writers produce texts that contain many of the features of nonfiction (Chapman, 1995; Newkirk, 1987; Purcell-Gates et al., 2007). Sometimes their writing may combine genres to create a hybrid; at other times, they approximate the mature representation of the genre. The ability to produce more elaborated, mature nonfiction genres improves over time (Newkirk, 1987; Donovan, 2001; Donovan & Smolkin, 2002). Moreover, work done specifically in the science content area indicates that young students acquire scientific register and content, and these are reflected in the writing and illustrating that they do (Pappas et al., 2009; Wollman-Bonilla, 2000). However, it is important to note that this body of research has focused on writing that occurred during free choice writing time or writing that was assigned as part of an experimental design. These studies did not address what happened when children were exposed to information books and instructed in nonfiction genres as part of literacy practices of a classroom community.

Other studies that focused on students’ nonfiction writing as part of specific units of instruction found that they take up nonfiction writing in a variety of ways that range from copying text verbatim to transforming the knowledge by integrating information from various sources (Jenkins & Earle, 1996; Many et al., 1995). Some factors that seem to affect their literacy practices include the student’s perception of the task itself (Many et al., 1995), the audience for whom the writing is intended (Wollman-Bonilla, 2000), and the ability of writers to distance themselves from the content (Read, 2001). Further, several studies pointed to the importance of considering illustrations and drawing as part
of the composing process since, with children this young, much of the complexity and sophistication of their thinking was expressed through other modes than the writing (Pappas et al., 2009; Varelas, et al., 2008).

Almost nowhere in the research literature, however, is there a study describing young writers learning how to ask questions, conduct research using a variety of sources and then write in a nonfiction format to convey their explorations and findings within the context of a classroom community’s writing time. While a number of books have been written for teachers about how to teach about and use information texts and nonfiction writing at elementary grade levels (Bamford & Kristo, 2004; Freeman and Person, 1992; Harvey, 1998; Robb, 2010; and others) and about the genre of literary nonfiction (Dorfman & Cappelli, 2009; Fletcher and Portalupi, 2001; Ray, 2006), there are very few empirical studies that address this topic in the elementary grades and only a few that address the topic with the youngest elementary school writers (Gallas, 1993, 2001; Jenkins & Earle, 2006; Many et al., 1996; Pappas et al., 2003; Read, 2001; Varelas et al., 2008).

One empirical study that described the process of children writing nonfiction within a classroom community is the work of Pappas and Varelas and the ISLE teachers in Chicago (2008, 2009). Their work was specifically focused on information writing within science units which included hands-on experiences and read-alouds using information books. While their work is informative, both for describing the intertextual connections students use when talking and writing about science topics and for its examination of drawing as part of the nonfiction composing process, it was centered in the science content area and described writing that was used as an assessment of science
instruction. It does not look at the process that students and teachers use as they research and write in a certain way. This study, however, attempts to describe the understandings were constructed when students and teachers used research to write as nonfiction writers apart from instruction focused on any specific content area; in this way the study adds to the early childhood field’s understanding of how young children construct their knowledge of writing nonfiction.

Gallas’ work (1993, 2001) takes place within her own first grade classroom community and looks at the imaginary play and science talk and journals of first graders. Her observations as a researcher and a classroom teacher helped her to understand how young students “incorporate their personal understanding of the world into the knowledge they receive in schools” (1993, p. 11). Furthermore, through talk, journaling and play, students moved beyond a search for the “correct answer”. They moderated their talk; restated, revised and extended their ideas; questioned and asked for clarification; gave credit and called for order amongst the group. Through such talk the students developed oral language skills which allowed them to express the relationship between their own thinking, imagination and the scientific knowledge with which they were engaged (1993, p. 24). This study furthers some of the work that Gallas has done by describing the understandings that students take up and adapt as they “play around” with the dimensions and aspects of being a writer of nonfiction.

In conclusion, research provides indications of the benefits of children interacting with information texts (Duke & Kays, 1998; Pappas et al., 2002; Tower, 2002). By listening to and talking about information books during read-alouds, young children begin to take on the specialized vocabulary of a topic and have opportunities to use the
academic language. Moreover, studies indicate that young writers are able to use appropriate voice and generic features to approximate nonfiction writing. Many et al. (1996) and Jenkins and Earle (2006) have shown how children in classrooms use source texts (in a variety of forms) as they write; Pappas and Varelas describe how children use illustration within the nonfiction composing process. I now turn to an examination of what research reveals about teachers’ stances toward nonfiction.

Instructional Stance on Nonfiction

The research indicates clearly the need to include information books in classroom instruction for both reading and writing. Yet, apart from simply being unsure about what nonfiction is, there are a multitude of other reasons that teachers do not use information books in primary level classrooms—reasons ranging from their own preferences to their perceived preferences of students. For many children, and especially those learning English as a new language, the vocabulary of nonfiction content is an issue (Pappas et al., 2007; Varelas and Pappas, 2006). Also, the concepts introduced in the books may be unfamiliar to many early readers (Duke & Kays, 1998; Hadaway, Vardell, & Young, 2002; Pappas et al., 2003, 2007, 2009; Tolentino, 2007). Moreover, the syntax and linguistic features used in the information text register (e.g., timeless verb use, generic nouns, pronoun references), the text features of information books (e.g., charts, labels, captions), and the structures employed in the writing (e.g., comparative/contrastive, descriptive, cyclical constructions) are all markedly different from the more common narrative structure of early childhood classrooms.

When researchers looked at the teachers’ stances teachers about what to include in classroom libraries and instruction, the uncertainties and misunderstandings become
apparent. In a small teacher survey conducted with ten teachers, Donovan and Smolkin (2001) addressed some of the issues that occurred as teachers thought about information book selection, especially to support science instruction. While these elementary teachers were interested in providing accurate, readable and entertaining books, they showed little concern with the explanation of scientific phenomenon or the work of science. Further, they assumed that science was boring, so children’s books were needed to add feeling and motivation to the science instruction. Finally, all the teachers felt that information books were impossible to read aloud (pp. 434-436).

In a later study Donovan and Smolkin (2002) argued that teachers needed to be trained in how to evaluate information books. In a survey of the kinds of books frequently classified as information science books, they found that information books that were suggested for science instruction often contained inaccuracies while the number of informational ideas presented in many of these information books was very limited. This lack of concept rich text coupled with story structure and language did not help young students with concept development; nor did it support the acquisition of the language of science. Teachers, the researchers suggest, need to be able to assess information books for their generic features, content, and visual features (p. 517) in order to support student learning of this significant genre.

Finally a brief note about what the early childhood research has to say about copying. In his study of 88 children from kindergarten, first and second grades, Kamberlis (1999) examined the use of cultural artifacts or tools as children wrote stories and science reports. He argued that “[i]f the appropriation of cultural artifacts can function as a zone of proximal development, we may want to question the assumption
that writing from models, and even copying, has no pedagogical value and may even be
detrimental to development....such practices may facilitate development and learning” (p.
166). This observation is particularly relevant in light of other studies done with
elementary age writers (Many et al., 1996; Jenkins and Earle, 2006) where verbatim
copying is often characterized as plagiarism. In keeping with Kamberlis’ observation,
writing workshop advocates (Ray, 1999; Dorfman & Capelli, 2009) advocate the use of
mentor or model texts of nonfiction (and more often literary nonfiction) writing, a
practice grounded in the rhetorical approach. They suggest that students borrow the
author’s words verbatim to frame the content they have researched. How does this
influence our understanding of what primary level students might be doing or capable of
doing as they write nonfiction? Are copying and model texts, in fact, valuable tools that
might help our younger writers as they write from sources?

In summary, while there are studies that point to the importance of using
nonfiction in classrooms as well as young students’ abilities to take up the literacy
practices associated with the genre, the picture of how children learn about nonfiction and
are supported as they work in classroom contexts to create nonfiction texts is still
incomplete. I am left wondering where the research is that shows, to paraphrase Ron
Scollon, “How the discursive practices of schools and classrooms produce students as
writers of nonfiction? How do these young students perform nonfiction writing? And
what tools do the students appropriate to accomplish the construction of themselves as
writers of nonfiction?” With those questions in mind, I now turn to studies of nonfiction
writing, or writing from sources, in middle and secondary classrooms.
Nonfiction in Middle School and Secondary Classrooms

While writing in the elementary school is informed by understandings of how emergent writers develop and what their spelling reveals about their writing development, writing in the middle and secondary schools seems more concerned with teaching grammar, rhetorical traditions and process writing that is often accompanied by instruction including sentence-combining, genre features and model texts. In the following section I review some of the research related to older students writing from sources or writing nonfiction in terms of its possible relevance for constructing an ecologically valid approach for use with younger students writing nonfiction. I look at the cognitive or sociocognitive approach and the rhetorical approach. I end with a consideration of the implications of this research for early childhood education.

The Cognitive or Sociocognitive Approach

The cognitive and sociocognitive research constructs writing from sources as a recursive process made up of “in the head” operations. While it is not within the scope of my dissertation to look at cognitive strategies that students might use when writing nonfiction, the myriad activities that this research describes (Langer, 1986; Langer and Applebee, 1987; Newell and Durst, 1993; Spivey, 1990) point to the recursiveness and nonlinearity of the writing from sources process.

Appreciating how messy and complex this process is would be important for primary classroom teachers for two reasons. Firstly, by appreciating the various activities that could be involved in writing nonfiction, teachers would be better able to support their young writers as they engage in writing nonfiction by being aware of the various parts of the global process of writing with sources. Secondly, teachers would have an
understanding of the variability of the process for individual learners. It is apparent that no two children would engage in this process in exactly the same way; teachers need to be sensitive to the way children are engaging in the process through discussions of their products and questioning for the thinking behind them, for instance.

*The Rhetorical Approach*

The social and cultural contexts within which nonfiction writing occurs is taken up more fully in the rhetorical approach with its attention to genres as culturally constructed patterns associated with social action and with its focus on the use of writing as a communicative act which uses “language as a symbolic means of inducing cooperation in beings that by nature use symbols” (Kenneth Burke in Lindemann, 1995, p.37). Since knowledge of genre and the rhetoric of exposition are part of the communicative competence or cultural capital that makes up literacy practices, and since researchers have shown that elementary age children are aware of genre (Chapman, 1995; Kamberlis, 1999; Langer, 1985; Newkirk, 1987), rhetorical teaching about writing from sources at an early age seems appropriate. In fact professional educational resources (Dorfman, L.R. and Cappelli, R., 2009; Harvey and Goudvis, 2000; Stead, 2001) provide lessons on the text structures of expository or nonfiction texts for teachers to use with elementary age readers and writers.

Given that understanding, the studies from the rhetorical approach provide several insights useful to teachers of primary level writers. Firstly, when writing from sources, writers developed an impression of what their purpose is. This impression varied widely; according to Many, et al. (1996) and Nelson and Hayes (1988) it can run the gamut from believing the task was to fill one’s source notebook with information, to collecting
interesting information, to transforming information into a new piece which would be of interest to an audience. This task impression was a rhetorical issue—one of audience—but Greene (1995) also argued that it was a predictor of how the students performed the research task. Many et al. (1996) contend that it impacted the kinds of strategies the writer used while composing. This work suggests, then, that teachers need to be explicit and clear in conveying the purpose for the writing; further they need to check their students’ understanding throughout the process.

Secondly, research studies with older students indicate that the social context and sense of audience have an effect on writers. Greene (1995) described two writers who made very different choices about what they included in their writing based on their perceptions of their roles as writer and their audience. In his study Greene also referred to work done by Higgins (1992) in an inner-city community college. She found that although these students used their personal knowledge and beliefs to vet the sources they were using when composing from sources, they did not include any of these experiences in their writing unless it was tacked on as a summary paragraph. Like Greene’s student they made choices based on their perceptions of their audience and their roles as writers, placing little value on personal, local or background experience. Nelson and Hayes (1988) showed that providing an audience other than the teacher affected the kinds of strategies college students used when writing from sources. Based on these collected findings, it seems important that teachers assist young writers in defining an audience for their writing, and discuss how the audience impacts the choices available to them. Teachers also need to help writers see the roles that they can take within the instructional
setting (e.g., readers and writers, critics and decision makers, knowledgeable authorities and consumers of disciplinary information).

Finally, the rhetorical approach recognizes the importance of sign systems other than written texts especially as regards the use of new technologies. Kress (1999) in his discussion of genre theory alluded to the new world where genre is part of how people describe texts but texts are no longer subsumed by the label of the genre. He described three categories of text: the aesthetically valued text, the culturally salient text and the mundane text (p. 468). Dyson’s studies of early childhood writing (1992, 2003) highlighted how culturally salient and mundane texts (e.g., media, popular culture and visual images) from outside of school influence young children’s writing. This has particular relevance for teachers of young children writing from sources. As Many et al. (1996) discovered, a simple drawing with a label might involve very complex thought processing. Moreover, although texts were privileged in the research work writers did, teachers needed to help students understand that there are other sources of information that are equally valuable (e.g., the oral accounts used by one of the students in the Many (1996) study, or the cultural background ignored by one of the students in Greene’s (1995) study.

The Instructional Approach

Studies from the instructional approach indicate that the ways in which teachers constructed nonfiction writing tasks had an impact on the ways in which students performed. When the teacher provided feedback, valued original thinking, scaffolded students through the research process, supplied model texts and provided an audience other than the teacher (Knudson, 1989; Nelson and Hayes, 1988; Newell and Johnson,
1993) students assimilated information to produce original thinking. Similarly, the Many et al. (1996) study described a classroom in which “(t)he social relations within this class were such that the teacher did not assume the role of expert or dispenser of knowledge; instead, learners routinely engaged in problem solving and in investigation in collaboration with both the teacher and peers. Children commonly sought information from one another, went to other classes for information or as peer tutors, and worked on individual assignments at their own rate” (p. 15).

By developing their understanding of these issues teachers are able to make a pedagogical shift in their writing instruction. For instance, the science, English, home economics and social studies high school teachers in Langer and Applebee’s (1987) study revealed how, through reflective practice, teachers were able to make pedagogical shifts in their writing instruction. This study illustrated how teachers reflected on and shifted the ways in which they taught as they considered the functions writing might serve in their disciplinary content. Nystrand and Graff’s (2001) description of a writing classroom’s study of argumentation gone awry supports these studies’ findings by underscoring the point that teachers need to understand how they are constructing the nature of knowledge as well as how the classroom structures “establish what counts as knowledge in their classrooms” (p. 491).

Summary of Review of Research

In sum, I have reviewed research concerning the role of nonfiction reading and writing practices in elementary grade classrooms as well as what “writing from sources” looks like in middle and secondary grades. Studies from all these areas indicate that students benefit in their academic learning from many opportunities to hear and discuss
nonfiction in early childhood classrooms. Some of the studies also imply that these sources should be high quality models. Further, these sources should not be just books. Students need opportunities to interact with visual and other media as exemplars of source texts and as “reading” experiences to enjoy and discuss.

This review also suggests that writing nonfiction is a messy and complex task. Studies of older students indicate the need for explicit teaching of the strategies and scaffolding of students’ efforts. This, in turn, might suggest that explicit teaching about nonfiction and scaffolding as support is also necessary as young students begin to write nonfiction. Moreover, in classrooms where writing nonfiction was valued as a high-risk activity, experimentation, the use of personal knowledge and belief and approximation were accepted and valued. In these classrooms students came to see themselves in multiple roles: as an authority with something to write about; as an author communicating with an audience; and as a learner inquiring about a topic.

Finally, there are very few empirical studies that address how early childhood classrooms are supporting the youngest elementary school writers as they move to nonfiction texts. This study attempts to provide a picture of how young students can be supported in early childhood classrooms as they acquire the practices of nonfiction writing while still engaged in the playfulness characteristic of this age group.
CHAPTER 3: METHODOLOGY

In this chapter, I provide details concerning the research design and methodology used in the study. I begin with the research questions and then include the framework and warrants for the methodology, a discussion of my role as researcher, a description of the research setting and population, an account of how the data were collected, and, finally, a detailed account of how the data were analyzed.

Research Questions

My overarching research question was: What cultural models are constructed by participants in a classroom as they socially and discursively come to understand the genre of nonfiction and the composing processes associated with it; and how do they acquire, take up and recontextualize the practices of the cultural models made available to them as they write nonfiction? Specific, related questions include:

- As students construct an understanding of the components of nonfiction, how do they take up this knowledge in their discourse and their writing?
- What metacognitive and rhetorical composing practices do first graders take up when they write nonfiction texts and how do they come to construct their knowledge of what these processes are?
- What sources do young nonfiction writers take up as they research and write nonfiction? How do these sources support or constrain how students construct their understanding of being a nonfiction writer?
Methodological Framework

This study is located within the broad field of the social and cultural literacy practices of young children reading and writing. As a researcher I position myself within the field of ethnography because the ethnographic perspective focuses on cultural and social processes. I define cultural processes using Street’s definition of culture as a verb in which he argues for “the importance of treating the term ‘culture’ as signifying process—the active construction of meaning—rather than the somewhat static and reified or nominalising senses in which culture used to be employed in the discipline of anthropology” (Street, 1993, p. 23). My experience within classrooms has led me to understand that students and teachers construct culture or ways of doing things, making meaning and being together in order to engage in day-to-day life.

Further, the interactional ethnographic perspective is appropriate because it includes particular ways to understand language as a social and cultural process; that is, as a logic-in-use it is oriented to exploring, not explaining. Ethnography views language as a key cultural and social process used to build and extend social relationships and construct meaning and knowledge over time. Thus, this approach provides me with a way to explore participants’ construction of knowledge and understandings as revealed through language within specific contexts over time, while considering the broader social, historical, and political contexts of academic spaces (Bloome et al., 2005; Bloome et al., 2008).

Discourse analysis provides me with a method for transcribing and analyzing the language which participants in the classroom used as they constructed understandings and knowledge over time. By analyzing transcripts of talk, I am able to discover how the
teacher, through the use of language, constructed with students the norms and
expectations for the academic and cultural practices associated with writing nonfiction in
large and small group settings, and the ways in which students, through their writing and
the talk about their writing during one-on-one conferences, acquired and took up the
practices the teacher modeled and talked about with them.

Methodological Warrants

Social constructionism introduced me to the idea that there is a constant need to
reflect on one’s own understandings of reality, pausing to question the natural premises
inherent in any framework in order to grapple with alternative perspectives and realities.
As a researcher, I recognize that my research design and analysis foreground certain
stances and values that I have as a researcher and that, as a result, I background other
perspectives. This is of some relevance as I consider the field in which my work is
situated. For instance, researchers with a children’s literature background have specific
guidelines for identifying nonfiction for young children and the ways such literature is
used in classrooms; and science educators argue for real and factual representations of
scientific realities within scientific nonfiction. Just as these researchers’ understandings
are ideologically and socially constructed, they, in turn, have helped to construct my
academic understandings of nonfiction; likewise my thirty years of classroom teaching
have also socially constructed my understanding of classroom life and first grade literacy.

My warrants, then, are based on several understandings. Firstly, I take the view
that classroom participants make meaning as they act together during literacy events.
Here I use definitions from Bloome et al. (2005): an event is “a bounded series of actions
and reactions that people make in response to each other at the level of face-to-face
interaction” (p. 6); literacy events are: “events in which written language plays a nontrivial role” (p. 5); and classroom literacy events are: “a cultural practice involving the use of written language associated with ‘doing classroom life’” (p. 50). Events presuppose that groups, not individuals, are acting in relation to each other in non-linear ways and across multiple occurrences to produce meaning that is located in the joint action and history of those who are doing the acting.

Secondly, over time I have come to understand that participants in classrooms use language to produce many texts as they act and react to each other. These texts include the traditional school-texts of reading and writing; but these texts also include oral interactions and read alouds, video recordings, performative texts, and drawings and illustrations. Further these multiple texts are nested within ideological institutions (e.g., schools, school districts, neighborhoods, etc.) as well as in disciplinary ideologies (e.g., genre, academic content areas, etc.).

Finally, I recognize that schools, as sites of cultural practices, are not just places where students individually acquire academic knowledge. As Gergen puts it, “This is to suggest that we remove meaning from the heads of individuals, and locate it within the ways in which we go on together” (1999, p. 145). Acknowledging classrooms as sites of cultural practices helps me recognize the dynamic and fluid nature of classroom literacy practices and the ways in which they are socially constructed, acquired and transformed. These, then, are the understandings of reality that are inherent in my methodological warrants.
My Role as a Researcher

During the nine months of this study, I positioned myself as a participant observer in a first grade self-contained classroom. As a participant observer, I observed and participated in the whole group mini-lessons, on occasion even teaching or reading aloud as invited by the teacher; I held conferences with students during Writing Workshop time or worked with teacher-assigned groups; and I met with the teacher for planning sessions during lunch hours. In these ways, I participated in the daily life of the classroom and came to share in the mutual knowledge of the first grade community.

My own background placed me in a unique position in the classroom. Because of my extensive experience teaching first grade and my training as a Literacy Collaborative coach, the teacher (who was only teaching first grade for the third year) often consulted me about reading and writing practices, occasionally asking me to teach a guided reading group, or conferring with me about book levels, student’s reading progress and scheduling issues. While I sometimes felt that I was being treated as an outside authority, I always felt welcomed and accepted in my role as a participant observer. As time went on, I was even characterized by the teacher as the “grandmother” teacher/researcher, an affectionate term she used to indicate the enjoyment I derived from working with children based both on my own experience as a first grade teacher but also based on the understanding that I was able to “give the children back” at the end of the day.

During observations of whole class mini-lessons and during sharing times, I usually sat at the back or to the side of where the students were seated on the carpet facing the teacher and a large easel holding a pad of chart paper. During writing times, I sometimes circulated around the room holding the video camera and asking students
questions about their work or listening in to their talk. At other times I sat with a small
group of students and worked with them. During these times I acted like a teacher,
discussing the writing, asking questions for clarification, mediating understandings, and
making suggestions.

I am certain that the presence of the video camera changed the dynamics of the
classroom throughout the data collection period. For instance on December 9, I noted in
my field notes: “Hector was in the nurse’s office when I signed in and when he saw me,
he said he was better and came down to class with me. Is this the power of the camera?”
Then, according to my field notes from the next day (December 10), I talked with the
teacher about the camera’s effect: “I have begun to wonder if Janey and I should talk
about structuring my work in the classroom a little differently. We touched on it briefly
while I was leaving and maybe need to talk more on Tuesday at lunch. She thinks a lot of
it [the student behavior] is honest excitement and does not relate to the camera.” By the
time that the students left for winter break, however, my presence with the camera had
become more routine and there was no more discussion recorded in my field notes about
the effect of the camera, although undeniably it continued to have an influence on the
surroundings.

Research Setting

Location

Byrd Elementary School is one of 14 elementary schools in the ninth largest
district in the state (c. 15,700 students). It is located to the west of a large metropolitan
school district and sandwiched between three smaller suburban districts within the county
in which it is situated. The school district serves an area covering 60 square miles and a
population of about 28,500 according to the 2010 census. Between 1989 and 2000 the under-18 year old population more than doubled which meant that the school district built several new buildings during that time.

According to the school website there are 38 academic and administrative staff members in the building; according to the school report card, 80% of the academic staff at the school hold a Masters degree. The demographics of the school in relation to the district as a whole are detailed in Chart 3.1. As can be seen from this chart the school has a higher percentage of Hispanic, Limited English Proficient (LEP) and economically disadvantaged students than the district as a whole.

<table>
<thead>
<tr>
<th></th>
<th>Total population</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Other</th>
<th>Economically Disadvantaged</th>
<th>LEP</th>
<th>Identified With Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
<td>14,945</td>
<td>78.7%</td>
<td>5.7%</td>
<td>4.8%</td>
<td>10.8%</td>
<td>22.4%</td>
<td>7.3%</td>
<td>11.4%</td>
</tr>
<tr>
<td>School</td>
<td>486</td>
<td>71.2%</td>
<td>3.0%</td>
<td>16.7%</td>
<td>9.1%</td>
<td>36.5%</td>
<td>24%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Data from 2010-2011 academic school year, [www.ode.state.us](http://www.ode.state.us)
Negotiating Access

I had been attending meetings at Byrd during the previous year as part of an initiative that Janey had asked the Columbus Area Writing Project (CAWP) to join. Janey had been a fellow of the CAWP Summer Institute during the summer of 2007 and, as a result of her work with the CAWP, she had applied for and received a grant from the Martha Holden Jennings Foundation for the 2008-2009 academic school year. With the funds secured by this grant and the support of her principal and some of the CAWP co-directors, Janey worked with her staff to create a “model writing school” where the teaching of writing became a school-wide effort. During these meetings and preparations for the meetings, I had occasion to work in Janey’s classroom, observing her teaching with students as well as her work with her peers. When I approached her at the end of the 2008-2009 academic school year about the idea of being a research site for a grant that I had been awarded, she was very enthusiastic and welcoming.

Once Janey expressed her willingness to be involved, I approached the school principal. I met with her, presenting an outline of the study as I had written it up for the Center for the Study and Teaching of Writing grant. She, too, expressed interest and support in the study, asking only that I abide by the school rules regarding visitors signing in and out of the building for the sake of security.

Teacher History

Janey had taught for 18 years at a variety of grade levels including special education, third, fourth and fifth. She moved to Byrd from another elementary school in the district in August, 2007 to teach a first grade classroom. It was of interest to me that she structured nonfiction writing throughout the year. The year I collected data in her
classroom was her third year at that grade level. As well as being an experienced elementary classroom teacher, she had also attended the CAWP Summer Institute (2007), was a Nationally Board Certified Teacher (2004) and had taken part in professional committees, school district sponsored book studies and attended conferences throughout her career. Further, subsequent to this study, she received the 2010 NCTE Donald Graves Elementary Writing Teacher Award.

In Janey’s first grade classroom there were 23 or 24 students depending on the period of data collection. There were 14 or 15 boys and 9 girls. There was little mobility in her classroom although one girl moved out about halfway through the year and a boy and a girl moved in at about the same time. Her class was self-contained but five students were pulled out for English as a Second Language (ESL) instruction every morning and two of her students received Title 1 Reading Intervention. All of the students went together to Physical Education, Art and Music classes one afternoon a week. Five of her students identified as Mexican-Americans; one of her students was adopted from Guatemala and another from Russia. One of her students was bi-racial and another had family ties to Puerto Rico. He identified more as an African American than as Latino, however. Finally, one student identified as Asian-American although the father had been born in the United States; another had family from Italy. The students came from mixed economic backgrounds with some of the students designated as economically disadvantaged.

Before data collection began Janey explained to me her instructional plan for teaching nonfiction writing. She had used a similar plan the previous year, her second year in first grade, and was adjusting the instruction this year based on experiences from
the previous two years. She began the year with a poster writing unit which helped
students learn how to ask questions and use sources. In the middle of the year students
wrote a thinking bubble where they collected information about a topic and presented the
information in a bubble or web-like format. She ended the year with the more formal
research report focused on a pond animal—a habitat that all the first-graders in the school
studied. Observing during two of these three instructional cycles, then, provided me with
an opportunity to see how Janey constructed students’ understanding of the genre of
nonfiction and how to write it in different contexts and across time.

Tools for Data Collection

During September and October, while I was waiting for IRB approval and the
return of student permission forms, I visited the classroom several days a week, teaching
a guided reading group and interacting with students during reading and writing time.
During this time I introduced the use of the video camera so that students would be used
to seeing me with it. The “official” use of a video camera to capture data began in the
middle of November. At that time I began to use the camera to describe, interpret and
represent the day to day life of the participants in the classroom, an activity often referred
to as video ethnography (Goldman, 2007). Using video recording in this way allows the
researcher to be in the classroom and with the participants capturing rich details to tell the
complex story of the events of the group (Goldman, 2007).

I recognize, however, that the video camera and the data it produces are no more
neutral than a researcher’s field notes. The perspective of the camera is as biased as that
of the observer. Recognizing this, I chose to hold the camera rather than placing it on a
tripod; thus, I videotaped what I was physically looking at as the teacher and students
interacted with each other and with me. As a result, there is panning and zooming, motion and turning that is inconsistent with the recommendations of the guidelines on video research panel (Derry, 2007). I feel, on the one hand, that this use of the camera allowed me to capture many more details than I would have been able to if I were simply writing fieldnotes. On the other hand, it also recognized the camera as a participant in the ongoing actions and events of the classroom. As a researcher using new digital technologies, I hoped that this action would help me heed Goldman’s (2007) caution that we avoid

observing the real lives of children and teachers in their habitat, not realizing that some element of what we do has a long history based in a worldview that encourages us to shoot, capture, dissect, and organize the bits and pieces of embodied chunks in systemic and “objective” practices—to build one best Truth bespoke by the gathered evidence (p. 33).

My first set of data were collected during the Writing Workshop segments of the classroom day beginning in mid-November and ending in December, right before the beginning of the winter break. During this time, I was able to visit the classroom two or three times a week depending on the schedules of the teacher and myself as well as late start days which were part of the school calendar. I resumed data collection beginning at the end of March and continued up to the end of the school year. During both periods of data collection, I captured video and still photographs. I sometimes copied student’s work but more typically I took photos with the video camera which also functioned as a still
camera. I wrote field notes at the end of each visit during the first data collection period but ceased to do that during the second data collection period.

My lack of field notes in my later data was due, in part, to my use of a video log. At the end of each week of data collection for both periods of data collection, I created a detailed video log. Using a spreadsheet format, I reviewed all the video from the previous week in real time and recorded what I was seeing and hearing according to date, clip and time. The video log detailed the actions that made up events across a recording period. It served as a place to record what the camera had captured and heard, as well as a space in which I could add comments, notes and questions that arose as I re-watched the events. In this way the video log served both as a log of the events on the video and as field notes recorded after the actual observation; as Green characterized it the data was boiled down and cooked up in the videolog (Discourse Analysis workshop, June 4, 2012).

The complete corpus of data, then, consists of 27 days of video-recording divided into sections where I turned the camera off during transitions. These video recordings include whole group lessons, sharing times and/or individual conferences lasting from one to two hours each day, and typically taking place in the afternoons. The corpus of data also includes fieldnotes and video logs from all of these sessions and photos of all 24 “I wonder” questions in poster format. Taken together there are two main bodies of data collected across two periods of time (November 26-December 16, 2009 for a total of 9 days of lessons lasting 30-45 minutes; and March 29-May 27, 2010 for a total of 18 days of lessons lasting 30-45 minutes). The teacher-led lessons (8 mini-lessons in the autumn and 12 mini-lessons in the spring; 1 read aloud in the autumn; 2 small group lessons in the autumn; and 2 whole group sharings in the autumn and 4 whole group sharings in the
spring) comprise whole class social and literacy events where the teacher and students socially constructed their joint understanding of nonfiction and nonfiction writing. The individual conferences between the researcher and students (8 in the autumn and 17 in the spring) provided opportunities to observe how particular students acquired and took up the social constructions in their talk and writing.

Analysis

Erickson (2006) describes three approaches to video data analysis: inductive, or whole-to-part; deductive, or part-to-whole; and manifest content approaches. Throughout my analysis process I used an approach similar to the steps that Erikson describes in the inductive approach. These steps included viewing and logging the recorded event in its entirety, then focusing on smaller episodes within and across events which are transcribed, coded, and analyzed for nonverbal behaviors, etc. These episodes could be viewed with the participants for their reactions; they should also be viewed again to determine typicality or atypicality across all the data and to see how representative the episodes were within the context of the larger body of data. Since I am interested in the content of the talk insofar as it relates to the construction of an understanding of being a writer of nonfiction as well as the social contexts within which this writing and talk occur, the several steps of this analysis proved to be most useful.

Phase I: Initial Viewing and Logging of Data

A preliminary analysis of the data began immediately after I had collected it as I entered the events in the recordings into the video log (as discussed above). Likewise, I viewed a few excerpts of the video with the teacher during our lunchtime visits. Serendipitously, we had begun this during one lunchtime, when Janey requested
information about a student’s reading level. I had worked with the student the previous
day and happened to have the video clip on my laptop; we were able to watch the
interaction between the student and myself during a writing conference and discuss some
of the concerns Janey had in relation to the intervention teacher’s concerns for this child.
This viewing allowed us to work together in a comfortable and collegial way with the
video, demystifying the act of videotaping; but more importantly, it set the stage for other
conversations about the data from the teacher’s perspective. During these lunchtime and
other informal conversations I tried to heed the tenets of ethnographic studies which view
participants as agents in the creation of knowledge and social order (Rex, 2001).

Phase II – Organizing the Data and Transcribing Events

In July of 2011, I watched all the video recordings again and added details to my
existing notations in the video log. I was also able, at this time, to identify particular
events which I viewed again to determine how representative or typical they were within
the context of the larger body of data. Transcriptions of these shorter events occurred
after I had viewed all the data; however, while I was making additional entries into the
video log, I often entered a phrase quoted directly from the recording or made note of
words that seemed to be key in the classroom conversations. During this phase I also
organized all the digital photographs that I had into folders arranged by date.

At this point I divided the corpus of data into two parts. One part dealt with the
unit where students produced a poster as a final project. I called this the poster writing
unit. It had two subsections which included the whole group lessons with the teacher and
the conferences I had with students. The second part dealt with the unit where students
wrote a research report on a pond animal. I called this the research report writing unit.

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also had two subsections which included the whole group lessons with the teacher and the conferences I had with students.

I organized the data in several ways throughout this process. Firstly, I had transferred all my video data to thumbnail versions. This allowed me to keep the large quantity of material on my desktop where it was easily accessible. Further, although the quality of the video is poor, it was much easier to navigate through this video format to locate and review specific events or episodes as I identified a need to view them more closely. Another way that I had organized the material was by using a spreadsheet format for my video log. This provided me with an unbounded table format; it also allowed me many options for sorting and coding my material as I moved forward with my analysis.

After referring to the questions with which I had begun this study, I identified certain events for transcription and closer analysis. At this time I transcribed twelve conversations between individual students and me that had occurred across both units. There were seven conversation transcribed from the poster writing unit and five from the research report unit. I also transcribed one conversation in its entirety of a whole group lesson held during the poster writing unit and one sharing session held during the research report unit. The criteria used to identify the smaller episodes of interest for transcription included my understanding of literacy events as bounded actions that classroom participants engaged in as they acted and reacted with each other to construct social, cultural and literacy understandings. As Bloome (2005) puts it:

> if literacy events are theorized as spaces in which people concertedly act on their circumstances and act on and with the literacy practices that are given and available, and that the conception of literacy exists not in
some background abstraction or shared cognitively held cultural model
but in its doing, then people are conceptualized as creators and actors..., even if the creation is a reproduction of what has been (p. 6).

All of the episodes I transcribed involved a literacy event where teachers and students were constructing, acquiring or taking up some aspect of their understanding of being a nonfiction writer.

The other criteria that I used to determine which episodes to transcribe were episodes where “imaginary moments” occurred (also akin to rich points, frame clashes or surprises). Gergen (1999) described “imaginary moments” as spaces where “participants join in visions of a reality not yet realized by either. These imaginary moments not only sow the seeds for mutual building....They move toward common purpose, and in doing so redefine the other as ‘us’” (p. 163). In considering what Gergen’s description of “imaginary moments” looked like in transcribed data, I turned to Fairclough’s definition of cruces to provide some guidance for what these imaginary moments might look and sound like in actual discourse as people go on together. Fairclough (1992) wrote that cruces are the “moments in the discourse where there is evidence that things are going wrong: a misunderstanding which requires participants to ‘repair’ a communicative problem, for example through asking for or offering repetitions, or through one participant correcting another; exceptional disfluencies (hesitations, repetitions) in the production of a text; silences; sudden shifts of style” (p. 230). In most cases the extended episodes that I transcribed included such stretches of speech within the larger conversation with the only exceptions being the one whole group lesson (mentioned earlier) and one whole class sharing.
Phase III – Searching for Themes and Patterns

Across both bodies of data the social practice of request-for-display of knowledge occurred as adults asked students about the work they were doing. These request-for-display events provided an opportunity to observe how socially constructed meaning and understanding evolved, not as a hidden personal variable, but rather as a publicly constructed presentation of academic knowledge. Within and between these request-for-display events, the teacher or researcher presented socially constructed understandings which the students then wrote or talked about in ways that were not always exact. This is consistent with social constructionism which suggests that what is mutually constructed by the group is held by the group and not by an individual. Or as Green and Meyer (1991; from Floriani, 1994) put it: “The cultural knowledge of an individual, therefore, is always dynamic and an individual’s repertoire of knowledge can be extended as she/he interacts with other members of the social groups and/or with other social groups as part of everyday life” (p. 144).

After completing the initial cataloging of my video recordings and photographs, I printed out my field notes and the video log, and began to survey the corpus of data related to the poster unit, looking for and describing patterns in the social, literacy and request-for-display events associated with the study of nonfiction and nonfiction writing. I noted ways that classroom participants constructed and developed a working consensus of what nonfiction and nonfiction writing were coming to mean. As patterns began to emerge in the whole class lessons, I consulted the conference data to confirm and describe more fully how those patterns were acquired and taken up by particular students. I then repeated this process with the research report data.
Phase IV – Analysis of Data

Having identified several themes or patterns within the corpus of data (e.g., using sources, being an author and content expert, visual and text features, asking and answering questions), I then returned again to my research questions to ensure that I aligned my analysis with them. As I considered my first question, What cultural models are constructed by participants in a classroom as they socially and discursively come to understand the genre of nonfiction and the composing processes associated with it; and how do they acquire, take up and recontextualize the practices of the cultural models made available to them as they write nonfiction?, I turned to van Leeuwen’s construct of the dimensions of a social practice. This rubric helped make visible how elements of social practices are related to each other; thus, it provided me with a way to begin to describe how a cultural model of nonfiction writing was being constructed by the classroom participants.

Adapting the rubric, I re-examined the data, identifying the particular elements within events in terms of action, language, resources, audience and tone/value. I created separate maps for whole group instructional sequences and for conferences between students and me. Sections of sample maps from the research report unit are given below. Note that the events represented in the first table (Table 3.2) occurred during the whole group lesson on March 30 and the events of the second table (Table 3.3) occurred during writing time that same day when I was working one student.
Table 3.2. Map of research report unit, whole group conversations

<table>
<thead>
<tr>
<th>Date</th>
<th>Teacher Action</th>
<th>Teacher Language</th>
<th>Resources</th>
<th>Audience</th>
<th>Teacher Tone/Value</th>
<th>Student Action</th>
<th>Student Language</th>
<th>Student Tone/Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/30</td>
<td>Teacher refers to the chart of the questions that students have begun to generate and continues to add to the chart</td>
<td>“We are going to start doing research”; “what are some questions we want to share”; “questions we all want to answer”; can you ask other questions not on the list?</td>
<td>chart with questions that students might ask about pond animals; books on the cart from the school library</td>
<td>the people who will be coming to the pond museum—parents, siblings, other teachers and students</td>
<td>researchers ask questions about their animals; they can ask questions that are not on the chart but the questions must relate to the topic</td>
<td>students ask specific questions which the teachers places in more general categories</td>
<td>Maddox asks a practical question about the museum and teacher directs him back to research questions—keeping to the topic</td>
<td>researchers ask certain types of questions; as writers or authors students are able to make certain decisions</td>
</tr>
</tbody>
</table>
Table 3.3. Map of research report unit, Writing Workshop conferences

<table>
<thead>
<tr>
<th>Date</th>
<th>Participants</th>
<th>Action</th>
<th>Language</th>
<th>Resources</th>
<th>Audience</th>
<th>Tone/Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/30</td>
<td>Eban and me</td>
<td>I ask Eban what question he is researching; he tells me he is looking for what fishing spiders eat and then he looks in index of his book</td>
<td>“I know they eat fish, but I don’t think that’s the only thing they eat”; Eban finds the word prey in the index and I say: “That would be what they eat, right?”</td>
<td>Discovery Journals and source books</td>
<td>I am an audience for Eban</td>
<td>researchers ask questions about their topic; they work with nonfiction text features and scientific language to find answers to the questions and then write them down</td>
</tr>
</tbody>
</table>
The maps of the elements of these literacy events helped me refine the themes that I had noted in my initial analysis. As I analyzed the maps I was able to define and organize the themes more clearly, which eventually led me to identifying the aspects of a cultural model of being a nonfiction writer and the dimensions that were part of each aspect. For instance, in the map of the whole group lessons (Table 3.2), the teacher (coded in purple on the left side of the dark line of the chart) constructed an understanding about how nonfiction writers write with questions. Further, through her actions and language, she identified the types of questions that the students should be asking about their research topic. Likewise, she indicated to students that they had certain resources available to them that related to the work they would be doing as researchers and writers. Finally, she identified an audience for the students.

On the right side of the dark line (coded in blue) students interacted with the teacher during the lesson, publicly displaying the ways in which they were acquiring and taking up the construction of being a nonfiction writer. They asked specific questions about the pond animal they have been assigned, and Maddox asked about the audience. During this interaction, students were also positioned as authors or people who had decisions to make about their writing in relationship to their audience.

In Table 3.3 (coded in green) I interacted with a student as he acquired and took up what had been constructed during the whole group conversation. Often during these conference conversations, students and I were co-constructing our understandings as we acted and talked together. Although I acted as an audience for students, I was also positioned as a teacher who asked questions about the work in progress, mediated content...
understanding and served as a resource. In this example with Eban, I directed him to use the index and mediated his understanding of the nonfiction term, *prey*.

After examining the data in this way I constructed a cultural model that reflected four of the aspects that I found represented across the data. I called these four aspects: writing with questions, writing with sources, writing with words and writing with visuals. I then returned to the data to identify the dimensions that were part of the aspects. I read and reread the maps, listened to and viewed selected sections of the whole group lesson video recordings and transcribed short segments of talk that seemed to be representative of these dimensions. Through this iterative process I was able to identify the dimensions that made up each aspect of the cultural model (Figure 3.1).
Figure 3.1 A cultural model of being a nonfiction writer

- **Writing with Questions**
  - asking questions around a topic of interest to the writer
  - asking questions to which the writer does not know the answer
  - answering questions accurately
  - writing the answers in one's own words to convey information
  - using visuals to read and research

- **Writing with Sources**
  - using print sources (books, Internet)
  - using people considered to be authoritative
  - using one's own local knowledge and lived experience
  - using movement
  - using material objects
  - building a repertoire of nonfiction visual features

- **Writing with Words**
  - using one's own words when writing
  - using nonfiction vocabulary
  - using mentor texts as models
  - making decisions based on awareness of audience
  - using visuals in writing and publication
As I analyzed the dimensions across both units I also discovered ways in which the dimensions were recontextualized across time and contexts. Using van Leeuwen’s description of recontextualization, I identified the ways in which the dimensions of each aspect were recontextualized from the poster unit to the research report unit. I used the following definitions from van Leeuwen (2008): substitution, particularization, generalization, deletion, addition, and repetition as I analyzed the data for recontextualization.

Finally, I returned to the longer conference conversations that I had transcribed to look for how students took up and adapted the dimensions of the cultural model during writing time. Using Green and Wallat’s (1981) discourse analysis method, I parsed the transcript into utterances, and analyzed each utterance to see how students were acquiring and taking up the discourses of the dimensions of the aspects of the cultural model. A sample transcript is given below. Note that each aspect of the cultural model is coded according to the dimension that was represented in the discourse.
<table>
<thead>
<tr>
<th>Date</th>
<th>line</th>
<th>speaker</th>
<th>utterance</th>
<th>comment</th>
<th>questions</th>
<th>aspect</th>
<th>sources</th>
<th>aspect</th>
<th>words</th>
<th>aspect</th>
<th>visuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/7</td>
<td>27</td>
<td>Casey</td>
<td>but I really wanna know, like</td>
<td>reference to what writers are passionate about</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td></td>
<td>how big they are (3 second pause) [looking up and away from me and paper]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Melissa</td>
<td>So both like how tall they grow,</td>
<td>repeating for clarification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30</td>
<td></td>
<td>how, how much they weigh</td>
<td>repeating for clarification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Casey</td>
<td>How like [spreading arms]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[ overlapping speech]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Date</th>
<th>line</th>
<th>speaker</th>
<th>utterance</th>
<th>comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td></td>
<td>Melissa</td>
<td>How wide</td>
<td>providing vocabulary</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td>Casey</td>
<td>wide</td>
<td>taking up vocabulary</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[portion of transcript omitted]</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td></td>
<td>Casey</td>
<td>When, when the swan has its wings out</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td></td>
<td></td>
<td>I read that page because it looked pretty interesting.</td>
<td></td>
</tr>
</tbody>
</table>
By analyzing the conference conversations I was able to investigate my other research questions: As students construct an understanding of the structures of nonfiction, how do they take up this knowledge in their discourse and their writing? What metacognitive and rhetorical composing practices and sources do they take up when they write nonfiction texts? As can be seen from this excerpt of Casey’s talk about researching information about her topic, the swan, she made use of dimensions from all the aspects of being a nonfiction writer. This is reflected in the coding which indicates dimensions within all four aspects of the cultural model. So, for instance, under writing with questions, Casey asked questions that she indicated she was interested in learning and to which she didn’t already know the answer. The coding also indicates that she was using a book as her source in her research and that an illustration in the book was guiding some of her research.

Summary

I collected and analyzed the data using ethnographic methods and discourse analysis in order to investigate the research questions. This allowed me to follow a number of students as they moved through an instructional sequence that included reading and being read nonfiction, researching questions and producing nonfiction writing. By analyzing the language used during the daily literacy events, it was possible to make visible the social and literacy practices that were used and valued in this classroom as participants constructed and acted on their understandings of nonfiction as a genre and as they wrote nonfiction. In turn this provided a picture of the complexity of teaching and learning as participants used language to co-construct and mediate
knowledge, acquiring, taking up and recontextualizing literacy practices that were fluid and evolving.
CHAPTER 4: DATA ANALYSIS

Doing Research

The next two chapters address the ways in which a cultural model for being a nonfiction writer was constructed by members of this particular classroom. As discussed in Chapter 1, I understand the construction of understanding and knowledge to be located within the social contexts of a classroom community and the relationships constructed within that community. As people act and react together to build relationships with other people they construct shared meanings and understandings. The culture that is constructed reflects these “patterned ways of engaging in life together, of seeing and interpreting the patterned ways of life, of holding members accountable to the norms and expectations of such life and of making sense out of the world around them” (Zaharlick & Green, 1991, p. 210).

Of interest in this chapter is the question: What cultural models are constructed by participants in a classroom as they socially and discursively come to understand the genre of nonfiction and the composing processes associated with it? Because this chapter deals with the aspects of the cultural model that had to do with researching (writing with questions and writing with sources), I also address two other questions. The first is the question of how knowledge about the genre of nonfiction writing was constructed and taken up by the classroom participants. The other question concerns the
sources (e.g., mentor and research texts, teachers’ mini-lessons, students’ talk, and students’ own local knowledge and background experience) young writers have available to them and how they take them up as they research and write nonfiction; further, I describe how these sources support or constrain students’ construction of their understanding of what it means to be a nonfiction writer.

To examine these questions I employ a narrative description of the talk that occurred during whole group lessons where Janey talked into being what it meant to write with questions and sources. I begin with the first unit, the poster writing project and then move to the research report unit. I focus on how her talk and the actions and reactions of the community members shaped their understandings of doing research—the work that authors did as they chose a topic, asked questions about the topic and read sources in order to find answers to their questions. This narrative description details how Janey scaffolded and mediated student activity to facilitate the acquisition of a shared cultural model; it also describes how she sometimes modeled or enacted for students the ways in which they should act. Further, I provide details of how students took up the opportunities made available to them as they acquired the stance of being a researcher.

In transcriptions that accompany each description of the writing units, I use discourse analysis to look more closely at the ways in which the dimensions of writing with words and writing with sources were introduced and discursively constructed by community members. Here I examine how the teacher made visible and scaffolded for students the assumptions and understandings of what it meant to be a researcher. Finally
I end with an examination of how these dimensions within each aspect were recontextualized over time.

One of the aspects of the cultural model of being a nonfiction writer that had to do with research was “writing with questions.” The dimensions of writing with questions included:

- asking interesting, topical questions;
- asking questions to which one did not already know the answer;
- answering the questions accurately by using sources; and
- writing the answers in one’s own words to show one’s learning.

In the first half of this chapter, I describe how the participants in this classroom discursively constructed the dimensions of this aspect of the cultural model during the two writing units. I begin by describing how Janey introduced students to the task of researching by having them ask “I Wonder” questions; she moved on to having students answer their questions, recording the answers in their Discovery Journals. As students worked on their research reports, she narrowed the topic so that only certain questions were available to ask, and the emphasis of the research process was on answering those topical questions. I also describe how students discursively and materially acquired and took up these dimensions as they moved from writing a question and answer for a poster to producing a several page report focused on an animal or insect found in a pond habitat. After examining the dimensions of writing with questions during the two nonfiction units, I then analyze how the dimensions of writing with questions during the poster unit were recontextualized to the research
report as the classroom participants engaged in this more academically rigorous form of nonfiction writing.

Writing with Questions: Part 1, November and December Posters

During the nonfiction poster writing unit the participants in the classroom began to co-construct their understandings of this aspect of the cultural model of being a nonfiction writer. They began with an understanding of the literary genre of nonfiction. This understanding had been constructed through whole class lessons and opportunities to explore nonfiction children’s literature during the weeks previous to the beginning of the unit in mid-November. Participants had come to understand that nonfiction books told about “real” information even if sometimes there were make believe or “not real” elements in the books. In the following post from Janey’s blog, she described what she observed happening during one lesson:

As I began our unit on informational texts, I wanted to make sure the kids had a solid understanding of the difference between fiction and informational texts. After looking at several examples of non-fiction books and creating a Venn diagram comparing fiction and non-fiction, I gave the students piles of books that included both kids of texts. I wanted to listen to their thinking and see if they could sort them accordingly. They did a great job. They were able to articulate their reasoning for sorting books. They looked at non-fiction conventions (table of contents, photographs of real things as opposed to illustrations of things that could never happen), the topic of the book, whether or not the book told a story, etc. I was feeling pretty smug, thinking I had done such a good job of teaching this concept. (A little like the smugness I felt with my oldest daughter who was really very well behaved. Then my son came along and reality hit!).

Then… I noticed S. had Me and My Place in Space in the fiction pile. I had this book in our nonfiction section of the classroom library. I began
to wonder about this misconception. I decided to bite the bullet and ask him and his partner why they had put this book in the fiction pile. (Remember, too, that Melissa is in my room videotaping the whole conversation for her research…Yikes! I was hoping that I could carry this off!) We started to look through the book with the whole class. As we paged through the text and looked at the pictures, we could see without a doubt that the illustrations lent themselves to “fake fiction.” A girl wearing a homemade box space suit floats through the solar system. The drawings looked like those we saw in many fiction stories. The class was sure that this book was indeed fiction. But then, I started to read the text. There were facts about space interspersed among the pages. We could learn from this book!

(from Raising Readers and Writers, Archive for November, 2009, Is it Fiction? Is it Nonfiction?).

In my field notes from around this same time, I had observed the following incident which is also indicative of the ways in which the participants struggled to make sense of the genre of nonfiction as represented in the classroom library books. As Janey was working with the students constructing a T-chart, listing the characteristics of nonfiction and fiction, a student came up and indicated with hand motions and words that there should be a space in between the fiction and nonfiction columns of the chart where these types of books could be listed. Here again, students were grappling with the notion of “hybrid” informational storybooks, where fantasy and narrative elements were interspersed with topical content; in this case, the student almost literally constructed, through his hand motions, a space for these sorts of books that was separate from those occupied by fiction or nonfiction books.

Based on their constructed understanding and exploration of nonfiction children’s books, during this unit Janey spent some time introducing graphic and text features that are typical to nonfiction. These included: table of contents, labels, diagrams (including the life cycle), cutaway illustrations, photographs and captions,
bold print, glossaries, and others. As these features were introduced, the information was recorded on chart paper and these charts remained up in the room throughout the unit for review and reference. Interspersed throughout these early lessons on nonfiction text features, however, was also information about the process that nonfiction writers or “scientific researchers” (as Janey and the students sometimes called nonfiction writers) used. It is the part of this process that I call “writing with questions” that I examine in detail in this section as it occurred during the poster writing unit.

Interesting Questions

Janey introduced writing with questions through “I Wonder” questions which she described as questions that students were “wondering about” or, as she also described them, “a question that they would pick to research”. Students were given 4x6 index cards and a manila envelope. These index cards were labeled “I Wonder” question cards and the envelope was a place to keep them together. During writing time, students were told to look through books for questions and write the questions down. The use of the word “wonder” in the label for the “I Wonder” questions was echoed in the teacher’s talk about the questions being interesting. For example, during one group lesson on November 16 she invited Carlos (an ELL student) to pick a page from a snake book she had used during the lesson (Carlos was very interested in snakes at this time). After he picked a page, she skimmed the page, saying “Oh, my gosh, listen to this” before reading. As she read, a group of boys, who all were interested in snakes, chorused her reading with “ohs” and “ahs”. After she finished reading, another boy, Maddox, asked: “Is a mamba faster than my power boat?” to which she answered, “No,
not faster than your power boat.” This sequence was repeated throughout the poster writing unit—students looked through books, reading as they were able, looking at pictures and other visual features, and asking questions that they were interested in and wondering about. Then they wrote those questions down on their cards, sometimes drawing sketches to accompany their questions and saved the cards in the manila envelopes for later use.

When I asked Casey about this process, she explained to me: “During Daily Five [reading group time] I got some cards and looked in books and found some questions I thought were interesting and so I wrote them down.” Her language reveals how she has taken up the teacher’s use of the word “interesting” as part of this routine associated with the “I Wonder” questions. At another point, when Carlos showed me a picture of a snake eating a frog, I asked how they [snakes] could do that. Janey immediately asked Carlos, “Is that a good question? Can you write that down?” In brief, at that time in that classroom, good questions were questions that came from looking at nonfiction books and the good questions were “interesting”—something that made you say “oh” and “ah” or even “wow”.

This is reflected in Janey’s own words in a blog posted on December 9. Here she is writing about the questions that her students are asking:

We are in the middle of our nonfiction study. Our classroom literally buzzes with excitement over all the newfound knowledge. I believe a huge part of that is the fact that the kids get to ask the questions. I am not asking them to answer my questions. They each have “I Wonder” envelopes for their questions and a Discovery Journal where they can write about their learning. So, the questions they are asking are those that are important to them
Here again, there is language that indicates excitement—an excitement about having choice to ask questions interesting to the students as learners.

*Questions with unknown answers*

Writing with questions was not simply about writing down questions that students were wondering about. On November 17, towards the end of a whole group lesson where students had been looking at the use of labels in a book on ants, Janey asked them to generate some questions they were wondering about when they looked at labels in the ant book. Maddox asked, “Why do queen ants have wings?” and Jeannie asked: “How many lenses does an ant have?” These questions were accepted by the teacher as “great” questions. Then Stewart asked: “Why do ants have legs?” Janey repeated his question with a rising tone. Then she said, “Why do you think ants have legs?” with an emphasis on the word “do.” Stewart responded, “To walk.” At that point in the exchange, Janey said to Stewart, “I think that you probably need to do a better job of paying attention, OK?”; she did not indicate that his question was a good or interesting question.

Later, during writing time, I had a follow up conversation with another student, Maria, about her question, “Why do we have a table of contents in books?” At this point, the students in this classroom were experts on tables of contents, and so I said to her, “So you already know the answer to that question. Ask a question you don’t know the answer to.” Janey picked up this same question during sharing at the end of the Writing Workshop time. Maria was invited to stand up by the easel to help teach the
class “something really important.” After she read her question about the table of contents, Janey asked, “Did you already know that answer? Did you want to ask a question you know the answer to? Does that help us as learners?” She then asked Maria to read the question she had written to which she didn’t know the answer; Janey told her that question was “a really interesting question.” During this lesson, then, good, interesting questions were differentiated from easy questions. Good questions were constructed within this aspect of the cultural model of being a nonfiction writer as questions people were interested in and wondering about, but good questions were also questions writers did not already know the answers to when they asked them. Janey legitimated this by saying that, “asking questions we know the answers to does not help us as learners.”

Later, on December 8, after reading Maddox’s question, “How do seeds grow?” I revisited this dimension of the aspect of writing with questions. I asked him if he really didn’t know how seeds grew since he was reading a book about it. He replied that he didn’t know how the water got them to grow. With this clarification, I then replied, “That’s a pretty good question, then.” As a participant in the classroom, I had also constructed an understanding that the questions students asked should not only be interesting to them or something they wondered about; they should also reflect something they were learning about (i.e. they should not be asking known-answer questions); Maddox had constructed a similar understanding as was evidenced by his additional explanation of his question where he explained what he was learning by asking his question.
The above examples reveal the way in which this dimension of the “writing with questions” aspect of this cultural model was co-constructed in this classroom. Janey proposed that students ask interesting questions, questions that made them wonder. They took this up with their “ohs” and “ahs” during read alouds, and in their language describing their questions. However, when students began to ask questions that seemed obvious, questions to which they should already know the answers, Janey made visible an underlying assumption of writing with questions by articulating that interesting questions were also questions “we don’t already know the answer to.” She went on to explain that asking questions that students already knew the answer to did not help them either as learners or as researchers who write with questions. In this way the action and reaction between the students and the adults in the classroom made visible this particular aspect of the cultural model of being a nonfiction writer that had previously only been assumed by the teacher.

Finding Answers to Questions

On November 30 Janey introduced Discovery Journals; first (in the morning) to the students who remained after the ESL teacher removed that group for reading instruction and then later (in the afternoon) to the returned ESL students. In the videotape clip of the lesson with the ESL students she began by posing a question: What is snow and how does it fall from the sky? She modeled looking for books that might answer the question by going to a basket in the nonfiction section of the classroom library. She said, “We have a basket about sun and rain and snow. It’s a big word that starts with W-; it is the weather basket.” She then chose a book, looking in the
front for a table of contents. When she discovered that there was no table of contents, she began to look through the book for pictures of snow. She read several pages to the students and together they decided she had not yet found the answer to her question. Then, she read a page that answered her question. At that point she showed the Discovery Journals to the students and modeled how to use them. She began by pointing out that at the top of each page in the journal there was a space for the date, question and title of the book; then, she wrote her question and reread it; next, she wrote her answer; finally she drew a picture “to help me remember because sometimes authors write their information in pictures”. She further described the Discovery Journal as “a place to keep your thinking”.

The procedure for using a Discovery Journal can be summed up in the following way: ask a question; go to the nonfiction part of the classroom library; find a basket with books to answer your question; look for the information in a table of contents; if there is no table of contents look through the pictures; when you find something that looks useful, read and see if you can find the answer to your question. Then write the question and the answer in the Discovery Journal; you can also draw a picture or sketch because nonfiction authors often write information in their pictures. Although much of this procedure was similar to the one used with the “I Wonder” cards, it was different in one important way; students were making a discovery—“what is my answer to my question?” They were expected to write (and illustrate) the answer. From that lesson on, then, finding answers to questions became an important dimension of the “writing with questions” aspect of the cultural model of nonfiction writing.
As students were finding answers to the questions they had on their “I Wonder” cards and in their Discovery Journals, Janey talked to them about this work. On December 8 and 9 she referred to the hard work it took to answer questions. During the sharing time on December 8, when Maddox told her it had taken him three days to find and write the answer to his question about how does snow fall, she said, “Wow! That’s hard work!” The next day during the whole group lesson, she referred to Ben’s question from the day before about a peach having a pit. She asked him if the answer was hard to find and, when he replied, “Yes,” she responded with, “But you found it!” That same day she told the students: “Your job today is to go back and pick a question from your ‘I Wonder’ cards, find a book to answer it and then put the answer on the back of the card.” So, as students moved from simply asking questions to answering them, the tone of her discourse shifted. While asking questions that were novel and interesting was an important beginning to their work as researchers and nonfiction writers, now they had to take on the job of answering those questions and that was going to require hard work.

In the previous section I have described how during the poster writing unit students took up the dimensions of the “writing with questions” aspect of the cultural model by asking questions generated by their own interests and/or sparked by the text, illustrations and text features of the myriad nonfiction books available to them in their classroom library. When several students began to ask questions that they knew the answer to, Janey made clear an underlying assumption of writing with questions; that is, “interesting” questions were those that helped the writer and reader learn new information. Then, as students continued to write with questions, understandings of the
dimensions of finding the answers to questions, writing the answers in their own words and producing a final published product were constructed.

Before turning to how the aspect of “writing with questions” was constructed during the research report unit, I use discourse analysis to take a closer look at how Janey talked into being the dimensions of the “writing with questions” aspect of the cultural model during the poster writing unit. I use transcribed conversations that occurred during whole group lessons during this unit.

*Discursively Constructing Writing with Questions, Posters*

As has been depicted in the previous descriptions “writing with questions” included the dimensions of asking interesting questions, asking questions to which one didn’t already know the answer and answering the questions using sources. As researchers and writers of nonfiction, students were expected to ask and record questions that were interesting to them and therefore, it was implied, questions that would be interesting to their readers. Further, it was expected that they would ask questions to which they themselves did not know the answers because questions with known answers did not help the writer (or reader) learn anything new. Finally, researchers answered their questions using the variety of sources available and recorded the answers on “I Wonder” cards or in their Discovery Journals.

In the following transcript I examine how the dimensions of “writing with questions” were discursively constructed by the teacher and students during the poster unit. I have included one example in which Janey constructed for students what they were to be doing when they were writing with questions. While this talk was embedded
in a much longer whole group lesson where much more information was discussed, for
the sake of cohesion, I have pulled out this section of the lesson to show the ways in
which Janey discussed the dimensions of this aspect of the cultural model.
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
<th>Dimensions of “Writing with Questions”</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/17</td>
<td>1</td>
<td>Janey</td>
<td>Envelopes down [referring to the “I Wonder” question manila envelopes]</td>
<td>management comment</td>
<td>interesting questions</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>cause Maria’s going to teach us something</td>
<td>Janey positions the student as the teacher</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>really important</td>
<td>emphasis on really to indicate the importance of what is going to be discussed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Maria</td>
<td>How [reading from “I Wonder” card]</td>
<td>mis-reads</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Janey</td>
<td>Why</td>
<td>gives correct word</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Maria</td>
<td>Why does they have table of contents in the book? [reading from card]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Janey</td>
<td>OK</td>
<td>accepts the reading of the written down question</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td>So her first question was</td>
<td>indicates that this is one of more than one questions to be continued</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comments</td>
<td>Dimensions of “Writing with Questions”</td>
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<tr>
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<td>--------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>discussed</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>Why do they have table of contents in the book?</td>
<td>repeats the question to focus whole group attention on the question</td>
<td>x</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>But</td>
<td>indicates that there is a problem</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>Did you already know the answer?</td>
<td>you is directed at the individual student</td>
<td>x</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Maria</td>
<td>[nods yes]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Janey</td>
<td>Yeah</td>
<td>repeats and validates student response</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td>Do we want to write down questions</td>
<td>now addresses the whole group with the use of we; use of write positions this question asking as part of the writing work of students</td>
<td>x</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>we already know the answer to?</td>
<td>continues to address whole</td>
<td>x</td>
</tr>
</tbody>
</table>
|      |      |         |                                                                          |                                                                         |                                        | continued
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td></td>
<td>students and Maria</td>
<td>No</td>
<td>group with use of <em>we</em>; echoes the question she has just asked Maria</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Janey</td>
<td>No</td>
<td>repeats and validates response</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>Cause does that help us as learners?</td>
<td>use of the word <em>cause</em> to signal a reason; <em>us</em> refers to members of the group and they are also positioned as <em>learners</em></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>students</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>Janey</td>
<td>No, no</td>
<td>repeats and validates response</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>So we want</td>
<td>mis-start</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td>So what did you decide to do?</td>
<td><em>you</em> addresses Maria individual; <em>decide</em> hearkens to authorial role</td>
</tr>
</tbody>
</table>

**Dimensions of “Writing with Questions”**

<table>
<thead>
<tr>
<th>questions</th>
<th>answers</th>
<th>unknown</th>
<th>finding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Maria</td>
<td>Throw it out in the trash.</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Janey</td>
<td>Yeah</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Janey</td>
<td>we’re just not gonna use that question</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Janey</td>
<td>and your gonna get</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Janey</td>
<td>[Maria walks to the trash can and throws the card away]</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Janey</td>
<td>[Janey looking toward me]Oh, she’s gonna do it for us.</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Janey</td>
<td>Cause we want questions we don’t know the answers to</td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
<th>Dimensions of “Writing with Questions”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30</td>
<td></td>
<td>Right?</td>
<td>discussion to the whole group with <em>we</em></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>So</td>
<td></td>
<td></td>
<td>ending segment about table of contents question and initiating a new sequence</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>What is your next</td>
<td>starts question</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>what’s your next question</td>
<td>repeats start</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>that you don’t know the answer to</td>
<td>reiterates the qualification for this question; individual is addressed (<em>you</em>)</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Maria</td>
<td>How does (.2) [reading from another “I Wonder” card]</td>
<td>begins reading and then waits at unknown word</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>36</td>
<td>Janey</td>
<td>raccoons</td>
<td>Janey tells Maria the word that she has stopped at</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

continued
### Transcript 4.1 continued

<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
<th>Dimensions of “Writing with Questions”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37</td>
<td>Maria</td>
<td>raccoons find their food?</td>
<td>continues reading her question</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>Janey</td>
<td>Oh excellent</td>
<td>evaluates question</td>
<td></td>
</tr>
<tr>
<td></td>
<td>39</td>
<td></td>
<td>[Janey writes on the chart paper] How do raccoons find their food?</td>
<td>Janey repeats question as she writes it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
<td>That is a really interesting question.</td>
<td>evaluates this question <em>(interesting)</em></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td></td>
<td>Excellent.</td>
<td>evaluation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>42</td>
<td></td>
<td>Have a seat.</td>
<td>management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43</td>
<td></td>
<td>Who else has a really, really good question?</td>
<td>addresses the whole group; use of the word <em>good</em> in relation to <em>interesting</em></td>
<td>x</td>
</tr>
</tbody>
</table>
This event occurred early in the poster writing unit and on the same day that Stewart had asked the question, “Why do ants have legs?” In this whole group lesson that occurred during the sharing time at the end of Writing Workshop, Janey constructed with students the understanding that the interesting questions that they were asking also needed to be questions to which they did not know the answers. When this conversation began Janey had already invited Maria up to stand next to where she herself was seated at the front of the group. Not only was this an unusual place to stand when sharing one’s writing, Janey then positioned the student as a teacher or someone who was going to teach the group something during this sharing session time (line 2). She emphasized that this teaching was not about something trivial, but rather was very important (line 3) and then Maria proceeded to read (with some help from Janey) her question from the index card where she had written her “I Wonder” question (lines 4-6). Janey accepted and validated the question (lines 7-9). Then, she marked discursively that they had reached the point where there was a problem or something to be discussed (line 10). She continued by asking Maria if she knew the answer to the question that she had asked before she wrote it down (line 11).

Janey and I had already spoken with Maria about this question during Writing Workshop time; further, part of the mini-lesson that day had been spent talking about tables of contents and looking at one that Ray had brought from home in a Lego catalog. Therefore, Janey herself was asking Maria a question that she knew that Maria was going to answer in a certain way; this was a staged performance, if you will. However, Maria’s nod of the head (line 12) provided the opportunity for Janey to pose the same question to the whole group (lines 13-14) which she marked by switching to the pronoun we; she also
used the verb *write* to signify that she was asking the students to respond as nonfiction writers. She then went on to give a justification for why writers don’t write down questions they already know the answer to (line 18); she was now positioning the students as learners as well as nonfiction writers.

The conversation then turned to what Maria’s next step would be (lines 21-26). It was rather a surprise to Janey when Maria, after saying she should throw out her table of contents question, literally did so (lines 27-28). However, as Maria returned from throwing out her card, Janey justified Maria’s action (line 29) asking for confirmation from the group (line 30). She then asked Maria to read her next question (lines 32-33), noting that this question was one to which Maria did not know the answer (line 34). Maria read her question about raccoons (lines 35-37) and Janey confirmed and validated this question in several ways. She used the word *excellent* twice (lines 38 and 41); she wrote the question down on chart paper (line 39); and she labeled the question as “interesting” (line 40). She then ended Maria’s teaching session (line 42) and opened the discussion up to the rest of the group asking for other questions from the students (line 43). This time the questions were labeled as “good,” but were directly connected to the interesting question Maria had written down about the raccoons—a question to which she did not know the answer.

During this event Janey reiterated for students the understanding that they should be asking questions that they were interested in learning more about (a previously constructed dimension of this aspect of the cultural model). She also clarified a further assumption that she had about these questions; if writers were interested in learning more about the question they had written down, then presumably they did not already know the
answer to the question. This event was embedded in teaching that Janey was doing about nonfiction text and visual representations and how those features could help students as researchers or people who asked and answered questions by giving them opportunities to ask interesting questions. However, when Stewart asked his question which Janey evaluated as a question that he knew the answer to and then Maria asked a similar question during Writing Workshop time, Janey decided to revisit the constructed understanding of the dimension of asking interesting questions and add a further dimension to this aspect of writing with questions, making clear to the students her assumption that interesting questions were also questions to which one didn’t know the answer.

Writing with Questions: Part 2, March through May Research Reports

In Part 1 I described the ways in which the participants in this classroom co-constructed, acquired and took up the dimensions of the “writing with questions” aspect of a cultural model for being a nonfiction writer during the poster writing unit. I ended the section with the analysis of a transcription of a whole group event that makes visible the ways in which the teacher constructed and guided acquisition of the dimensions of “writing with words” during this unit. In the following section I describe the “writing with questions” aspect of the cultural model during the research report unit. I again employ a narrative description of the talk that occurred during whole group lessons to focus on how Janey’s talk and the actions and reactions of the community members shaped their understandings of “writing with questions” and the dimensions associated with it. I also analyze a transcription of a whole group conversation in order to look more closely at the ways in which the dimensions of “writing with words” were introduced
and discursively constructed by community members during this unit. I end the “writing with questions” section of the chapter by detailing how dimensions of this aspect of the cultural model were recontextualized as participants adapted to the new format and what it meant to write with questions as a nonfiction writer of a research report.

During the course of the research report writing unit students continued to use the dimensions discussed during the poster unit including:

- asking interesting questions with unknown answers, and
- answering questions with facts and details which they wrote down.

During this unit, however, there was a shift to more topical, and less generic, questions; as a result, specific sources were made available to students to use as they answered their questions. These sources were intended to support students as they took on the more academic language and structure of a formal research report. In what follows I discuss the dimensions of asking topic-specific questions and conducting research to find information, facts and details that would be interesting for a reader.

*Doing Research—Asking and Answering Topic-Specific Questions*

On March 29 Janey began the unit on pond animal research. She introduced the unit by telling the students that first graders had a pond museum in the spring where parents would come and learn about the animals that they, the students, had become experts on. After perusing a number of books that the school librarian had gathered about the animals, insects and fish that inhabit pond ecosystems, students wrote down their choices on an index card, putting a star by their three favorites. From these choices Janey would assign each student a topic because, as she told the students, she didn’t want 24 turtle reports.
The next day (March 30) Janey gave each student their assignments and then spent some time writing up a chart of the questions that students would be using in their writing. She told the students, “We are going to start doing research” and asked them “what are some things we want to share” or “questions we all might want to ask?” The students generated a list of questions that Janey wrote down on a chart that was left up so that students could go back and refer to it. While some of the questions students asked were general questions like, “What does my animal do?”, “How do our life cycles go?” and “Where do they live at?”, other questions were more specific like, “How much does my animal drink?”, “How does it swim?” and “What color beak does it have?” Janey redirected these questions by connecting them to the larger questions she had already written down. So, for example, when Maddox said, “How does the animal lay eggs, I mean have babies”, she indicated that would be answered as part of the question, “What is my animal’s life cycle?” At the end of this question charting event, Janey did remind the students that they could ask questions that were not on the chart.

At the end of the whole group lesson she explained what they were to do with their research folders. The research folders themselves were different colored pocket folders with the student’s name and animal printed on the front. Inside the folders were Discovery Journals with several sheets of paper stapled together and a cover page with a place for the student’s name and animal. She explained that these journals were “just like what we’ve been doing all the time” referring back to the Discovery Journals that the students had used in the latter half of the poster unit. As in the past, the pages of the journal had spaces for a question, the answer to the question and sketches. There was also space for other information they discovered that was interesting to them—this was
consistent with the earlier journals. Janey described how the students might use this space saying, “Maybe you ask a question and you can’t find the information you want for your question but you find out something else really interesting.... You can write that information here.” She then told the students that what she wanted them to do to start the research process that day was to write three questions on separate pages of their journals.

There was one other instance in these data where Janey talked to the students specifically about the questions they were using in their research as part of this aspect of the cultural model. On March 31, before sending them off to begin their research and writing, she modeled for them the routine they were to follow. Taking Javier’s folder, she read the question that he had answered; she then read the question he had written but not answered yet. She told the students, “So, the next thing I’m going to do now, I am going to look for that answer in my book. Now, let’s say that I don’t have a question here. What would be the next thing that I did?” She prompted the students to ask another question, referring to the list of questions on the chart paper beside her ending with, “Of course you can still think of other questions.” Writing with questions during this unit, then, was not so much a matter of writing questions that you wondered about or were interested in answering. Rather, these questions were to guide the research these young writers were doing so that their reports would be informative for their audience. Of course, students still had choice in the questions that they asked; but the questions on the chart were designated as good questions, designed to maximize learning opportunities for them and their audience.

The generation and use of questions to help the nonfiction writer collect information for writing was a repetition of what students had done with previous
nonfiction writing as part of this aspect of the cultural model of being a nonfiction writer. Likewise, the use of the Discovery Journal was a direct carry-over from previous nonfiction writing events as indicated by the teacher and acknowledged by the students. However, in this instance, asking and answering questions was recontextualized in two ways. First, students were limited in the choice of topic. On the first day of the unit, they had looked through books to explore possibilities and had written their choices. Ultimately, however, the topic was assigned by the teacher and although she tried to accommodate the students’ indicated preferences she was not always able to do so. Secondly, the questions that students asked were also more focused in order to produce specific information about pond animals—their life cycles, appearance, habitat, diet, etc. While students could add other interesting information that might not exactly pertain to these categories of questions, nonetheless all the questions asked and the information gathered was specific to a particular animal or insect. This was unlike the poster writing unit where students could ask any question they wondered about—there was no focus or limitation to the scope of these questions.

*Adding Details and Facts*

Students shared their questions and answers throughout the early part of the research report writing unit. On March 30 and again on March 31 I had many short conversations with students in which they read their writing to me. Some of the conversations began with me asking them what their question was, much as had been the routine in the poster unit; they would then read the question and the answer to me. Other conversations began with students coming up to me and telling me some information. On the one hand, Olivia initiated a conversation with me by asking, “Did you know fish were
discovered half a billion years ago?” while Maddox, on the other hand, announced to me, “I got what I did and the ending is really good. They grow in their mommies’ stomach and they pop out. Baby deer.” At the end of Writing Workshop that same day (March 31), Janey asked, “Who learned something really interesting today that they could share with us?” Maddox began with the phrase, “I learned.” Other students began with the phrase, “I found out” or they just told the interesting thing they had learned.

By the beginning of April, although there was still some use of the “what is your question” routine from earlier, the answers to the questions that students had been gathering in their research folders began to be referred to as research, details and facts. After several read alouds early in April, Janey added to the Wow! Nonfiction chart (where she was recording what the authors of the mentor texts she was introducing to students were doing that made the reader say Wow! when they heard their books) that the authors put facts at the end or around the illustrations of the books. On April 5 she had the students practice using “If I were a” pattern that they had heard in the mentor nonfiction read aloud with their own writing. She introduced the activity by calling Benito up to help her, saying, “If I was going to write a fact about Benito’s skunk, you could write: If you were a skunk, you would be black and white with a bushy tail. You would be as big as a cat.” All this information was recorded on pages of Benito’s Discovery Journal under the question, what does a skunk look like?

On April 9 Janey, feeling that the students has lost some of their focus (video log field notes, April 9, 2010), reviewed the concept of the pond museum with them and discussed the audience for this project showing some sample research reports from the previous year. She referred to these reports by saying, “I am going to show you some
cool things that other students did,” and, after sharing a few pages from one report, commented “she has some good details in here” referring to the student’s writing about turtles (April 9). Later in that same whole group lesson, she pointed out the tiny print on the pages of the read aloud book and asked the students to pay attention to it. After she read the “tiny letters” on the next page of the book, a student said, “Those are the facts” and Janey agreed, saying, “You’re right. We’re learning facts about the earth being clean.” Then, as she sent the students off to begin their writing, she told them that their “number one job today is to get finished with your research.” Likewise on April 13, she clarified for students, “No, your research is done. Now we’re getting out the white paper and you’re going to start to write your book.”

Students also took up this language as Janey guided their acquisition of this dimension of the cultural model. On April 14, when Janey asked Colin what his job was for the day, he said, “Practicing like Marion Dane Bauer [the mentor text author]... and you have to take your own research.” On April 9 when I was working with a group of girls who were finishing up answering their research questions, Casey referred to a detail that she has just finished on the life cycle page of her Discovery Journal. Then, on April 20 during a whole group session for sharing work in progress, several students used the word “fact” about writing that they planned to add to their illustrations. Marcy told the group that she was “gonna put a fact, ... where the dragonfly’s going...and my fact is going to be dragonflies fly as fast as a person runs.” Likewise, Casey, in describing her illustration, commented, “I was going to do a fact around the wings [of the swan]”. Later on that same day during writing time, several students again referred to facts in their work. Susannah, after wondering aloud what she should write, said, “Maybe I’ll just
write a cool fact”; later Olivia explained that she could write a fact about fish being the first to have an internal skeleton. Finally, on April 26, when I talked to Olivia about running out of facts she responded, “I have more facts”; and Marcy came up and told me, “I made a fact for this one and it’s about, like, what they eat: dragonflies eat baby walking sticks. They also eat little fish and mosquitoes”. Although the terms varied, students had a co-constructed the understanding that during research time, they were looking for details and facts to add to their writing about the topic of their research report.

Based on the way that the participants talked about the information in their writing, I argue that there was a recontextualization or adaptation of the way that they had come to construct their understanding of “writing with questions” as part of the cultural model of being a nonfiction writer. During this unit the students were positioned as researchers by Janey and their writing was referred to as research, information, details, and facts. Further, Janey talked to the students about helping their audience learn about their topics through their research reports by including details and facts. Moreover, while students were still asking and answering questions specific to their pond animals, they were encouraged to collect other interesting information that they found that might not be relevant to the questions they were trying to answer. It seems that the constructed understanding of writing with questions had changed from one where students wrote down any questions they were interested in and found answers which they put into their own words, to an understanding that they were to ask questions focused on one topic, questions that would help their audience learn about that topic; further, if there was other information relevant to the topic, and not necessarily a question, it could be added to the writing. I discuss this recontextualization further in Chapter 6.
Discursively Constructing Writing with Questions, Research Report

In this section I have described how during the research report writing unit students took up the dimensions of the “writing with questions” aspect of the cultural model. I now use discourse analysis to take a closer look at how Janey talked into being the dimensions of the “writing with questions” aspect of the cultural model during the research report writing unit. As in the poster unit, Janey continued to position students as researchers or people who asked questions that they were interested in learning more about. However, because of the requirements of the research report, the questions that students asked were no longer the wide ranging wonderings that had characterized the poster unit. Instead student inquiries were narrowed to a generic set of questions which would ensure that they fully described their pond animal, its life cycle, eating habits, activities and habitat. In the following transcript I have included two examples in which Janey constructs students as researchers who ask and answer questions about a specific topic. These two examples are presented in chronological order. I use these short pieces of transcribed talk from two days as representative of the ways in which she discursively constructed asking questions about the topic of the pond animal research report. While this talk was embedded in much longer whole group lessons where much more information was discussed, for the sake of cohesion, I have put these samples together to show the ways in which Janey discussed the use of these approved texts as sources.
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
<th>Dimensions of “Writing with questions”</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/30</td>
<td>1</td>
<td>Janey</td>
<td>Right now</td>
<td>marking this particular moment in time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>we’re gonna talk about our research</td>
<td>the use of research is a shift away from the use of the word <em>questions</em> or the phrase <em>what I was wondering about</em>; use of <em>we</em> to address whole group</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>What are some</td>
<td>mis-start</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>Now we have to think about</td>
<td>positioning whole group to consider the question she is posing; use of metacognitive verb <em>think</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>who our audience is</td>
<td>the word <em>audience</em> has been used in earlier conversation and characterized for students as parents, teachers, other students</td>
<td>x  x</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>because some Kindergartners might come to our pond museum</td>
<td>reference to earlier discussion about who some of the audience might be; <em>pond museum</em> is the venue in which students will be publishing their writing</td>
<td>x  x</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>What are some things that you that you think</td>
<td>returns to positioning the whole group to consider the question; use of <em>think</em> to indicate metacognitive</td>
<td>x</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comment</td>
<td>Dimensions of “Writing with questions”</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td>we might want to share</td>
<td>use of the word <em>share</em> speaks to publication; use of <em>we</em> for whole group</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
<td>with our audience?</td>
<td>use of <em>our</em> and <em>audience</em> to indicate the readers/viewers of the collective work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td>Like questions that we probably all want to think about and answer.</td>
<td>the use of <em>we</em> and <em>all</em> is a shift from the individual <em>you</em> that was used for “I Wonder” questions; this discursively marks the list of more generic questions that will guide the research</td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[portion of transcript omitted]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td></td>
<td>Who has another question?</td>
<td>asking for thinking about questions from all the students</td>
<td>x x</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Helen</td>
<td>calls on one student</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Helen</td>
<td>um ( 6 second pause)</td>
<td>collecting her thoughts</td>
<td>x x</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Date</th>
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<th>Utterance</th>
<th>Comment</th>
<th>Dimensions of “Writing with questions”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td></td>
<td>how does it swim?</td>
<td>this question reflects her knowledge of her own research topic animal, the duck</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Janey</td>
<td>OK</td>
<td></td>
<td>accepts and validates</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td>that’s like Hector’s question</td>
<td>categorizes the question</td>
<td>x</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td>How does my animal move?</td>
<td>repeats the more general question</td>
<td>x</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>Can you put</td>
<td>begins addressing individual student</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>can we put these together</td>
<td>repeats addressing whole group; these is the deictic reference to the two specific questions about animals moving</td>
<td>x</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>because not all animals live in the pond</td>
<td>justification for more generic form of questions marked by because</td>
<td>x</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>or around the pond</td>
<td>further justification</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td>OK so how does my animal move?</td>
<td>repeats generic, less specific question</td>
<td></td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
<th>Dimensions of “Writing with questions”</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/31</td>
<td>23</td>
<td>[reading from Javier’s Discovery Journal]</td>
<td>repeats the generic question Javier has written in his journal; she is using I to model—she has indicated that she is pretending to be student</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>and I then answered worms, insects, fish, frogs, small xxx.</td>
<td>I indicates continued modeling in student persona; use of the verb answered to indicate next step in research process</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>OK, so I answered my question</td>
<td>confirming and validating Javier’s work in asking and answering one of the topical questions about his pond animal</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Oh now my next</td>
<td>Oh indicates surprise as she turns to find another question already written</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>I have another question written right here.</td>
<td>explaining what she has found on the next page</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Where does the salamander live?</td>
<td>another generic question focused on the student’s pond animal</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comment</td>
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<td>-----------</td>
<td>---------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td>So, the next thing I’m going to do now</td>
<td>next thing indicates the next step in the recursive research process she is modeling</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td>I am going to look for that answer</td>
<td>which is to answer the question</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td>in my book.</td>
<td>use of authoritative source, the book</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td></td>
<td>Now, let’s say that I don’t have a question here.</td>
<td>let’s say used to mark further pretence—although there is a question, pretend there isn’t</td>
<td>x</td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
<td>What would be the next thing that I did?</td>
<td>next thing again references the research process—this time without the question already asked</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
<td></td>
<td>Hector?</td>
<td>calls on a student to answer the question</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td>Hector</td>
<td>Go ask a question</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>36</td>
<td></td>
<td>Janey</td>
<td>I would ask another question.</td>
<td>confirms and validates student’s answer</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
<td></td>
<td>And remember</td>
<td>referring back to collective memory</td>
<td></td>
</tr>
</tbody>
</table>

continued
<table>
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<tr>
<th>Date</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dimensions of “Writing with questions”</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>38</td>
<td>Sit down Susannah</td>
<td>management statement</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>39</td>
<td>these are the questions that we said</td>
<td>referring to the chart page with questions; use of <em>we</em> to mark whole group; verb <em>said</em></td>
<td>x  x</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
<td>that we thought might be good questions to answer</td>
<td><em>we</em> to mark whole group; verb <em>thought</em>; <em>good</em> to qualify questions; interesting use of <em>to answer</em></td>
<td>x  x</td>
</tr>
<tr>
<td>41</td>
<td>41</td>
<td>when we’re doing our research</td>
<td>collective group again; naming the process as research</td>
<td>x</td>
</tr>
<tr>
<td>42</td>
<td>42</td>
<td>because we’re going to have a lot of people come to our museum</td>
<td>justifying why the group might want to <em>answer</em> the questions on chart</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>43</td>
<td>that aren’t going to know the answers to these.</td>
<td>repeat of <em>answer</em> as a noun in reference to deitic <em>these</em> referring to questions on chart</td>
<td>x</td>
</tr>
</tbody>
</table>

[Janey reads the questions from the chart on the easel beside her]
March 30 was the second day that Janey talked with the students about writing a research report. She characterized the work they would be doing on this report as “research” (line 2) which was a shift away from the use of the word “questions” or the phrase “what I was wondering about,” the ways in which this dimension had been commonly referred to during the poster unit. She also introduced the idea of audience in this initial conversation (lines 5, 6, 9); this was not an unknown concept to the students since it had been constructed as part of the cultural model during the poster writing unit. However, in this unit the idea of audience was introduced much earlier in the process, before the students had even begun to ask or answer questions. Here Janey positioned the audience as being Kindergartners (line 6) or others with whom students would be sharing some things (a phrase which I interpreted as meaning information about the pond animals, lines 7-8). The unspoken assumptions were that the information would be interesting and informative to the audience; indeed, I would argue that here she used the reference to Kindergartners to position the audience as people who would be learning from the research report.

Janey then narrowed the more general consideration of “some things to share” to “questions” (line 10). These questions were further characterized as questions that everyone would be answering. Again, this was a shift from the poster unit where students asked and answered questions based on their individual interests or wonderings. Here the use of the word all marks that the questions that students are to think about will be questions that everyone in the classroom will be using as they research or ask and answer questions about their research topic.
Janey and the students then began to generate a list of questions and the following exchanges are illustrative of the way in which much of this conversation proceeded. In this example, for instance, Helen offered a question what was specific to her topic, the duck (line 14) and Janey negotiated to make the specific question more generic or to show how it could be categorized as an example of a more generic question (lines 16, 17, 19, 20-22). This was typical of several conversations that took place during the time in which the list of questions was generated so that, when the chart with the questions that students might want to ask about their topic was completed, all the questions were written using the following formula: question word, “my animal”, present tense verb—for example, How does my animal move? or Where does my animal live?

By the next day, March 31, students had already begun to ask and answer questions using the chart of generic questions. As part of the whole group lesson that day, Janey reviewed with the students the process they were to use as they conducted their research about their pond animal. She took Javier’s Discovery Journal and, telling the students that she was pretending to be Javier, she modeled how students were to look in their Discovery Journals, check to see if they had a question that still needed an answer or whether they needed to ask a new question (lines 23-36). Both of the questions that she read from Javier’s Discovery Journal matched questions on the chart (Lines 23 and 28) with the phrase my animal replaced by the word “salamander,” Javier’s topic.

She ended by referring the students back to the list of questions that had been generated the day before (line 39). She characterized these questions as “good” research questions (lines 40-41) referencing the talking and thinking that students had done (lines
39 and 40) as they generated the list of questions as well as giving a justification for the list of questions (lines 42-43). In this conversation, the audience was referred to as *a lot of people* and not just Kindergartners; however, she strongly implied that the audience would be learning by reading answers to questions to which they didn’t know the answers. Janey then reread all the questions from the chart; this chart was posted on the easel sitting beside her chair. She ended the whole group lesson by sending students off to write with the reminder that they could, of course, ask other questions about their topic than those on the chart.

In these two excerpts Janey constructed with students the understanding that, although they were still asking and answering questions to which they did not know the answer, the sorts of questions they were answering were narrowed. This was due in part to the understanding that each research report was focused on one animal that lived in the pond habitat. It was also the case because during this unit there was an approved list of generic questions that students were expected to research in terms of their own topic. These were questions that all the participants had thought about and decided would be the sorts of questions that researchers would want to answer. Further, it was suggested that this list of questions optimized the information that the audience would be expecting to learn about and read.

Recontextualization of the Writing with Questions Dimensions

Having described the dimensions that were constructed as part of the “writing with questions” aspect of the cultural model of being a nonfiction writer and shown how they were discursively constructed by the classroom participants, I now examine how
these dimensions were recontextualized from the poster unit to the research report unit. In
the following table I have delineated the dimensions of writing with words as they were
constructed during the poster writing and the research report units. I have then noted how
these dimensions were recontextualized as they moved from the context of poster writing
to research report writing.
Table 4.1 Recontextualization of the “writing with questions” dimensions

<table>
<thead>
<tr>
<th>Dimensions of “writing with words”</th>
<th>Dimensions of “writing with words”</th>
<th>Form(s) of Recontextualization based on van Leeuwen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poster writing unit</td>
<td>Research report unit</td>
<td></td>
</tr>
<tr>
<td><strong>Ask questions on any topic</strong></td>
<td><strong>Ask and answer questions</strong></td>
<td><strong>repetition of asking questions</strong></td>
</tr>
<tr>
<td>that students “wonder” about (usually initiated by looking at a nonfiction book from the classroom library)</td>
<td>on students’ assigned pond animal using the chart of general questions</td>
<td><strong>substitution—the range of questions is particularized</strong></td>
</tr>
<tr>
<td><strong>Ask “interesting” questions or questions that students are interested in or excited about</strong></td>
<td><strong>Provide information about the topic that is interesting and informs the audience who are defined as the people coming to the pond museum</strong></td>
<td><strong>repetition of asking interesting questions</strong></td>
</tr>
<tr>
<td><strong>Ask questions students don’t know the answers to so they can learn</strong></td>
<td><strong>ask questions from the list of generic questions that students may or may not know the answer to</strong></td>
<td><strong>repetition of asking unknown questions</strong></td>
</tr>
<tr>
<td><strong>Record questions on “I Wonder” cards and questions and answers in Discovery Journals</strong></td>
<td><strong>Record research in Discovery Journals</strong></td>
<td><strong>repetition of the use of the Discovery Journals</strong></td>
</tr>
<tr>
<td><strong>Answer questions by using sources (usually the nonfiction books from the classroom library)</strong></td>
<td><strong>Use approved sources to provide maximum amount of information on the topic</strong></td>
<td><strong>repetition of many of the types of sources used substitution of approved legitimate, authoritative sources</strong></td>
</tr>
</tbody>
</table>

The table summarizes the recontextualizations which occurred in the dimensions of the “writing with question” aspect of the cultural model of being a nonfiction writer.
During the poster writing unit students took up the dimensions of this aspect of the cultural model by asking questions generated by their own interests and/or sparked by the texts, illustrations and text features of the myriad nonfiction books available to them in their classroom library. When several students began to ask questions that they knew the answer to, Janey made clear an underlying assumption of writing with questions; that is, “interesting” questions were those that helped us learn new information. Then, as students continued to write with questions, eventually the tasks of finding the answers to their questions, writing the answers in their own words and producing a final published product added to students’ constructed understanding of the cultural model of being a nonfiction writer as requiring dimensions from the aspect of “writing from sources.” Generally these sources were nonfiction books from the classroom library although students did make use of other sources as described in the next section.

During the research report unit the students were positioned as researchers by Janey and their writing was referred to as research, information, details, and facts. Further, Janey talked to the students about helping their audience learn about their topics through their research reports by including details and facts. Moreover, while students were still asking and answering questions specific to their pond animal, they were encouraged to collect other interesting information they found that might not be relevant to the questions they were trying to answer. It is arguable that the genre of the research project itself, which called for more information than just a question and answer, and the timing of this project, which took place at the end of the first grade year as opposed to the beginning, could account for some of the differences in the two units.
However, I would also argue that there was a recontextualization or adaptation of the dimensions that they had come to understand as “writing with questions.” The constructed understanding of writing with questions had changed from one where students wrote down any questions they were interested in and found answers which they put into their own words, to an understanding that they were to ask questions focused on one topic, questions that would help their audience learn about that topic. Further, if there was other information relevant to the topic, not to the question, it could be added to the writing.

Nonetheless, there were many similarities between the two units. In both units students were recording “interesting” information in their own words. Further, at the end of the year, in some informal interviews where I asked students what they had liked about being researchers, they often mentioned how they liked asking and answering questions, reading and looking in books. Finally, both units required students to construct their understanding of the cultural model of being a nonfiction writer as requiring the aspect of writing from sources. I now turn to that aspect of the cultural model.

Writing with Sources: Part 1, November and December Posters

Writing with sources is the other aspect of the cultural model that was aligned with doing research as a nonfiction writer. The dimensions of writing with sources included the use of different sources available to the participants of the classroom to ask and answer questions and how they were used. These sources included: books, printed Internet searches, people, local knowledge and lived experiences, movement and material objects. In this section, I describe how the participants in this classroom discursively
constructed the dimensions of this aspect of the cultural model. I begin by describing how the teacher outlined the availability and accessibility of sources and how they could be used to help students answer the questions they were asking. I also describe how students discursively and materially acquired and took up these dimensions as they researched and wrote their own nonfiction texts. After examining the dimensions of writing with sources during the poster and research report units, I then analyze how the dimensions of writing with sources during the poster unit were recontextualized to the research report as the classroom participants engaged in a more academically rigorous form of nonfiction writing.

Figure 4.1 Nonfiction classroom library

Books were an important tool and source of information for nonfiction writers; because of the important role they played, Janey considered carefully the choice of nonfiction books she provided in her classroom library. The books that were categorized
by topics (by the students during several Writing Workshop sessions) and stored in baskets in a separate section of the classroom library were chosen by Janey to be accessible to children of many different reading levels (see Figure 4.1); so, for instance, she looked for books with detailed illustrations to support children who might not be fluent readers. She also chose books that she judged would be engaging to students—books with “lift the flaps” and other features as well as books that were about interesting topics that would appeal to boys and girls. Although many of these books could be categorized as “hybrid” informational storybooks, she sought out nonfiction books of high quality, seeking recommendations from the owner of a local independent children’s book store and researching nonfiction children’s literature sites on the Internet. Finally, she looked for books that would help students as nonfiction writers—books that would help them ask and answer questions; books that would serve as mentor texts as they wrote; and books that would provide rich conceptual information. So books were positioned as an important source of information for both asking and answering questions; further it was recognized that you would have to look through one book and maybe several to find answers for your questions.

*Books as Sources*

As students looked through nonfiction books and the text features within them to generate questions, and as they wrote their questions on “I Wonder” cards and in their Discovery Journals, books were seen as a place to go to find information to ask questions within this dimension of the cultural model. On November 3, when students began working on “I Wonder” questions, they spent their Writing Workshop time looking
through the newly sorted baskets of nonfiction books and writing down (or sketching) any questions they had on index cards. Janey also talked about how students might ask questions using the nonfiction text features they were learning about and looking for in their nonfiction books. So, for instance, during one whole group lesson, she asked them to think about questions they would wonder about when they looked at labels (November 17).

Janey’s whole class lessons during this unit almost always focused on a nonfiction book or two. Sometimes she read a page or two of the book; other times she talked about a feature of the book which was copied and pasted onto the charts that were constructed about nonfiction text features (see Figure 5.3). Moreover, students were frequently directed to the classroom library to find a book when they seemed to be at an impasse in their work. Although this was not so often the case during Writing Workshop, getting a book to look at or read, was part of the Daily 5 routine that Janey used during Reading Workshop time.

As the unit work progressed, and with the introduction of the Discovery Journals where students were to begin to record their answers to questions, Janey also indicated that books were the sources students should use to answer their questions. She suggested that they could find answers in certain text features. She talked to students about the ways in which the table of contents helped readers identify which page to go to, and how this would help them “find the information [they were looking for] fast.” In another group lesson, Katie brought her picture to the sharing circle at the end of Writing Workshop and explained how the picture in the book had helped her: “My mom didn’t know that it [a
beaver] had webbed feet and she’s a teacher.” To which Janey responded, “I didn’t know that either.” And in yet another lesson, when Janey was talking about captions and how they could help answer questions, she said to the students, “Some people say we don’t even read captions. Can you believe that?” Janey encouraged students, when they were writing with sources, then, to make use of all the features of books they had been learning about in whole group lessons, including table of contents, captions, and illustrations.

As other research has shown, nonfiction books were by far the most commonly used and referred to research tool in Janey’s classroom—a privileged source of information. Several times during whole group lessons, before students had begun answering their questions, Janey asked students how they would find out some information about a question, and the students had responded with “Look in a book.” Likewise in a whole group lesson on November 18, Janey had asked the students, “What if you can’t find it [the answer to your question] in this book?” and one student had replied, “Look it up in another book that has it”. When students began to answer questions, Janey again mentioned books. One day (December 9), she told the students: “Your job is to go back and pick one of your questions that you asked on your [“I Wonder”] cards..., find a book that’s going to help you answer the question; see if you can put the answer on the back of the card....” When she modeled the use of the Discovery Journal where students could ask and answer questions, she also showed the students how to look through a book for information (November 30). First she looked for a table of contents, and when the book didn’t have one, she looked at the pictures to see if
they could help her. She looked at three pages that she thought might help her answer her question before finding the answer on a fourth page.

Moreover, there were several examples in these data where children referred to the need to find a specific book in order to seek for information or to answer a question. For example, at one point when Ned was reading his “I Wonder” questions to me, he said that he knew that sharks eat fish but he couldn’t find the answer to what else they eat. He then said that he almost had the answer to the dinosaurs’ size but couldn’t find it either: “I know where that book is. I put it somewhere and can’t find it” (December 8). There were several other occasions throughout the data when the teacher stopped the class to look for a book, either for a minilesson or for an individual student who was searching for the answer to a question. At other times, again throughout the data, students went to friends to find if their book had the information they were seeking. For instance, when Casey was trying to find out the size of an octopus, she went to Marcy who had a fish book to see if there was information in her book (December 15). Other students spent time purposefully tracking down a particular book that they remembered from asking their question originally. Kane, for example, spent the better part of his writing time one day looking through books remarking “This is not the one I need” when he returned one book to the basket on the library shelf and pulled out another to look through for the answer to his question, “Why does the machine have a jib?” When he finally found the book he was looking for, he went directly to the page which showed an illustration that looked much like the one on his “I Wonder” card (December 9). In fact, books were so important in this cultural model, that at one point, I even interrupted a scuffle between
two students who were fighting over a particular book in the classroom library (December 15).

However, there were students who adapted the use of books as sources of information to help them answer their questions. When students began to search for answers to their questions, some of them had to look for print sources elsewhere. Some students, with the permission of the teacher, left the classroom during writing time to go to the school library to ask for help from the librarian (reported with examples by Janey on December 10). Likewise, in the whole group lesson on November 18, when Janey had asked the students, “What if you can’t find it [the answer to your question] in this book?” another student had replied, “If you can’t find it, just like look it up on the [com]puter.” Janey acknowledged that this was another source and, in fact, Janey did help some students with Internet searches (December 10); however, this did not seem to be as common with the poster unit as it was in the research report unit.

In the following example, Hector recontextualized information he had read/heard and used to answer one question in order to answer a different one (a particular type of intertextuality). On December 9 Hector and I read a dog book to find the answer to his question, “How dogs can jump high?” After reading several pages to him, I finally read a page that said that dogs use their muscles to run and leap. Then Hector, Javier and I had some further conversation about where the muscles that help a dog jump are located on the dog’s body. Hector told me several times that the muscles a dog uses are “Here” pointing to his shoulder or over his shoulder to his back. Then on December 15 during a whole group lesson, Janey, who posed Colin’s question to the group, read a page from his
monkey book that answered the question and asked the students to pair/share or talk with a partner about what the answer to the question, “How do monkeys hang on vines so well?” might be. Hector was paired with Colin. On the video recording Colin wiggled his thumb up and down at Hector; then Hector pointed over his shoulder. Janey had listened to this pair and when she called the whole group back together, she commented that Hector had said something kind of interesting. “With their what?” she asked Hector. “Muscles,” he responded. While the text of Colin’s monkey book had specifically mentioned thumbs, Hector’s response referred back both verbally and nonverbally to the work he had done several days previously and did not reference the source being used at that moment. While there were other examples in my data where participants made these sorts of intertextual connections, they were often mediated by Janey or me or they were less clear as to the source of the connection.

Local Knowledge and Lived Experiences as Sources

As part of their constructed understanding of this aspect of the cultural model, students began to introduce the use of sources other than books as a resource for answering questions very early in the nonfiction poster writing unit. For example, after hearing Janey reading labels from a book about ants, Carlos asked where the ant’s home was (November 18). Janey read the chapter titles from the table of contents after Ray asked her if there was one. (As an aside, Ray had brought in a Lego catalog the day before and Janey had invited him to the front during the whole group lesson to discuss and show how the table of contents worked in this catalog.) After hearing all the titles from the table of contents, there was a general agreement that she should read the chapter
called “All in the Family”. She read some of the first page and then skimmed on to read about nests. At this point Carlos told about how “there is one like that at my house in a tree” and he went on to explain how he hit the tree with a stick. In both these instances, Ray and Carlos had introduced other sources of information for nonfiction writers. Ray has found a table of contents in a catalog which he brought into the classroom from home; Carlos asked a question about ants based on an observation that he has made of an ant hill at his home.

Carlos and Benito (both ELL students) again used local knowledge and lived experiences in their writing about spiders (December 10). When hearing about bird-eating spiders from Guyana, South America, Carlos said that he found it [in his bathtub] too. I invalidated this claim by telling Carlos that he lived in North America and so he would not find that kind of spider in his home. After my explanation, Carlos replied, “I know” and Benito asked, “We do?” Later in this same discussion, as we were trying to figure out the size of this spider, both boys shaped their hands to the approximate size of a small bird and Benito referred to “the baby birdie”. And yet again, when we were discussing the size of a dinner plate spider, Benito, Carlos and Arturo, who had come to join the group, shaped their hands to an exaggerated size of a dinner plate; Arturo said, “My plate’s this big.” These comparisons between the actual object and the spider of the same name were examples of how students used information from their background (i.e., the size of birds and dinner plates) to construct the comparison as it was described in the book source. Interestingly, however, later in the writing time that day, Arturo, who only joined the conversation concerning the size of dinner plate spiders briefly, returned to the
table where Carlos and Benito were illustrating their writing about the size of the two spiders, with another book about spiders. He turned to a page in the book to show us a picture and he said, “This a, this a spider with long legs [handing the book to me]. This spider right here.” Here then is an instance of how students shifted from using information they had from outside of school as a source for their nonfiction writing back to using books as a source of information, integrating information from multiple sources.

Another example of a student who used local and background knowledge when being a nonfiction writer was Colin. During reading time, he had begun a report on spider monkeys. He showed me the first few pages of his spider monkey book during Writing Workshop time later that same day (December 8). He had written on the first page in the sequence of pages in his journal the title, *The Spider Monkey*, drawn a picture of a monkey-like creature climbing or holding onto a rectangular shape on the surface of which he had written the word *by* and his full name. On the following two pages he had written: “The spider monkey climbs trees very good. He does not fall”; and “Spider monkeys like bananas. Bananas are good for spider monkeys” [I have corrected spelling and added punctuation as appropriate]. When I asked him if he had been reading a book about spider monkeys, he said, “I know lots about spider monkeys....Lots of stuff they can do.” I then asked, “How did you find out about that?” and he responded, “I kinda knew already”. Colin was a student who produced a nonfiction text outside of writing time in a different format and genre than was used during Writing Workshop time. Further, he has used his own knowledge of a topic. He did not have to ask questions or use books to research for answers in order to produce three pages of information about
spider monkeys; instead he used previously acquired knowledge and fashioned a piece of
nonfiction writing during reading time using the tools of reading workshop. In terms of
the cultural model of writing from sources, Colin relied solely on local and background
knowledge to produce a nonfiction text; yet his “report” was very similar to the
informational books he had been hearing and reading during Writing Workshop. In that
sense, then, he has not strayed from the co-constructed understanding of what nonfiction
sources look like, indicating that even without books as sources he still used the cultural
model of nonfiction writing.

People as Sources

Some students used people as sources, another dimension of this aspect of a
cultural model of being a nonfiction writer. Casey, for instance, tried to find the answer to
her question about what happens to make colors change when you mix them together by
looking in some books from the classroom library by herself. When she was unsuccessful
with that search, she brought several other books over to me and we looked at them
together; we were still unable to find the answer. At this point, Casey suggested that
maybe she should talk to the art teacher. Based on that suggestion, at the end of writing
time we wrote a note to the art teacher asking for any information she might have that
would answer the question (December 10). Casey also hunted out people she knew had a
book that might help her. This was also the case when I mediated between Arturo and
Katie, asking Katie if we could use her book on frogs to look for an answer to Arturo’s
question about how high a frog can jump (December 15). In these instances, the source
had validity as an authority because of: expertise (in the case of the art teacher); because
the sources had been constructed as authoritative, as with the books Casey and other students were searching for; or because of the authority of the adult in choosing the source, as was the case with Katie and Arturo.

There are other instances in the corpus of data, however, when students offered information to other students—acting as an additional classroom source. Typically this occurred in the conference data that I collected. There was only one instance in the data where a student offered information for another during whole group lessons. That occurred when a student told Janey what the question was that Carlos was asking about ants’ homes; before answering the question, Janey confirmed it with Carlos (November 18) validating that the other student was “invited” to provide the information. Otherwise, whole group lesson conversations were mediated by Janey, who asked questions, called on students to give responses, prompted and coached students as they shared, gave them the floor to talk about something they had discovered and provided opportunities for students to pair/share (the time during the whole group lessons when students talked together about the question that Janey had brought up for consideration). In short, students did not act as sources of information to each other during the whole group lessons unless invited to do so by the teacher. While Janey might have viewed students as a valued source, other students did not unless Janey had mediated the interaction, delegating some of her authority to the student and thus granting them her “stamp of approval” as it were.

This became clear in analyzing the conference data, where there were several instances when students offered information to others and were ignored or dismissed.
Renee, who had been standing at the same table as Olivia and me as we struggled to answer Olivia’s question about what the sun is made of (Renee was talking to another student and taking out and putting away her “I Wonder” cards), chimed in toward the end of our conversation, saying, “The sun is actually a big star.” Olivia replied, “Yeah, we know that” to Renee, and I went on to explain that what we were trying to figure out was what the sun was burning. Olivia seemed to dismiss Renee’s comment as irrelevant to the conversation. I was the one who followed up (and did some repair work) by telling Renee what we were trying to figure out; the conversation ended there (December 15).

Likewise, when Marcy was trying to figure out where to put the sun in her poster illustration, Susannah came up to where we sat and pointed to the top left of the earth in the illustration saying, “You should put it here”. Marcy immediately pointed to the top right and said with a strong tone, “Right here.” There was no sense in her tone or gesture that she was taking up Susannah’s suggestion even to resist it; rather her tone, timing and nonverbal actions seemed to suggest that it was as though Susannah hadn’t even spoken. Susannah then pointed to the bottom right of the poster illustration and said, “Or right here.” There was a pause before I asked, “What is going to help the reader the most, do you think?” directed at Marcy. She replied, “Um” followed by several seconds of silence where she was looking up at me. Again, I interpreted Marcy’s actions as dismissing or ignoring Susannah’s suggestions and presence; even her silence was not directed at Susannah but rather at me as she leaned back in her chair and looked up (December 16).

There was another interesting instance of this “ignoring” involving Susannah on the day when I worked with Benito and Carlos (December 10). The two boys and I had
been working together for some time and Susannah joined us, sitting down at the end of
the table and working in her own Discovery Journal. As we were working, Susannah,
pointing to Carlos’ page with a pencil, said, “Sketch right here.” There was a pause
during which Carlos did nothing and then I started talking to Carlos about his illustration.
Later in that same event, Susannah asked how to spell the word, “how,” and I said that
Carlos and Benito both knew how to spell that word. Her response was, “Just kidding
you.” Susannah’s comment could be interpreted in several ways. She may have been
repaying Carlos for what she saw as him ignoring her earlier direction; it may be seen as
her resistance to the idea that she needed help from the two boys; or she may simply have
been trying to get my attention and when I wouldn’t help her spell the word she ended the
conversation.

This lack of interaction between students about their topics was typical of what I
observed in my data, even when I left the camera running and walked away. In general,
although students were writing in a space where they could talk and work side-by-side,
they did not use each other as sources of information about their topics; indeed they more
often ignored any attempt by another student to offer them information or help.
Moreover, although Janey valued and validated students’ local knowledge and lived
experiences as part of the cultural model, thus giving them some authority as sources of
knowledge, students did not seem to value each other as a source unless it was validated
by Janey. This may speak to a sense of ownership that students felt about the content of
their writing that was in part signaled by Janey’s construction of nonfiction writers as
experts about their subject. It also may have had to do with the ways in which the identity
of a nonfiction writer was constructed in this classroom; so while there were times when
writers were positioned as being open to suggestions from friendly critics, at other times
they pushed back not accepting what someone said they should do.

Indeed, as indicated by the previous examples, when students were researching
and writing or grappling with their own individual questions, they ignored or dismissed
suggestions from other students. While this suggests that there was a hierarchy of
authoritative sources with students’ unvalidated local knowledge ranking very low, I
would also argue that there were issues of ownership at play. Olivia and Marcy both
ignored or dismissed direct, non-teacher mediated comments about their work. Olivia
dismissed Renee’s comment as irrelevant to her question and Marcy simply ignored
Susannah’s suggestions about the placement of the sun on her poster. Likewise, Susannah
and Carlos ignore each other’s instructions about the routines associated with this aspect
of the cultural model of being a nonfiction writer. In all these cases there was an actual
piece of work involved (a page in a Discovery Journal, a partially completed poster) that
belonged to one student and was being commented on by another student. The writing
belonged to the student and, consistent with how authorship was constructed in this
cultural model (see the aspect “writing with words”), nonfiction writers made their own
decisions about their writing. This sense of ownership, then, may have made students
resistant to other students as sources unless, and maybe even not then, they were
validated by a more authoritative source like the teacher. I take this up further in Chapter
6.
Materiality (Physical Movement) as Sources

The material sources that students made use of in the poster unit movement were, mediated by Janey and me during three occasions in the data. The first event occurred on December 9 during a whole group lesson where Janey was talking about how students would write the answers on the back of their “I Wonder” cards. She read and reread a page from the book about how the movement of cold and warm air causes the wind; as she read the text several times, she used arm motions to show the movement. After the students talked in pairs, Janey asked who could explain it to her. Katie said, “The cold air moves up and the warm air moves down and that makes the wind.” Janey then had some students act this out in a group, with one row of students standing to represent the warm air that was up high and other students kneeling in front of them to represent the cold air that was low; then the students shifted their positions to show the warm air moving down to meet the cold air students who began to rise, indicating the way in which wind is created. Janey had the children repeat this movement and I suggested that the rest of the students could blow like the wind when the two rows of students met. After the class had acted this out again, Janey asked them how they would remember their learning, and they moved on to discuss the procedure for answering their questions on the back on their “I Wonder” cards. In this case Janey was using movement to help the students understand the science in the answer to the question.

The second event involving movement occurred when I was talking to Arturo about his question, how high can a frog jump (December 15). The book that we were looking at said that a bull frog jumps twenty times its own length. The text did not give a
description of the size of frogs so I suggested that we guess, having Arturo and Katie (who let us use this particular book) show me with their hands what they guessed the size of a bullfrog might be. After making this estimate, I told Arturo to start his frog at the classroom door and think about how far it could jump. Pointing with his pencil he counted to twenty, moving the pencil in hopping motions from the door to past where he was sitting on the carpet. Arturo ended the conversation by telling me that maybe a frog could jump more than twenty times, maybe thirty times. In this event there was both the use of hands (as with the spiders that Carlos and Benito were discussing) to estimate the size of the bullfrog and the counting of a measured unit to estimate the length of a frog’s jump. (This reference to measurement, by the way, appears much more frequently in the research report unit.)

A third event involved Marcy and the earth tilting (December 15). On that day, I had Olivia come over and act out being the sun while Marcy tilted away from and then back towards the sun. When I ask Marcy what tilt meant, she said, “Like (. ) way up?” motioning with her arms stretched up and bending to one side. I then showed her how she might tilt away from the sun, moving the top of her body away from Olivia, whom she was facing. On the edge of this conversational circle, Kane tilted first his head and then, using his whole body, tilted from his waist, as Marcy was tilting away from the sun. Then as the conversation came to a close, Olivia said, “I can actually do that. Tilt, tilt, tilt” and she began to tilt her body from the waist, moving in time to the chanting tone of the repeated word, tilt. As with the wind reenactment, here again, movement was being used as a source to help students understand a potentially difficult concept.
I would like to highlight one facet of movement as a source. I have already discussed Hector’s movement, pointing to his shoulder and back to indicate where the muscles were in a dog’s back that helped it jump. I have also described how Carlos, Benito and Arturo used their hands to indicate bird sized shapes and dinner plate sized shapes. In other data, there were instances of students using their hands to indicate some movement that they couldn’t express with words or pictures. For instance, Marcy described the use of an arrow to show the earth tilting in her poster illustration, motioning with her arm and upper body. Olivia explained how the gases on the sun keep exploding using her hands to show a roiling motion. In all these instances, as with the ones mediated by Janey and me, movement provided a different representation of knowledge. I do not argue that this was a more authoritative form of knowledge although it was a source that was validated by Janey and me. Rather, through the use of movement, participants were able to express some understandings that were unavailable to them with words. Thus they used a different sign system, movement, to communicate and clarify information as they also expressed their ideas in words and illustrations.

*Discursively Constructing using Books as Sources*

Looking across the data at the sources that were available and used by participants in this cultural model, a hierarchy for authoritative sources of knowledge becomes apparent. Print texts, primarily books, were the most authoritative source of information within the cultural model of being a nonfiction writer and were taken up as such by most participants. While other sources were recognized and used, as students referred to lived experiences and local knowledge, used movement, and asked other people for
information, none of these sources were as authoritative as books. These other sources had to have some validation from the teacher, be connected to books, or be acknowledged as having expertise, as was the case with the art teacher, to be recognized as authoritative sources. Thus, I would argue that books were at the top of the hierarchy of authoritative sources, and unvalidated local knowledge was at the bottom.

Having described the dimensions that made up “writing with sources” during the poster unit, I now turn to discourse analysis to examine how these dimensions were constructed by the teacher and students during whole group lessons. In the following transcript I examine how the authority of books was discursively constructed. I have included three examples in which Janey constructs for students what they were to be doing as nonfiction writers when writing with sources. These three examples are presented in chronological order. I use these short pieces of transcribed talk from three days as representative of the ways in which she discursively constructed books as an important source for nonfiction writers. While this talk was embedded in much longer whole group lessons where much more information was discussed, for the sake of cohesion, I have put these samples together to show the ways in which Janey discussed the use of books as sources.
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 18</td>
<td>1</td>
<td>Janey</td>
<td>How could you find out for sure?</td>
<td>raising the question of how to validate an answer with accuracy; this you is singular addressed to the student</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Helen</td>
<td>Because</td>
<td>mis-start</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Janey</td>
<td>No, answer my question.</td>
<td>redirect to maintain control of the topic under discussion</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Janey</td>
<td>How could you find out if that’s where the queen was?</td>
<td>repetition of how to validate answers; use of you directed at individual student</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Helen</td>
<td>Go ahead and read.</td>
<td>uptake on book as source</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Janey</td>
<td>Yeah, you could read.</td>
<td>agreement on book as an authoritative source; you may have shifted to collective or plural form</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>What if you don’t find it in this book?</td>
<td>here the you is plural; the question is open to all the students; deictic this indicating the book in her hand and indicating there are other books</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Helen</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Ray</td>
<td>Look in another book that has it.</td>
<td>uptake on book as source</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td>Like if you can’t find it you can look it up on the ’puter.</td>
<td>addition of computer as source</td>
</tr>
<tr>
<td>November 30</td>
<td>11</td>
<td>Janey</td>
<td>I was wondering about what is snow and how is snow going to fall down to the ground.</td>
<td>teacher is modeling asking a question and using first person I</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
<td>Did anyone ever wonder</td>
<td>invites the students (with the continued)</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comments</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>---------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>13</td>
<td>students</td>
<td>Yeah</td>
<td></td>
<td>uptake on joining the teacher</td>
</tr>
<tr>
<td>14</td>
<td>Janey</td>
<td>So, this weekend when I was in school I was thinking about that</td>
<td>teacher continues to model asking the question using <em>I</em></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>students</td>
<td>xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Janey</td>
<td>So I was thinking about that</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>so I thought I bet you we have some books in our nonfiction library.</td>
<td>teacher models books as authoritative sources; continued use of <em>I</em> but also reference to the collective group of students with plural <em>you, we, and our</em>; refers to a number of books with <em>some</em></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>So, I went into the nonfiction part of the library.</td>
<td>models searching for sources; use of <em>I</em>; implied quantity of sources through the use of the “part” and books through the use of <em>library</em></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Which basket do you think I might have looked in?</td>
<td>models narrowing the search for the book sources by looking in a particular “basket” which contains books on the topic; continued use of <em>I</em> but also invitation for collective group of students to join her in thinking with the use of plural <em>you</em></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>student</td>
<td>I know</td>
<td></td>
<td>individual uptake</td>
</tr>
</tbody>
</table>

Transcript 4.3 continued

continued
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Janey</td>
<td>If I was looking for a book to answer my question about snow?</td>
<td>modeling with <em>I</em> and <em>my</em> reference to “a book” which implies that there are many books to look at and choose from</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>Which do you think?</td>
<td>invitation to join her in thinking with plural <em>you</em></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>students</td>
<td>Uh, xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Janey</td>
<td>We have a basket about sun and rain and snow</td>
<td>prompting for a specific answer; use of <em>we</em> for collective response; a basket again referring to many books available in one basket of many</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>Do you remember what that big word is that we use that talks about sun and rain and snow?</td>
<td>calling on the collective memory for a vocabulary label</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>It’s starts with “w”</td>
<td>more information to prompt memory</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Carlos</td>
<td>Winter?</td>
<td>response</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Janey</td>
<td>Not winter</td>
<td>evaluation of the response</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>Weather</td>
<td>teacher provides the correct response</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>weather basket</td>
<td>teacher reiterates the correct response and connects it to the basket of many books</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>So I went to the weather basket</td>
<td>continues to model finding a source using <em>I</em> and referring to the basket of many books</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td>and I looked through all of the weather books,</td>
<td>continued use of <em>I</em> to model; the use of <em>all</em> again indicating many books, not just one</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comments</td>
</tr>
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<td>--------------</td>
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<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>Benito</td>
<td>Benito,</td>
<td>disciplinary</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td></td>
<td>and I found this book called weather words</td>
<td>continued use of <em>I</em> as she models; deictic <em>this</em> referencing a specific book</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td></td>
<td>and I thought oh, this will probably tell me about snow.</td>
<td>continued modeling with <em>I</em>; indicating that this specific book may be an authoritative source for answering the question she is asking</td>
</tr>
<tr>
<td>December 9</td>
<td>36</td>
<td>Janey</td>
<td>Your job is to go back and pick one of your questions</td>
<td>this use of your refers to singular student even though she is addressing the whole class; each individual has the responsibility to do this job</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td></td>
<td>that you asked on your cards</td>
<td>this is a reference to individual cards that each student has made and kept</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>student</td>
<td>What?</td>
<td>individual request for clarification</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>Janey</td>
<td>from your “I Wonder” cards</td>
<td>teacher clarifies that “your cards” are the individual collection “I Wonder” cards on which each student has generated questions</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
<td>find a book</td>
<td>the book is a source but there are many books to look through</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td></td>
<td>that’s going to help you answer the question.</td>
<td>the book is an authoritative source that individuals can use</td>
</tr>
</tbody>
</table>
In all three transcripts, as Janey was working with the whole group (November 18 and December 9) or with a smaller group (November 30), she directed students to books as the source for answering questions. In many instances Janey specifically used the word “book” in reference to the source that students should use to seek answers to their questions (lines 7, 17, 21, 32, 34, 40). In other instances, while the word “book” was not used exactly, the implied reference was to books. For instance, in line 6, while not naming the source specifically as a book, she was confirming Helen’s uptake response “go ahead and read.” This response was made to Janey’s question, “How could you find out for sure?” (line 1) and was asked about a question that Helen had asked previously in reference to a book that Janey was holding up for the whole class to see. Similarly when Janey referred to part of the library, and a basket or weather basket, she was referring to physical spaces that contained books; so while the word, book, was not used, the implied understanding was that the sources found there were books.

Further, it is important to examine the adjectives that Janey used when she referred to books as sources. On line 7 she used the deictic marker “this”, referring to the book in her hand. She has indicated that Helen (or other students) might not find an answer to their questions in this particular book. Ray took up the idea and suggested that students could look in another book or on the computer, using the word “another” to indicate many possible options, while the reference to the computer indicates the limitless searches possible on the Internet. At other times in these transcripts, Janey used the general article “a” (rather than “the”) and the adjectives “some” and “all” when referring to book(s). I argue that in this way she was discursively constructing an understanding
that nonfiction writers have access to many (indeed an almost unlimited) supply of books to use as sources when researching to answer their questions.

Finally, the pronoun use across these three transcripts shows that Janey was also discursively constructing participants’ responsibilities vis-à-vis the use of authoritative sources. In the first segment, she was talking to Helen about how she would confirm whether the queen ant lived in the section of the ant hill that Helen had pointed out. When Helen made a mis-start answering the question (line 2), Janey redirected her back to the question (line 3), maintaining control of the conversation presumably because it concerned an important topic that Janey wished to address with the whole class. While Janey’s use of the word “you” was probably used to refer to Helen in the early part of the interchange, by line 7 (and possibly even at line 6), she used “you” in a plural sense, opening up the discussion to the whole class; likewise, Ray’s use of “you” could also be interpreted as referring to the collective group.

In the second segment of the transcript Janey made use of “I” and “my” as she modeled for the small group of students how she might go about looking for a book to answer her question. She occasionally referred to “we” and “our” as she invited students to join her in thinking about where to look for books; but most of her language used the first person, reflecting her “thinking aloud” about how to search for sources. This was in marked contrast to the third segment of the transcript, where she returned to using “you” and “your.” This time, however, these words were used to refer to each individual student in the class who all had envelopes filled with “I Wonder” questions that they had written and collected over a period of some weeks. She told them that it was now “your job” to
find a source to use to answer one of “your” individual questions. This shift in pronouns marked a shift in the students’ roles as nonfiction writers who were “writing with sources.” As students began to answer questions, Janey constructed, through her use of pronouns, that it was their responsibility to take up this aspect of the cultural model, writing with sources, using books as an authoritative source.

The constructed understanding of these students of this aspect of the cultural model of being a nonfiction writer was that the print world was full of many books, and it was their responsibility to use these books to answer their questions. There were multiple books available to nonfiction writers, not just one specific book that was positioned as an authoritative educational text. Unlike many classrooms, where the unmarked case is that there is a singular textbook which is the authoritative source, these participants had constructed an understanding of themselves as nonfiction writers who used multiple sources as they researched and wrote nonfiction. This understanding of themselves as people who used multiple sources as they did their work, along with the understanding of books as authoritative sources, was an understanding that participants brought to the writing of research reports later in the year, a topic I address further in Chapter 6. I now turn to a description of the dimensions of writing from sources as they were constructed during the research report unit.

Writing with Sources: Part 2, March through May, Pond Animal Research Reports

In Part 1 of “writing with sources” I have described the dimensions that participants constructed of the “writing with sources” aspect of a cultural model of being a nonfiction writer. In Part 2 I look at the dimensions that were acquired and taken up as
part of this aspect of the cultural model during the research report writing unit. Books continued to be a privileged source of information as students conducted research for their pond animal reports. Students spent time looking through books at the beginning of the unit to decide which animals they were interested in researching. As they researched, they looked at books, hunted down other students who might have a book with information they could use, searched for the exact book they had looked at or used before and occasionally visited the school library. Also during this unit students used nonfiction text features in books as they conducted their research. So, for instance, there are several examples of students using tables of contents to locate specific information. On April 7, Kane, after hearing and seeing Ned’s explanation of how turtles lay eggs, turned to the table of contents in his book, read through the chapter titles and turned to “Growing Babies” to confirm Ned’s explanation. In another example, Colin looked through the table of contents in his book to locate information on beaver dams (March 31). Students also continued to use books to prove a point. So, as with Ned and the sea stars (see Chapter 5), on April 15 Colin came up to show me in a book where it said that beavers were herbivores. Finally, one student, Olivia referred to learning about some of the information she had recorded in her Discovery Journal in a book from home.

Approved Textual Sources

During the research report unit books as sources were more controlled by the teacher once the students had been assigned their topics. As Janey explained on March 29, the school librarian had put the collection of pond animal research books in alphabetical order on a library cart so that they could move between the four first grade
classrooms as all the first graders in the school were involved in writing their pond animal research reports at this time. Thus, as Janey told the students, it was important to keep the books in order; to that end, she or another adult would be in charge of taking the books off the shelves and putting them back on the shelves after they had been used. These books were the primary source for the students’ research; they were controlled in terms of who could take the books off the shelves or return them; likewise they were not readily available at all times since the cart travelled to other classrooms at other times of the day.

The other source of classroom/teacher sanctioned information was what classroom participants referred to as “white pages/papers/sheets.” These were usually single sheets of paper that had been printed from Internet sources that Janey used to help expand the amount of information available to some children who had fewer books on their topic. In one event in my data, I came to understand that these sheets were used to provide specific information that Janey wanted students to use in their research reports. On April 7 Olivia came up to me for help with adding information to her fish research. When I asked her if she had a book, she showed me her white paper and said, “She [Janey] said I can look on this. It told me about one kind of fish.” When I asked Janey if Olivia could have a fish book, Janey indicated that there was a lot of information on the white page, and she would like Olivia to add that information to her research although she also found a fish book on the cart for Olivia to bring over.

The collection of books on the library cart, and the ways in which accessibility to them was controlled recontextualized the ways in which participants had come to
understand this aspect of the cultural model, writing with sources (books). During this particular unit, students came to understand that their access to the books on the cart was limited to when the cart was in the room as well as when they were given the books by an adult. Further, they came to understand that their access to information was also limited to the books on the library cart and to the white papers that Janey printed from the Internet, the “approved” sources. Further, implicit in this understanding and in conjunction with the constructed understanding of the kinds of information they should be researching (from the aspect, “writing with questions”), students came to understand that there was certain information that should be included in their research reports; and that information was available in the specific sources made available to them.

This constructed understanding, which recontextualized the sources of information so specifically, was problematic for several students. In Olivia’s case it led her to sources that, because they were not “approved”, provided information that was not relevant to her research report. Olivia, as mentioned above, struggled with information for her report on fish to the extent that she even found books at home to help her collect interesting details or facts. Unfortunately, the use of these sources led her to write about little fish being scared of big fish like sharks and whales and about dolphins jumping out of the water. When I asked her whether she should be writing about dolphins, since they were not a pond animal, she wondered whether she should have written about the sharks, too. Then she said: “Yeah, but, she [Janey] said fish and they are in there, but, um, I think she’s saying like if fish are pond ...going to be okay, but since they are scared of those aminals (sic), you can put that if they were in the water, like the ocean.” Olivia’s attempt
to justify leaving in sharks, dolphins and other fish she had written about which were not
denizens of the pond, while having some logical merit to it, did not stand up to the final
editing process; as a result much of the information that she had researched using
unsanctioned sources was constructed as useless for her as a nonfiction research report
writer.

In Casey’s case the recontextualization of specific texts as approved sources led
her to express frustration about text difficulty and her inability to find certain
information. On April 7, when Casey and I were looking through her swan book, she told
me: “I haven’t been reading very carefully, like, whenever I see a cool picture that I
really wanna read I start reading it. Like when the, [I make a comment], when, when the
swan has its wings out. I read that page because it looked pretty interesting. Well, at least
I tried reading it because my book’s kinda hard but I tried reading it.” Using the
illustrations in nonfiction books as a source for “I Wonder” questions was a repetition of
one dimension of “writing with questions” as it had been constructed in the earlier poster
unit. Casey continued to use the illustrations to determine where she might find
interesting information about swans; however, she didn’t always find the text accessible
in terms of readability. While this might also have been the case in the poster writing
unit, because students had access to so many nonfiction books when they asked and
answered their “I Wonder” questions, it is likely that Casey would simply have found
another book or asked a different question if the readability of one book was too hard for
her.
Casey also talked about how her books were not providing her with the information that she needed to do her research. She had repeated several times her question about the size of swans. I had suggested that we might need to get on the computer and find the information for her. Her response was that there was not a white paper for her. She then said, “Because I’m not getting very much research done, because I can’t find any good information in my books that I really want to know about.” For Casey, then, the approved sources were letting her down. She was specifically interested in the size of swans—she had returned to the idea several times during the conference sessions I have video recorded—but she was unable to locate this information in any of the book sources she had available.

Regarding books as a privileged source of information in nonfiction writing is common to much research done in classrooms of all ages. Further, readability levels of nonfiction books, vocabulary load and conceptual demand are also common issues in the research with young students. In this classroom while the teacher may have been trying to address these latter issues by providing “approved” sources to students as they wrote their pond animal research reports, for some students this became problematic—limiting their ability to find the type of information they wanted or leading them to use non-approved sources which produced information that did not match their topic.

*Local Knowledge and Lived Experiences as Sources*

Although books and white Internet pages were positioned at the top of the hierarchy of authoritative sources, students continued to refer to local knowledge and lived experiences during the research report unit. At one point Hector referred to a field
trip to the local pond where he had observed the object he was drawing but unable to name (a lily pad): “I saw them at the pond....they have a flower in it, but it’s yellow, but there’s no more on top.” At other times students called up facts that they knew from their own experiences, as when Olivia named the orange butterflies as monarchs and told how she could watch fish laying eggs in a tank located some place she visited.

Another example of how students connected what they were hearing or reading about in their research with their local knowledge and lived experiences occurred when I was reading to Casey from her swan book. I had read to her about waterfowl feathers keeping the birds warm and being waterproof. She then drew on her own experience with fabric using a comparison to tell me what waterproof meant when I asked her: “Like whenever they get in the water their wings don’t get wet but when they get out they won’t be soaked. Like, it’s not like fabric. If you put fabric in the water, when it comes out it will be soaked and it will take a longer time to dry.” Next she asked me to read the fact by the picture of the zipper on the page. After reading this information, I told Casey of my experience with bird feathers and brushing them apart and together. Then Casey, again drawing on her lived experience as a source, made the logical connection between brushing hair for humans and preening for birds: “It seems like brushing their hair for them, is like brushing their feathers.”

As these descriptions suggest, local knowledge was often used by individual students to extend their understanding of a word or a concept. In all these examples students made use of their local knowledge while working with me, and I validated their information as they offered it. While the picture of the lily pad remained in the
People as Sources

Students also continued to make use of authoritative people as sources. Of course Janey, the other adult helpers and I continued to be sources, reading to students from books, asking questions about their research to date, and helping them find sources that might answer their questions. One particular instance of this was when Janey used Hector’s mosquito facts to model the mentor text patterns students would be using one particular day. This modeling and the suggestions provided by other students provided Hector with a scaffold as he worked during Writing Workshop time.

In other instances, however, students made use of fellow students as sources outside of the whole group lessons. Marcy told how her brother, who was in another first grade classroom, helped her find out more information about dragonflies, since he was also studying about dragonflies and had the same book (April 20). Similarly Casey asked the students sitting at her table the question, “Do swans bite?” I was sitting nearby and heard this so I called Casey over and confirmed her use of people as sources and then offered to become a source for her question. As I told her my story of being bitten by a swan once, she told me about some ducks in Florida that bit people, and then asked me if I also knew that swans whacked people with their wings, offering to show me the illustration from the book. In both these examples, the students sought out information
from others on their own. Unlike the offers of information that occurred in the data from
the poster unit, these instances reveal that students were asking questions of others
purposefully. Thus, they still had ownership of the research since they had initiated the
action. Further, they regarded their sources as having some authority; in Marcy’s case the
source was the same book as she had been using, and in Casey’s the source was
ultimately a teacher since the students at her table were unable to answer her question.

There were other instances, though, when students offered others information that
they had not sought out. On April 28 Hector (an ELL student) told me that the baby
mosquitoes were coming out of the mom’s belly; I told him that could not be the case
since insects are not mammals. Olivia first addressed me, suggesting that Hector could
use a similar pattern to the one she had written about fish laying eggs. I then asked her to
say that to Hector, and, having had her suggestion validated, she began: “Maybe you
could say...” Although Hector did not take up this suggestion at that moment, because I
directed him to finish another page he had already started, he did use the suggestion later
with my support. In this instance, Hector’s use of Olivia as an authoritative source was
mediated and validated by me.

Another example occurred on April 7 when I asked Kane what he was doing. He
told me that his question was “Where do turtles lay eggs?” but he didn’t know the answer
yet. Ned, who had been erasing something on Kane’s paper when I came up and was
sitting across the table from him said, “I think I know” and then drew a picture explaining
parts of the illustration as he went along. When he was finished, I said, “Oh, so he can
check that out by looking in the book,” referring to the turtle book on the table beside
Kane. He immediately turned to the table of contents and found a chapter called, “Growing Babies” to look in. Again, use of another student as a source was mediated by my presence as a teacher; it may also have been mediated by the fact that Kane and Ned were connected as working together since Ned was erasing something for Kane on the page of his Discovery Journal when I came up.

A final example occurred when Casey and I were discussing what would make her writing more interesting. At one point I appealed to Olivia, asking her if it wouldn’t be more interesting to include all these facts that we had been discussing previously. At this point, Casey indicated that she wanted to use Olivia and me as sources to evaluate how interesting her information was: “You guys, can, like, help me think of this stuff because I’m studying the swans so I am, am, like, well I am gonna read it and I won’t be very interested because I already learned about it. But you guys can, like, help me think of stuff to write because you can help me find out if it, like, would be interesting for you guys.” Here it would seem that Casey transformed the use of people as sources into something other than a resource for information; people were now evaluators of whether her research facts were interesting enough to be included in her nonfiction writing. I see this as different from the general construction of the pond museum audience. That audience was constructed as people who viewed, read and enjoyed the nonfiction writing. Instead Casey positioned Olivia and me as much more evaluative, readers who would help determine the content of her writing.

At this point in the school year students seemed to be less resistant to the idea that their classmates could offer them information or suggestions as they went about their
nonfiction writing and, in fact, in several of the examples, even sought out information from their classmates themselves. Nevertheless, the advice of other students still needed to be validated, whether by the authoritative source of a book or by Janey or me. And it continued to be the case that the students were positioned as authors who were able to make their own decisions; so if they chose to ignore the information, that was their choice.

**Materiality (Objects) as Sources**

Students continued to make use of material objects as sources during the research report unit as part of this dimension of the cultural model aspect. Building on the idea of a pond museum where people come to learn things, and in a later lesson where students talked about people coming to “look at the things we made,” several students suggested bringing in artifacts. Marcy (whose research topic was the dragonfly) brought in a plastic snail for Renee (whose pond animal was the snail) to display as part of her research report. In a conversation with me Casey raised the issue of providing real feathers as part of the pond museum so that visitors could touch them. Later she suggested providing each visitor with a feather to take home; she also proposed having an experiment where students could match feathers to the different birds. Recognizing the need to acquire these material objects (feathers), she talked about getting them at stores or from backyards. Olivia, who was sitting at the table where we were having this conversation, offered to bring feathers from her grandmother’s backyard and also provided information on a source for different little feathers, the Darby Creek visitor center.
Another commonly used material object during this unit was the ruler. This source was evident in several events across these data. The first instance was when I used rulers to show Zane how long a walking stick would be. On that same day, during the whole group sharing at the end of Writing Workshop, Janey showed the students how long a beaver would be after Colin shared his fact that beavers could be four feet long. A final example of the use of the ruler as a material source was Casey’s ruler swan. In this case, Casey and I had finally gotten on the computer to locate the size and weight of a grown swan. As she puzzled over these dimensions, she suggested that we lay out the swan with rulers. Referring back to the computer several times, Casey, Colin and I, watched by several others laid out five rulers in one direction and ten rulers (five on each side of the first five) on the floor of the classroom. After the ruler swan was assembled, Casey explained to a group of her classmates who had congregated around the rulers, about her swan: “Yeah, this is the body and please go down there and push those down [addressing Colin]. [Then her voice became louder and she addressed all the students milling around] OK, the biggest line is his, is the swan’s wings [she makes a Vanna White sweep along line representing the wings], but up here is how its body is. [She now straddles the shorter ruler line lining her body up bottom to top] This is, this is the bottom and this is where its head is.” As we began to clean up the ruler swan, Olivia suggested that Casey include the swan in her museum.

Through the use of material objects, several students constructed an understanding that as part of the pond museum, they could also provide artifacts for people to view and touch. Marcy brought such an object from home; Casey suggested
buying feathers or having someone bring them in from home. In other events Janey and I used the material object of a ruler to mediate students’ understanding of the size of their pond animal. Much as Carlos and Benito had done with their hands, as they approximated the sizes of spiders, rulers provided a concrete representation of size. In this way participants added material objects as a dimension of the writing with sources aspect of the cultural model of being a nonfiction writer.

Discursively Constructing Approved Textual Sources

In the preceding section, I have described how students took up the dimensions of the “writing with sources” aspect of the cultural model during the research report unit. As in the poster unit, students referred to other sources of information than books including lived experiences and local knowledge, rulers and other material objects, and people. Moreover, print texts continued to be a privileged source of information within the cultural model of being a nonfiction writer; further, these print sources and their use in nonfiction writing with sources were more delineated and controlled than had been the case in the poster unit. In the following transcript I have included two examples in which Janey constructed for students the use of approved texts for nonfiction writers “writing with sources.” These two examples are presented in chronological order. I use these short pieces of transcribed talk from two days as representative of the ways in which she discursively constructed the parameters surrounding the printed texts that could be used as sources and how they should be used. While this talk was embedded in much longer whole group lessons where much more information was discussed, for the sake of
cohesion, I have put these samples together to show the ways in which Janey discussed the use of these approved texts as sources.
<table>
<thead>
<tr>
<th>Date</th>
<th>line</th>
<th>speaker</th>
<th>utterance</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>29</td>
<td>Janey</td>
<td>Mrs. Jones will look at your cards</td>
<td>use of third person nominalization to invoke authority</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Janey</td>
<td>and I will give you one of the animals to research</td>
<td>shift to first person; the teacher is acting</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Janey</td>
<td>because I would like everybody to research something different, OK</td>
<td>legitimation for limiting choice</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Janey</td>
<td>from the pond</td>
<td>clarification</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Janey</td>
<td>so that we don’t have</td>
<td>beginning of legitimation for limiting choice; Janey may have heard Arturo’s comment which caused her to repeat in the next line?</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Janey</td>
<td>xxx cheetah</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Arturo</td>
<td>xxx cheetah</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Janey</td>
<td>so that we don’t have 24 books about turtles</td>
<td>finishing second legitimation for limiting choice</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Janey</td>
<td>cause that would be silly</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Janey</td>
<td>wouldn’t it</td>
<td>checking for uptake</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>students</td>
<td>xxx [laughing]</td>
<td>uptake</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Janey</td>
<td>All right.</td>
<td>signaling new topic</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Janey</td>
<td>Arturo, you just said something very important.</td>
<td>further clarification of narrowing of sources</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Janey</td>
<td>Are we going to have,</td>
<td>mis-start</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Janey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>line</td>
<td>speaker</td>
<td>utterance</td>
<td>comments</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>students</td>
<td>are we going to be learning about cheetahs?</td>
<td>clarification that the topic is narrowed not just by the teacher’s choice but also by the subject of pond animals</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>students</td>
<td>No</td>
<td>response</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>Janey</td>
<td>Why not?</td>
<td>lead in to legitimation of clarification</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Arturo</td>
<td>We don’t have cheetahs and lions at the pond.</td>
<td>response/uptake</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>Janey</td>
<td>Yes, cheetahs and lions don’t live in the pond.</td>
<td>evaluation</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>students</td>
<td>Yeah xxx</td>
<td>uptake</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>Janey</td>
<td>Yeah</td>
<td>evaluation</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>Now, this is really, really important.</td>
<td>signaling new topic; emphasis on how important this topic is with the repetition of <em>really</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>...[refocusing a couple of students]</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>Janey</td>
<td>Mrs. J. [the school librarian] has these books in a certain order</td>
<td>books are named as a source but they are limited by the deictic reference <em>these</em>; the librarian is named as the person responsible for providing the books in the way in which they have entered the classroom</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>Hector</td>
<td></td>
<td>refocusing</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>She has the books in a certain order.</td>
<td>it is emphasized that she [the librarian] has acted in this manner, implying that the teacher has not done this</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>She has them in ABC order.</td>
<td>↓</td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Date</th>
<th>line</th>
<th>speaker</th>
<th>utterance</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>OK.</td>
<td>OK.</td>
<td>signaling change of topic</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>All four first grades are using the books</td>
<td>legitimation for the order of the books being used as sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>so it’s really important that we keep the books in order.</td>
<td>shift in pronoun to the collective we; a rhetorical move to engage the participants or get buy-in?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>That means that I will be taking the books off the shelf</td>
<td>back to first person indicating that the teacher will be acting alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>and I will be putting them back on the shelf.</td>
<td>↓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>OK?</td>
<td>requesting buy-in, indication of understanding?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 7</td>
<td>Melissa</td>
<td>Do you have a book about fish?</td>
<td>request for an authoritative source and use of a to mark one of many</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Olivia</td>
<td>No, she [Janey] said to look at this [Internet paper].</td>
<td>responds with another authoritative source and it is singular</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>I don’t know if this will help me.</td>
<td>indicating some resistance/frustration about the source; again indicating the singular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>This tells me about one kind of fish.</td>
<td>legitimation for the frustration/resistance indicated by the narrowing of topic—one kind</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>[pause while I am reading page]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Melissa</td>
<td>You don’t have any fish books?</td>
<td>request for books as an authoritative source; shift to you in a more</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
March 29 was the first day of the research report unit, and in this transcription we see Janey spending some time describing to the students the ways in which they will begin their research reports. She has told them that they will be looking through books to find out what pond animals they are interested in researching, and they are to write the
names of three animals on an index card to indicate their interest. (Later they are told they can write as many names as they want and star three of them.) The transcript begins with her telling the students that she will then assign them an animal (lines 1-2). She then gave two reasons why she would make the final choices: she wanted everyone to do something different (line 3); and she didn’t want 24 reports on turtles (line 5-8).

There is then some further discussion clarifying the parameters of the research the students are to do during this unit. Echoing back to line 4 and taking up Arturo’s comment about cheetahs (line 6), Janey asked the students about why they would not be doing a report on the cheetah. Arturo provided the “correct” response (lines 13-18). Janey then opened the discussion about the books on the library cart that was sitting near where the students and Janey were seated, saying, “Now, this is really, really important” (line 21). She told the students that the books were in a certain order (lines 22-25), and legitimated this with the information that all the first grades would need to use the books so they had to stay in order (line 27-28); she ended by telling them that only she would be taking the books off the library cart or putting them back on the cart (lines 29-30).

Although it was not the case that Janey wanted to be the only one to handle and shelve the books, because four first grade classrooms were using them at the same time, the collection of books that made up the primary source for the pond animal research was limited in its availability and accessibility. Students were not able to go and get the books off the shelves for themselves; moreover, the books were not always in their classroom so they were not able to keep them in their book boxes or refer to them during times other than Writing Workshop. Finally, although the books were appropriate both in terms of
topic and in terms of age and reading appropriateness (for the most part), they were limited in scope, chosen to provide information on the types of questions that would be typical of a research report on an animal. This was unlike students’ previous construction of books as sources where they had been able to browse through multiple, labeled baskets full of many books on a variety of topics that were available to them at any time in the classroom library.

Apart from the books on the topic that came from the library cart that travelled to the classroom on a daily basis, some students were also given white print-outs of information that came from Internet searches. These white pages were provided to supplement information for students who might not have had as many book sources. As is made clear in the April 7 transcript, however, it was expected that students use these sheets in their research. When I asked Olivia if she had a book we could use to confirm the guesses she was making about fish laying eggs, she waved the white paper at me and told me she was to use that for adding details to her research (lines 33-34). She seemed to feel some sense of frustration as expressed in line 35. After I read the sheet to see if it had any information about fish laying eggs, I again asked about the availability of other books, as had often been my habit when working with students during the poster unit (lines 37-38). At this point, Janey, who was seated with another group of children some distance from where Olivia and I sat, indicated that she wanted Olivia to use the information on the white paper she had (40-41). Again, after I negotiated with Janey to get Olivia one book from the library cart, Janey reiterated that Olivia needed to include information from the sheet in her research (line 45).
Like the approved books on the library cart, the white Internet pages provided a certain sort of information that Janey expected nonfiction writers to take up. These pages provided readable information beyond the scope of some of the book sources, depending on the pond animal being researched. Further, as was constructed during “writing with questions,” certain information needed to be included in the reports. The books on the library cart and the Internet pages were sources that Janey used to scaffold these young nonfiction writers so that they would be successful in researching and writing reports about a pond animal.

Recontextualization of the Writing with Sources Dimensions

Having examined the dimensions of the aspect of the cultural model I call “writing with sources” and seen how these dimensions were constructed, acquired and adapted, I turn now to how “writing with sources” was recontextualized during the research report unit. In the following table I have delineated the dimensions of writing with sources as they were constructed during the poster writing and the research report units. I have then noted how these dimensions were contextualized as they moved from the context of poster writing to research report writing.
Janey worked with her first graders across time to help them become more academically sophisticated as nonfiction writers. Thus, at the beginning of the first grade year it was important for her students to construct an understanding of how to ask “interesting” questions and then how to answer those questions using their own words.

By the end of first grade, students were able to read and write more, and they were able to build on previously constructed understandings of what it meant to be a nonfiction writer. Thus, with the research report writing, students, while continuing to use many of the dimensions of writing with sources they had used in the poster writing, also encountered some recontextualization of these dimensions in a form other than a repetition of them.

The use of nonfiction text features in books to ask questions disappeared for the most part...
although such text features were still positioned as being helpful for answering questions. Further, because of the characteristics of a pond museum, material objects like rulers to show measurement and actual objects like feathers and plastic snails were added to the materiality dimension.

Most significant however was the way that the use of textual sources was recontextualized. During the poster unit, Janey had encouraged students to use all the books available to them in their classroom library and in the school library. She encouraged students to look through books to ask and then answer questions. She discursively constructed this openness with words like “all”, “another”, and “a”. This is not to suggest that she did not construct with the students the understanding that they would have to narrow their focus to find answers to questions. However, even when answering a question about the weather, for example, she still had a weather basket full of books to look through as she thought out loud about how to answer her question.

During the research report this dimension was particularized to the use of specific approved sources which were largely controlled by Janey and the school librarian. While students could still go into the classroom library to find books that might help them, the texts that were constructed as approved sources were the books on the library cart and the white papers that had been printed from Internet searches to supplement information on certain topics. Moreover, these texts were tightly controlled. The books could only be taken off and put back on the library cart by Janey or some other designated adult; and the information on the white Internet pages was searched, printed and handed out to students by Janey. Moreover, if students were given one of these pages, it was expected
that they would use the information printed on the page as they researched facts about their pond animal.

The particularization of this dimension occurred, at least in part, as a result of Janey’s support for first graders writing research reports. As their topics were narrowed to a choice of pond animals and as their questions were specialized to help the audience learn about their topics, so, too, were the sources that were available for students to use. These sources were chosen to provide information on the many pond animals that the students might choose to research. Moreover, these texts were chosen to be accessible to students both in terms of readability and in terms of their earlier understandings of nonfiction texts and text features.

While most students took up this recontextualization, for several, it caused some tension and perhaps, arguably, some resistance. On the one hand, Olivia was led astray as she began to include sharks, whales and dolphins in her pond animal report. She and I were both redirected by Janey to the white Internet paper as an untapped source that we were instructed to make use of. On the other hand, Casey, who was passionate in exploring the idea that swans whacked people with their wings (she brought this subject up with me at least four times in data collected during April 5, 7 and 9), persisted in trying to find the answer, finally acquiring the relevant information on April 9 when I took her to the computer and found the height and wingspan of the largest swan.

Summary

This chapter begins to answer the question of what cultural model(s) are constructed by participants in a classroom as they socially and discursively come to
understand composing processes associated with researching or writing with questions and sources. It also addresses the question of how knowledge about the genre of nonfiction writing as related to researching (asking questions and using sources to find answers) was constructed, acquired, taken up and recontextualized by the classroom participants. The dimensions of the cultural model, “writing with questions,” included: asking interesting, topical questions to which one did not already know the answer; answering the questions by using sources; and writing the answers in one’s own words to show one’s learning. The dimensions of the cultural aspect, “writing with sources,” included the use of books, people, local knowledge and lived experiences, and materiality as sources.

Providing support for young nonfiction writers necessitates constructing an understanding about how to ask questions. In this classroom the teacher introduced and the students took on the activities associated with asking questions throughout the course of a school year. They began by wondering about anything at all that interested them; over time they moved to wondering about generic, content-related questions associated with the topic of their research report. Based on the detailed descriptions above, I argue that the teacher constructed the literacy activities in this way to support students as they moved from writing the simpler structure of a question and answer poster to the more academically demanding multi-page research report.

I also argue that the participants in this classroom were enacting a chronotope of wondering. During both writing units, Janey specifically used the word, “wonder.” During the poster writer session the word was used to name the index cards on which
students collected questions (“I Wonder” cards). In her talk during whole group lessons
during both units she used the word. Even the note taking tool she provided to students,
the Discovery Journal, implied an element of wondering through its use of the word,
“discovery.” Moreover, wondering was discursively constructed as a task that required a
display of interest and learning. Janey herself expressed interest in questions and
information that she heard from students or read in books through her use of language
like, “Wow!” or “Oh my gosh!”; likewise students took this up with similar language. So,
for instance, during read alouds, there would often be a chorus of “ohs” and “ahs”; and
during writing time it was not uncommon for students to approach me with an
exhortation like “Listen to this!” In these ways, then, over time wondering became a
stance or attitude that students acquired and displayed through their talk and their writing.

The aspect of writing “with sources” also reflects the ways in which Janey
provided support for young writers as they moved from the poster writing unit to the
research report. Just as Janey narrowed the scope of the questions students asked as they
moved from the context of writing a poster to writing a research report, she also
particularized the print sources available to them based on topic, readability and previous
experience with similar nonfiction texts and text features. While some children resisted
this narrowing of sources, seeking out other “non-approved” sources, others added to
their understanding of writing with sources by bringing in material objects for the pond
museum or books from home.

Finally, “writing with sources” revealed the issue of source authority. As students
worked with a variety of sources to answer questions, a hierarchy of authoritative sources
was constructed. At one end of the spectrum were books and other “approved” print sources which were considered to be the most authoritative sources. Other sources were more or less authoritative depending on who validated them. Teachers and adults had the most authority to do this; unvalidated local knowledge or suggestions, however, carried little authority and were often ignored.
CHAPTER 5: DATA ANALYSIS

Authoring Nonfiction Texts

In Chapter 4 I explored how participants constructed and acquired the aspects of the cultural model of being a nonfiction writer associated with doing research. These two aspects were “writing with questions” and “writing with sources.” In this chapter I examine two other aspects of this cultural model related to being an author, “writing with words” and “writing with nonfiction visuals.” While arguably all the work that was done by nonfiction writers was writing with words and visuals, I align this aspect of the cultural model with authorship—the choices that writers made as they produced notes, rough drafts and final products using both words and visual representations. This chapter, then, continues to explore the question asked in Chapter 4 (What cultural model is constructed by participants in a classroom as they socially and discursively come to understand the genre of nonfiction and the composing processes associated with it?) and also looks at the following question: What metacognitive and rhetorical composing practices do first graders take up when they write nonfiction texts and how do they come to construct their knowledge of what these processes are?

One of the aspects of the cultural model of being a nonfiction writer in this classroom is “writing with words.” The dimensions of writing with words included:
• using one’s own words when writing;
• using nonfiction vocabulary;
• accuracy in the information written;
• using mentor texts as models for one’s own writing; and
• awareness of audience.

In this section, I employ a narrative description of the talk that occurred during whole group lessons and writing conferences to describe how the participants in this classroom discursively constructed the dimensions of this aspect of the cultural model, “writing with words.” I begin by describing how the teacher introduced students to the roles and responsibilities of an author and then to the many choices that authors have when they compose. I also describe how students discursively and materially acquired and took up these dimensions as they moved from writing a question and answer for a poster to producing a several page report focused on an animal, bird or insect found in a pond habitat.

Once again I use discourse analysis to more closely analyze the ways in which the teacher “talked into being” the assumptions and understandings of what it meant to be an author. Finally I consider how the dimensions of writing with words during the poster unit were recontextualized to the research report as the classroom participants engaged in this more academically rigorous form of nonfiction writing.

Writing with Words: Part 1, November-December Posters

While much of the work that students did as nonfiction writers revolved around the writing of words on a page to produce written communication in the form of “I
Wonder” question cards, notes and sketches with labels in Discovery Journals, rough
draft writing and finished, “published” products, this aspect of the cultural model is
closely aligned with the notion of what it meant to be an author. As authors, students
came to understand that they had to make decisions about the best way to communicate
what they had learned so that their readers could learn new things, too. Further, this
learning had to be communicated using their own words as well as the vocabulary of the
discipline of their content matter. The role of the author and the responsibilities
associated with it reflected the understanding that writers of nonfiction assimilated
nonfiction text features from various sources to author new texts.

However, it is also worth noting that these students were only six years old.
Therefore, one part of “writing with words” was the routine of getting the words down on
the paper. As is typical with very young children (Calkins, 1986; Gentry, 1992; Graves,
1983), many of the students followed a particular early writing routine that had been
modeled by the teacher. The steps of this routine included:

- orally composing and rehearsing what they would be writing;
- using their own spelling knowledge of high frequency words to write some words;
- spelling the words for their writing by using the word wall to spell unknown high
  frequency or content area words;
- articulating slowly and writing down the sounds they heard in order to create
  temporary/invented spellings of unknown words;
- looking in their books and copying the word they needed in their writing;
- rereading throughout the process of writing; and
• using punctuation and capital letters.

This routine remained consistent whether students were writing nonfiction or something else. It is not my intent to examine early writing and spelling here. However, it is important for the data that I discuss as part of this aspect of the cultural model to note one aspect of this routine: looking in books and copying the words they needed to use in their writing. It was often the case that students did not know how to spell a word related to their writing that was associated with the topic they were investigating. So, for instance, when a student didn’t know how to spell the word “jib” or “muscles”, they would be encouraged to locate the word in the text and copy it into their own writing. This became relevant as participants in the classroom constructed their understanding of what it meant to author new text in relation to other texts and the disciplinary vocabulary associated with them.

*Using your Own Words*

As noted above students were encouraged to locate and copy particular words that they needed in their writing from the books they were using. One student even took this up with a nonfiction visual feature, copying a diagram from a book she was using. When Janey asked her why she had done this, she said that she wanted to remember it. At another point (December 9) when I was working with Hector (an ELL student) and his question about dogs (during this activity students has generated “I Wonder” questions), he was trying to spell the word “muscles” and I directed him to the book he was reading. Later during that same conference session, I asked Kane if he had found his answer. He replied, “I found it but don’t know what to write” at which point Javier said, “Copy”. I
suggest that this is evidence that there was a level of shared understanding among the students that one could copy from books to spell words, frame an answer and to save information that one wanted to remember.

However, during this same event, Colin took a different approach. He had come over to where I was sitting with Kane, Hector and Javier early in the writing session, and showed me his book. I read a page in his book and said, “There’s an answer on that page, I think, to your question. I just read this whole page and I think that I see an answer. See.” Colin read silently and then I asked him, “Did you see an answer?” He replied, “Yes”, and when I asked him what it was, he read the page to me. I reiterated, “So their thumbs are what helps, huh?” and returned to my conversation with Kane. Later Colin returned to where I was still sitting with the group, and showed me his “I Wonder” card and read the question (“How do monkeys hang on vines so well?”) to me after I asked him to do so. When I asked him what the answer was that he had found and written down, he read word for word what he had read from the book.

Somewhat taken aback, I responded to him: “You know, this is interesting, but you didn’t quite answer your question. Because to me, I mean, when I’m thinking about this question, your question was how can they hang on vines?” Colin said, “Uh” and then paused. I went on, “So what’s the answer? They have a thumb that makes it easy for them to swing, right? Cause do we really care, with your question, do we really care if they can tickle a baby? Does that answer your question?” Colin responded, “No.” I then said, “No. Does it answer your question if we say they can pick a leaf off a twig?” Again Colin said no. “But does it answer your question to say they can swing?” I ended by saying, “...one
of the things that you need to do when you think about taking information out of a book is think about how you want to say it, not just copy it out of the book.” Colin offered to erase the whole thing then, but I told him to take it to the teacher so that she could talk with him about it; he came back a few minutes later and told me it was “okay.”

Several days later (December 15), Janey addressed Colin’s writing during a whole group lesson. She began by saying to the whole class, “Do you know what we have to talk about? [Various students responded.] How do we write the answers down to the questions that we find?” She then invited Colin to stand up front by her chair so that he could “teach the class,” complimenting him on being so smart that he “remembered exactly where this [the page with the information] is”. After reading his question and answer, she said to the class, “He found his answer right away”, and she read the page that Colin had copied from the book. She then asked him why he had written what he did. His response was unintelligible, but Janey said, “Did you think it would, like, make it easier to remember? [portion of transcript omitted] Or you weren’t quite sure what to write down?” When Colin responded, “I don’t know”, she continued, “OK, so you played it safe and you wrote all of this down from the book.” She continued, “All right, so that was a strategy that Colin used. He wasn’t really sure what the right answer was, so he went ahead and copied it down. But we’re going to show you a different way to do it. OK? Because it didn’t really answer the question, did it?”

Using Colin’s question and the page from the book, she then modeled reading, rereading, shutting the book, writing the answer in one’s own words and rereading the question and answer to check that one had answered the question. After rereading the
page several times and receiving off-topic responses from other students, Maria finally answered correctly at which point Janey wrote the answer on the chart paper. She said, “So what am I going to do? If I want to put this in my own words, boys and girls, because you know what? If I copy the author’s words, is that helping me to learn?” Next, she had the students reread the question and answer. She asked, “Does that answer the question...? Did I copy it out of the book?” Finally she ended the lesson with this summary: “When looking for the answer, reread, read it again, close the book or magazine or whatever it is you’re reading, write, don’t copy, the answer in your own words....That’s how we do our best learning, if we can put it into our own words.” While this was not the first time that Janey had encouraged students to tell what they had learned about in their own words (December 8), it was the most extensive modeling she had done with this dimension of “writing with words” and as part of the overall cultural model of being a nonfiction writer.

Colin was not on the road to becoming a plagiarist. As has been reported in other research with young nonfiction writers (Jenkins and Earle, 2006), young children may have an urge to copy directly from the book. Especially in the context of answering questions that were generated from looking at books and the nonfiction text features available in the books, I observed many students looking for the same exact book that had generated their question. Coupled with the understanding that nonfiction writers sometimes copied words (in order to spell them) or diagrams (in order to remember them), for the students who could read the texts that they were using, copying the text could have seemed quite natural. However, in this instance, Janey constructed with her
students that copying verbatim from a book did not help them either answer the question or do their best learning.

*Using Nonfiction Vocabulary*

The day after the whole group lesson with Colin Janey called on Ned. “Come here, Ned,” she said. “Like, this was shocking to me. I had no idea about this. Okay, what was your question?” And Ned replied by reading his question and answer (as was the constructed routine when asked this question). He read from his “I Wonder” card: “What do starfish eat? Sea stars eat clams and they can open clams with their feet.” Janey responded by exclaiming, “Whoa! Can you believe that?” as she addressed Ned’s classmates who were seated on the rug facing them. After a choral response of agreement from the group, Janey then went on to clarify Ned’s use of the words starfish and sea stars by asking him, “Sea stars and starfish must be the same thing?” Ned nodded in agreement.

Later in the writing time, I checked in at the table where Ned was working. We had some conversation about his placement of the question and the answer on the paper and then I asked him what he was going to draw in the middle of the poster to help his reader, echoing Janey’s words from the whole class lesson as she sent students off to begin work on their posters. When Ned responded that he didn’t know what he was going to draw, I made a suggestion: “I wonder if you can draw a picture of a sea star’s arm opening up the clam.” Ned immediately replied, “Its feet.” I said, “Huh?” not really understanding what he was saying and he repeated, “Its feet.” I then said, “With its feet, yeah, yeah” and moved on. Some minutes later, Ned came up to me where I was working
at another table. Referring to a book that he had with him, he read from the caption, “Here’s what it really says: Sea stars, clams. Sea stars can open clams with their feet.” I suggested that I had mixed him up by using the word “arms” instead of “feet”; we had a few more moments of conversation, and then he left with the book.

![Sea star poster](image)

Ned had not copied verbatim from the source text when answering his question although he has relied heavily on the original. His shift from the word “starfish” in his original question on his “I Wonder” card (December 8—What do starfish eat?) to sea stars in the answer is one example of this. While he may have written his original card by looking at the picture and not reading the words and thus using a word (“starfish”) that was known to him, when he returned to the text to find the answer to his question, he read
and used the words that the author used to refer to what he, Ned, had named a starfish.

Then, when Janey talked about his question, she checked that he, and the other students,
perhaps, all understood that the two terms indicated the same thing. When he nodded his
agreement, she reiterated his answer using the pronoun “they” to establish this connection
(“OK. They eat clams and they open the clams up with their feet”).

Later, in his further conversation with me, he was quite adamant about the use of
the word “feet,” and not “arms,” when referring to what the sea star used to open up
clams. He corrected me initially and clarified the correction by seeking me out (almost
ten minutes after our original conversation) to show me what the book said. While some
of the impetus behind this might have been repair work (he may have felt he bordered on
rudeness or Janey may have indicated this to him), for whatever reason he used the book
and the vocabulary of the book to support his use of the terminology in his writing and
his correction of me. Likewise, this adherence to terminology from the book was also the
case with the words “sea star” and “starfish.” Although he used both words on his “I
Wonder” card, when he produced his poster (Figure 5.1) all the labels in his illustration
indicated “sea stars” and “feet” and the question at top of the poster asked, “What do sea
stars eat?”

Ned’s writing is indicative of the ways in which other writers took up and
negotiated the tension between copying and using your own words working within this
cultural model of being a nonfiction writer. As previous research with young students has
shown (Duke, 2000; Pappas, 2009; Purcell-Gates, et al., 2007 and others), nonfiction has
a heavy vocabulary load for young readers and writers. Some research has indicated that
this may lead to younger writers copying from the books they have read in order to record information (Jenkins and Earle, 2006). Other research has indicated the importance of talk mediating the way that students come to understand scientific concepts (Pappas et al., 2003).

In Janey’s classroom, while it could be argued that these findings are consistent with other research, I would argue that there was something else going on. As the participants in this classroom worked to write down their ideas, Janey emphasized the need to write “using their own words” so that they would be better learners and be able answer the questions they were asking more fully. Yet it was also a constructed understanding that books, as research tools, were very important; they could be used in a variety of ways, and one of those ways was as a reference for spelling the important words that one used in one’s writing. Typically these important words were often the vocabulary of the topic, copied from the text as students took up the academic language of the discipline in which they were writing. In Colin’s case copying had not helped him. He had not answered his question by copying the exact words of the text. In Ned’s case, after Janey checked that he was clear that “sea star” and “starfish” meant the same thing, his use of the academic or content language over his own language was constructed as helpful to him as a learner and a nonfiction writer.

Awareness of Audience—Author Responsibilities

A final dimension of this aspect of the cultural model, “writing with words,” concerned nonfiction writers’ roles and responsibilities as an author. As we have seen in “writing with sources,” the use of sources to ask and answer questions posed its own
difficulties and opportunities for students. The use of sources also had an impact on the way that “writing with words” was constructed. As research at many grade levels has shown, it is often a challenge for students to make sense of the different texts they read in order to write their own, “newly authored” text (Newell et al., 2012). A further challenge occurs as students construct their understandings of what it means to author a text in an unfamiliar discipline like science or social studies where they must assume authority on the topic of their writing. Moreover, as Greene (1995) has noted: “The sources writers use provide the basis for their work in the form of support and elaboration, particularly as they begin to assimilate ideas of other writers and find a way to say something new (p. 187).”

The students in Janey’s classroom also faced these challenges as they approached the task of writing their posters, a product in which they were to convey what they had been learning about during this writing unit. As they read multiple texts by many different authors, they were exposed to different voices and disciplines. Then, towards the end of the unit, Janey introduced the poster writing task, telling them on December 16: “So boys and girls, you guys have been doing so much learning. You have found out some really interesting things.” She went on to indicate to the students that they would be acting as authors, producing new texts that were an assimilation of the ideas they had been researching and expressed in “their own words.”

After modeling for them how they were to write their question at the top of the 18”x24” white paper and their answer at the bottom, she moved on to a lengthy discussion of how they would illustrate their posters. She asked, “How do you think it
[the illustration] will help the reader. Cause I want the people who are reading it, we're going to hang these out in the hallway. So other kids from Byrd are going to come and learn some new things.” After some discussion where students offered their ideas about how the picture would help the readers, Janey summed up the options they could use in their illustrations which included a picture, diagram or labels.

Then she asked, “Is there one answer that’s right? Like, is it wrong to say I’ll do pictures and diagrams? [Several students said no.] No, you are the authors. You have to make a decision about what you think will best help your reader.” And then, after speaking to some students about listening, she repeated, “This is super important. You are the author of your little poster. You have to decide what is going to be the best way to help your reader.” Finally she ended this segment of the whole group lesson by reminding the students that their readers were themselves, the kids and teachers at Byrd and the principal, and that “Everybody is going to make their own decision [about how they can help their readers understand].”

Up to this time the audience for their writing had been the teacher and other students as they had shared their questions and answers as part of Writing Workshop. This was the first time that an audience other than members of the class had been publicly constructed as part of the cultural model of being a nonfiction writer. Along with this construction of a new audience came certain roles and responsibilities. Janey used the word “author” several times in her talk positioning the students in this role. Likewise she connected with this role of author certain responsibilities. As authors, students had to make decisions about what they were going to write about as well as the best way to
communicate this in their poster writing and illustration so that the reader could learn new things. Further, as part of using their own words, students were to communicate their learning by authoring new texts which used not only their own words but also the vocabulary of the discipline they were writing about. Moreover, each student would be responsible for making an individual decision concerning the choices that were available to them for illustrating their posters. Again these decisions reflected the understanding that writers of nonfiction assimilated nonfiction text features from various sources to author new texts. This dimension of “writing with words,” then, while only briefly introduced during this unit, laid the ground work for the research report.

*Discursively constructing writing with words, posters*

We have seen in the previous section how the aspect of the cultural model, “writing with words,” included the dimensions of using your own words when writing, using appropriate nonfiction vocabulary and an understanding of the roles and responsibilities of an author. As authors, or people who write with words, students had to make decisions about the best way to communicate what they had learned so that their readers could learn new things, too. Further, this learning had to be communicated using their own words as well as the vocabulary of the discipline of their content matter. The role of the author and the responsibilities associated with it reflected the understanding that writers of nonfiction were both learners and decision makers.

In the following transcript I examine how these dimensions of “writing with words” were discursively constructed during the poster unit. I have included two examples in which Janey constructed for students what they were to be doing as authors
when writing with words. These two examples are presented in chronological order. I use these short pieces of transcribed talk from two days as representative of the ways in which she discursively constructed what it meant to be an author when writing with words. While this talk was embedded in much longer whole group lessons where much more information was discussed, for the sake of cohesion, I have put these samples together to show the ways in which Janey discussed the audience/author dimension of the cultural aspect of “writing with words.”
Transcript 5.1. Discursively constructing the dimensions of writing with words, poster unit

<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
<th>Dimensions of “Writing with Words”</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 15</td>
<td>1</td>
<td>Janey</td>
<td>The thumb</td>
<td>the task is to answer the question Janey has posed; she repeats a student’s answer</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>you’re right.</td>
<td>evaluation of the student answer</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>So what am I going to do?</td>
<td>using the pronoun “I” as she models; she is not asking what her action will be—it is accepted that she will write the answer now that they have identified the correct one based on the reading of the book; this is a transitional comment moving to the next step in the process</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>If I want to put this in my own words</td>
<td>the use of if is rhetorical—it is not an option to “put this in my own words”; continued use of first person as she models; this is a deictic marker referring to the information that answers the question (i.e. the thumb); using your own words</td>
<td>x</td>
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<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>words is juxtaposed to something else (copying)</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>boys and girls</td>
<td>calling students back to attention</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>because, you know what?</td>
<td>because signals a reason for writing in own words; tag question indicates that the information that is about to come as important</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>If I copy the author’s words</td>
<td>continued use of first person as modeling; “copy the author’s words” is now revealed as the juxtaposition to using your own words</td>
<td>x</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>is that helping me learn?</td>
<td>rhetorical question; that is the deictic marker referring to copying; learning is constructed as what nonfiction writers do when they don’t copy</td>
<td>x</td>
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<tr>
<th>Date</th>
<th>Line</th>
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<th>Utterance</th>
<th>Comments</th>
<th>Dimensions of “Writing with Words”</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>students</td>
<td>No</td>
<td>agreement</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Janey</td>
<td>So how can I say this in my own words?</td>
<td>continued use of modeling with first person; <em>this</em> is a deictic marker referring to the answer to the question; “my own words” marks not copying</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td></td>
<td>That the thumb helps the monkey</td>
<td>a restatement of the answer that needs to be expressed in own words</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
<td>How can I say that?</td>
<td>appeal for help from the students in shaping this answer (<em>that</em>) into writing</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[portion of the transcript omitted]</td>
<td></td>
<td></td>
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<td></td>
<td>13</td>
<td>Janey</td>
<td>Does that answer the question?</td>
<td><em>that</em> refers to the written response on the chart; evaluation of the writing of the answer to check for accuracy—implied that learning has occurred when you</td>
<td>x</td>
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<tr>
<th>Date</th>
<th>Line</th>
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<th>Utterance</th>
<th>Comments</th>
<th>Dimensions of “Writing with Words”</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td>Javier</td>
<td>calling student(s) to attention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>students</td>
<td>Yeah, yes</td>
<td>agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Janey</td>
<td>Did I copy it out of the book?</td>
<td>it refers to the written response on the chart; evaluation of the writing of the answer to check that it is not copied—implied that learning has occurred when you don’t copy</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>students</td>
<td>No</td>
<td>agreement</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>December 16</td>
<td>18</td>
<td>Janey</td>
<td>So boys and girls</td>
<td>calling students to attention; addressing the collective group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>you guys have been doing so much learning</td>
<td>guys reiterates the collective group as does you which could also point to individuals; emphasis indicates</td>
<td>x</td>
<td>continued</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comments</td>
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<tr>
<td></td>
<td>20</td>
<td></td>
<td>You have found out some really interesting things.</td>
<td>again the collective but also the individual you; interesting echoes the language that has been used to characterize the kinds of questions that nonfiction writers ask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td></td>
<td>In fact,</td>
<td>the tone here is serious and factual</td>
<td></td>
</tr>
<tr>
<td></td>
<td>22</td>
<td></td>
<td>you know what Mrs. Wilson said to me?</td>
<td>invoking Mrs. Wilson as an authority</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23</td>
<td></td>
<td>Some of your questions are like college questions.</td>
<td>use of <em>some</em> to qualify the questions that are in this category; Mrs. Wilson is an authority on college and research as established on previous occasions; college is invoked as an institution of learning</td>
<td></td>
</tr>
</tbody>
</table>

Dimensions of "Writing with Words"

- **Date Line**
- **Speaker**
- **Utterance**
- **Comments**
- **Dimensions of "Writing with Words"**
  - **using own words**
  - **nonfiction vocabulary**
  - **author responsibilities**

(x)
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>They’re like really, really hard questions.</td>
<td><em>they’re</em> refers to the questions; repetition of <em>really</em> as emphasis; “hard” is equated to learning at a high level like college</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>So, I want us to be able to show our learning.</td>
<td>shift to <em>I</em> as Janey moves to giving directions about what students are to do; continues with the collective <em>us</em> and <em>our</em> to modify learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[portion of the transcript omitted]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Janey</td>
<td>Is there one answer that’s right [about what to include in the posters]?</td>
<td>this is setting the students up as decision makers—i.e., when there is only one right answer you don’t have to decide anything</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Like, is it wrong to say</td>
<td>juxtaposition of wrong with right; <em>say</em> is the external voice of the decision maker</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions of “Writing with Words”

- using own words
- nonfiction vocabulary
- responsibilities
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<thead>
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<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td></td>
<td></td>
<td>I’ll do pictures and diagrams.</td>
<td>modeling how that decision maker might sound, so shift to first person; it is implied that there could be other combinations (e.g., labels and pictures)</td>
</tr>
<tr>
<td>29</td>
<td>students</td>
<td>No.</td>
<td>agreement</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Janey</td>
<td>No.</td>
<td>emphasis; evaluation</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>You are the authors.</td>
<td>shift to <em>you</em> indicates the individual students are all authors and authors are people who write down interesting things that they have learned as established earlier</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td>You have to make a decision</td>
<td>decision making is required as authors</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td>about what you think</td>
<td>decisions are based on judgment (thinking) about certain criteria</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
<td>will best help your reader.</td>
<td>the criterion for the individual decision is</td>
<td></td>
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</table>
### Transcript 5.1 continued

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>what will help readers understand what has been learned</td>
<td></td>
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</table>

- **Author responsibilities**: using own words
- **Nonfiction vocabulary**
Across the two days represented in this transcript Janey constructed with the students an understanding of the roles and responsibilities writers of nonfiction as they assimilated information from sources and authored a new text as part of this aspect of the cultural model. In fact, Janey described a process or routine for students to use as they went about writing using their own words. She began by validating that they had the correct answer to their question (lines 1-2) and then marked a transition to the next step (line 3) which was the step of writing the answer in one’s own words (line 4). After she had written the answer down on a chart paper and reread it, she checked that she had conveyed the correct information in her own words (lines 13-17). Embedded in the midst of this process or routine was a justification for why students should use their own words when they wrote. Not only did using one’s own words ensure that they answered the question, but she went on to indicate that copying an answer meant that the writer had not learned anything (line 8). So using one’s own words was synonymous with learning; in this way learning was constructed to be an important role for an author.

Learning, however, was also important to authors as they considered their audience. Here again, Janey positioned authors as people who learned many interesting and intellectually challenging things (lines 19-20; lines 23-24); but, as authors, they had a responsibility to share that information with others, their audience (line 25). They did this not only by asking interesting questions (a dimension from “writing with questions”), and writing in their own words the information they found to answer their questions, but also by making decisions about the best ways in which to present this information to readers (in this instance students, teachers, and community members who would be walking past the posters on display in the hallway outside the classroom). There was no single decision
to be made (lines 26-28); rather as individuals, authors had to decide the best way to convey what they had learned to their audience (lines 32-34). There seemed to be a single criterion for the individual decisions, however, and that was a consideration of what would help readers understand what had been learned by the author.

As in other transcripts Janey made use of “I” and “my” as she modeled for students by thinking aloud, only shifting to “us” and “our” as she invited students into thinking about how they would share their interesting and intellectually stimulating questions and answers. As she constructed for students their responsibilities to their audience as authors of their posters, she shifted to the use of “you,” indicating the individual even though she was addressing all the students. This shift in pronouns again marked a shift in the students’ roles as nonfiction writers. Now they were positioned as individual authors of their own work; as such, they had certain decisions to make in order to convey their learning to their readers.

In this way learning was constructed to be an integral part of authoring within this aspect of the cultural model. Nonfiction writers, first and foremost, of course, learned interesting, new things by asking questions, reading sources and writing down the information they found (all dimensions that comprised the aspects of the cultural model associated with doing research: “writing with questions” and “writing with sources”). As a dimension of this aspect, “writing with words,” however, they also learned that they used their own words to write down the information they had researched. Copying was occasionally appropriate, to help remember a diagram or to spell a word, but copying the author’s words right out of a book did not help an author learn anything. Furthermore, any decisions that authors made were justified if they helped the writer convey what they
Writing with Words: Part 2, March through May, Research Reports

I now turn to the dimensions of the “writing with words” aspect of the cultural model constructed, acquired and taken up during the research report unit. Students continued to use several of the dimensions discussed during the poster unit including copying words from books as a way to spell unfamiliar words and using (and sometimes even copying) nonfiction vocabulary from their sources as they took up the academic voice of the discipline they were researching. During this unit, accuracy and audience were added to or recontextualized as students were supported to take on the more academic language and structure of a formal research report. In the following section I discuss the dimension of using nonfiction vocabulary as well as the two further dimensions of “writing with words” that were recontextualized from the poster unit.

**Using Nonfiction Vocabulary**

The use of nonfiction vocabulary (i.e., scientific language that had to do with pond animals) occurred throughout this unit at various times during Writing Workshop. Several examples occurred during the whole group lesson where Janey worked with the students to write the questions that they would be using to guide their pond animal research. At one point in the discussion Zane offered: “It lives in a habitat” after Janey had written the question: “Where does my animal live?” Janey and another teacher in the room complimented him on his use of the “good science word”. Then just a few turns later, Kane asked: “Where do they hibernate?” again using a scientific term that the
students had become familiar with during earlier research and reading. Although he did not receive the compliments that Zane had, Janey did respond by acknowledging his contribution with a slight rewording and adding it to the chart.

This use of disciplinary vocabulary also occurred during later whole group lessons as Janey read aloud to students from the books she was using as mentor texts. She used several “hybrid” nonfiction books to model certain ways that students could write their information in their reports. Models that she presented during this series of mini-lessons included: *Atlantic* (2002) which used first person; *What Can You Do With a Tail Like This?* (2003) which included writing detailed information around the illustrations on a page with larger text giving a general fact; *If You Were Born a Kitten* (2001) which used the pattern If you were a ... (ellipses not included); and *10 Things I Can Do to Help My World* (2008) which included the use of ellipsis.

As Janey read aloud from these mentor texts the students often commented and asked questions about the topical information that was being presented by the author. For instance, on April 5 when Janey was reading *If You Were Born a Kitten* (2001), there was some discussion about the word “porcupette.” Janey asked Olivia what the word meant and Olivia answered: “It’s like a little baby porcupine.” When Janey asked her how she knew, Olivia replied: “Cause in the picture it doesn’t show it big, it shows it in the wild as a little baby.” Janey went on to define the term further: “It’s not talking about an animal that would be your pet dog or your pet turtle or your pet fish. This is p-e-t-t-e and it means little.” She characterized this information as “really important,” possibly because initially several students had said in unison that a porcupette was a pet or a pet porcupine.
With the “porcupette” example Janey was focused on specific vocabulary that students were hearing in the read aloud. However there was a focus on conceptual language as well. Later in that same lesson, Olivia asked Janey to turn back to a conceptual and literary phrase that was used on the whale page. The text read: “Then your mother would nudge you up for your first sip of air.” Olivia commented: “I notice that when they say a sip of air, they’re not going like this [making a slurping sound and motion with her mouth], they’re just breathing.” Janey confirmed this with her agreement that the whale babies were just taking a little breath. Right after Olivia’s turn, Marcy had Janey turn back to yet another page about baby possums being the size of teaspoons. Marcy said, “I was reading a book and it is on Life Size Zoo. It was talking about a koala and it says a baby koala, when it’s born, it’s as big as a jellybean.” In both these examples students were taking up and connecting the use of conceptual language by defining content-specific vocabulary using their own language and knowledge. While much of the discussion that occurred during these read alouds did not appear in the research reports, the use of specific vocabulary did appear later in students’ notetaking, their rough drafts and their final pieces. It can perhaps be argued, then, that these conversations were indexical of the ways students acquired and took up the use of disciplinary vocabulary as part of this aspect of the cultural model.

During conferences the students and researcher also used nonfiction language. On March 30, Eban, whose topic was fishing spiders, talked to me about what the spiders ate. He turned to the index of his book looking for where he might find information about this. As he was reading the words in the index, I asked him if the index said anything about food or eating and he said excitedly, “Prey.” I confirmed that the word “prey” did
mean what spiders would eat and complimented him on this knowledge. Then, as we
looked at the page about prey, I struggled to read to him the Latin name of the two
species of fishing spiders the book was addressing. I finally gave up with the
pronunciations, however, suggesting that he simply read and write fishing spider instead
of using the “fancy name.” Eban took this suggestion up later, asking me if he could just
write the word spiders; I replied he could in his notes, but he would need to use the full
phrase “fishing spiders” in his report. Later, both in his notes and when sharing he did use
the phrase “fishing spider,” and made no further reference to the Latin name.

A day later Maddox came up to show me a “bad picture” in his book. The picture
showed coyotes chasing a herd of deer and Maddox told me the picture was bad because
“the baby deer are going to get chased.” Lucas, who was standing nearby offered that it
was a “stamp” “when the coyotes chased them” which I interpreted to mean “stampede.”
Later, when just Maddox and I were looking at another picture of deer crossing a river, I
asked him if he thought that was a picture of a stampede too. Maddox replied, “No. Well,
you see, these on the back are walking. They’re all walking.” I then asked, “So a
stampede isn’t walking?” to which he responded: “No, they always run to get away.
That’s why they have long legs.” While Maddox didn’t take up Lucas’ initial suggestion
that the deer were stampeding on the page where they were running away from the
coyotes, he understood the concept and was able to refute it when applied to the deer
crossing the river at a walk.

Another instance of adult mediation of the use of nonfiction vocabulary occurred
when I was working with Hector’s question: Do mosquitoes fight? Hector had been on
the edge of an earlier conversation between Carlos and Maddox when I had asked
Maddox to tell Carlos about why deer fought in order to help Carlos answer his question about why turtles fought. Maddox had told us: “they [the stags] were fighting with their antlers to see how strong they were so the strongest gets to make a baby with the female.” Some time after this conversation, Hector had decided that his next question would be about mosquitoes fighting. After he located a book about mosquitoes, I directed him to open to the table of contents and I read the chapter titles to him. Then I said: “he [Carlos] said turtles fight for a girl and he [Maddox] said deer fight for a girl, so how about, and that’s how you make a baby and the word mate means making a baby, so look in that chapter “Ready to Mate” that starts on page 18” [Hector was moving his pencil down the chapter titles in the table of contents as I said this]. Here, then, I was making connections between the earlier conversation that I believed had influenced Hector’s question to the specific vocabulary of the source text in order to help Hector understand how fighting animals and the word “mate” were connected.

In a similar example on April 7 I checked in with Colin who was writing about how fast beavers swim. He had written in his Discovery Journal: “A beaver is a streamlined swimmer.” When I asked him: “What does that mean?” he repeated the word, elongating it into two separate syllables and then opened the book, saying “it’s in the book.” When I asked him if he had to look in the book to find out what it meant, he said, “It means it’s a good swimmer.” I pressed him for what a good swimmer would be if you were a beaver and he repeated the word “streamlined”. When I asked him again, I was met with an “I don’t know” and a turning away of his head and body, at which point I ended by saying, “I think it means it’s fast.” Colin was the same child who had copied the text verbatim about monkey’s thumbs during the poster session so some of his actions
might have reflected his uncertainty about having copied a word from the text.

Regardless, although he had some idea of what “streamlined” meant, I suspect that Colin might have copied the word (or words) from the text and not authored a new text that reflected the combination of using his own words along with the nonfiction vocabulary as had been modeled and guided within the cultural model.

A final note about the use of disciplinary nonfiction vocabulary as it occurred in these data. During the research report unit in particular, because students were writing about life cycles and how pond animals mated and reproduced, animals were often gendered using human terms. So, while some students used more scientific vocabulary and referred to male and female animals or insects, they were just as likely to refer to “girls” and “boys” as well as “moms” and “dads.” There is no place in these data where Janey addressed this issue although she did compliment one student who used the word “female” instead of “girl” during the sharing session on April 13. On another occasion (April 9) she herself used the word “female” when modeling a mentor text pattern and then changed it to “girl” when it seems that a student did not understand the word. So it may have been left unaddressed because she felt this helped students make sense of what they were learning; on the other hand, it simply may not have been something that she was concerned with at this juncture.

Research about how read alouds aid in the acquisition of scientific register as well as work that points to the high vocabulary and conceptual load of nonfiction for early readers is supported in the examples above as students acquired and took up this dimension of the cultural model. Although Janey did not explicitly teach nonfiction vocabulary, she and I both worked with students to mediate their understanding of
unfamiliar nonfiction vocabulary and conceptual items during read alouds and conferences so that they would be able to use this nonfiction vocabulary when they authored their new texts. Students took up these understandings in tension with the understanding that they should be using their own words when they authored new texts. Thus, as they interacted and questioned their way through read alouds, and as they read or were read to when doing their own research, they sometimes made intertextual connections and defined words and phrases in their own language. However, as they wrote, they also often copied words from their texts that reflected the disciplinary language of the research reports but were not necessarily fully translatable into their own words. I touch on this dimension again in Chapter 6.

Writing with Accuracy

Another dimension of writing with words within the cultural model was the dimension of accuracy. One example of this that I discussed in the earlier poster unit, was when, upon hearing about bird-eating spiders from Guyana, South America, Carlos said that he had found one in his bathtub. I had responded immediately telling Carlos that he lived in North America and so he would not find that kind of spider in his home since it came from South America. Later in that same event, I also checked the accuracy of the sizes of the birds they were shaping with their hands and the dinner plates, actually moving their hands when I felt they were exaggerating the sizes. This checking for accuracy continued and became more explicit during the research phase as Janey and I constructed with students the understanding that the information they reported had to be accurate.
In some instances accuracy involved checking a detail in the book. When Colin came up to me and told me his next question was: “What do beavers build their lodges with?”, he immediately added, “Oh, which is just sticks.” I asked, “Just sticks, no mud?” He replied, “Maybe” and I sent him off to check in his book. He came back quickly: “I just found it, right on the next page...With sticks, grass and mud [reading from the text].” He then added this information to the answer in his Discovery Journal. During that same Writing Workshop I asked Carlos what happened to the turtle that lost the fight. When he was unable to answer my question, I asked for the book and read him the appropriate text from the book, which he reproduced in his writing as “This turtle lost because his back is down.” A final example occurred as students began the process of illustrating their final, edited research reports. Colin came up to me and showed me that his final printed page did not match the information in his Discovery Journal. He had written that beaver kits learn to swim at five years old, but his final copy said thirty minutes. Janey overheard him telling me this and came over: “That was not right. I was an editor and double checked your facts.” She went on to explain that it had seemed to her that beavers would learn to swim sooner since they lived in the water; so she had checked on the Internet at home when she was typing up the report and found the fact that kits learned to swim in 30 minutes. In these examples, students and teachers turned to print sources (a dimension of “writing with sources”) to verify guesses, recall information or double check facts.

In other instances inaccurate information was labeled by an adult as possibly made up or not true. In most instances this involved the adult contradicting the student. For example, on March 30 Olivia told me that fish were alive half a billion years ago. She then added, “When mummies were made.” I said with some emphasis, “Before
mummies....That was in the time of the dinosaurs.” Returning to the subject of the age of early fish species on April 8, she told me: “I think they found a skeleton and they put it in a, like, little gadget [to age it].” I agreed that this might be possible, but I said, “We can’t make it up. We really have to have some facts.” Later on April 9 when she and I were working together again, she told me that she thought the rainbow fish was the most colorful species of fish. I again immediately contradicted her, saying, “Oh, the Rainbow Fish is a made up fish,” to which she replied, “I know.”

Similarly when Maddox was struggling to use the “If you were born a ...” pattern, he told me that he could write, “If you were born a fawn, your mom would lick you.” I responded: “Maddox, where’s your fact that says your mom would lick you? Where is that in your research?” He replied: “Nowhere,” without even looking in his Discovery Journal; then I said, “Because it’s not true. Don’t make up facts to match the kitten book [from which the “if you were born a ...” pattern came from].” Meanwhile in the background of our conversation, Eban, possibly coaching Maddox, could be heard saying “you could say if I were born a fawn.”

On April 28 Olivia coached Hector with his writing. Hector had told me about his illustration: “Here’s the babies are coming out of the mom’s belly.” My response was, “They don’t come out of bellies in insects.” Olivia added, “I think they lay eggs.” I then explained further to Hector: “They lay eggs so they’re not mammals. Mammals, they come out of the mom’s belly but when they lay eggs, they are not mammals and insects are not mammals. So you can’t have that. They have to come out of an egg.” Olivia then suggested to me of how Hector might write this, using the pattern from her own writing about fish laying eggs. I validated her suggestion and asked her to tell it to Hector. She
then explained to him: “Maybe you can say, instead of, I am a fish. I lay eggs, you can say, um, fish, dot, dot, dot [ellipses pattern], I mean mosquitoes, dot, dot, dot instead of saying I lay eggs, then I am a mammal, say I am not a mammal cause I lay eggs.” Hector, overwhelmed by all the talk, simply responded with, “Oh. Do I have to get another page?” He did not do this writing immediately, but eventually in his published research report, he did write: “Mosquitoes...are not mammals. They lay up to 300 eggs.” In these instances, students were discouraged from using made up information or information that was not true for their pond animal and instead given further information by an adult or asked by the adult to attend to another student’s suggestion or contribution.

Finally, accuracy also involved students recontextualizing knowledge they knew from one context to another; but again this was mediated by adults as they checked the students’ information because of a possible fallacy of logic (as Janey had done with Colin’s page about beaver kits learning to swim). So, for example, during a read aloud on April 8, Marcy was reminded of something she had read in a book about birds when Janey read the page about a baby albatross: “When I was reading a book about birds, it said an albatross can fly a year without stopping.” Janey wondered aloud if it didn’t have to stop and eat or if maybe it caught its food in the air. Marcy said she didn’t know the answer to that question, and Maddox suggested: “I think it ducks down because it said they eat fish” indicating that the albatross caught fish from the sea and not prey from the air. This was an example of a student recontextualizing information from another source that was no longer at hand and so could not be checked for accuracy.

In the following examples the sources were directly consulted, possibly because the participants had been using them more recently. On April 13 Arturo and I had a
discussion about what snakes could smell with their tongues. I had asked him what they smelled, suggesting it probably wasn’t pizza. He said: “Persons can smell with their nose and they can smell chicken or a sandwich.” I asked him again what he thought snakes smelled and he looked through his Discovery Journal until he came to the page about what they ate or got eaten by. His answer was: “They can smell snails, fish, frogs and worms and owls.” I complimented him on his “smart thinking” but made sure to point out that snakes would smell owls, not because they ate them but because owls ate snakes, again mediating for accuracy.

On April 26 as I was checking in with students as they finished up their research so that Janey and I could type them up and print the pages for their reports, I asked Stewart about where he got the fact for his writing, “if you are a muskrat, you look like a beaver.” He told me: “Cause Colin showed me a picture of a beaver and I looked at the muskrat and the beaver and they looked, they kinda looked the same.” Colin, who was sitting nearby agreed, “They do look the same.” I suggested that muskrats were probably smaller, though; he told me that he didn’t know how much they weighed or what size they were. As I moved to another student at the table, checking on his progress with his research on turtles, I read that turtles eat muskrats on one of his pages. I pointed this information out to Stewart since, if turtles ate muskrats, they could not weigh the almost 70 pounds that Colin had reported that full-grown beavers weighed. Although in his final research report, Stewart did not include any information about the size of the muskrat, writing about how it had the same shape and fur as a beaver, his illustration showed a larger beaver and a smaller muskrat on the page.
The dimension of accuracy within this aspect of the cultural model was constructed as a matter of judging which knowledge was authoritative. For that reason accuracy was closely related to “writing with sources.” When students were asked to support their facts, books were constructed as having more authority than their guesses or intertextual connections, as logical as those guesses or connections might be. Students were told to find or check the facts in books or in an equally authoritative source text, the notes they had written in their Discovery Journals. Likewise, teachers were judged to have even more authority than the book, able to change written “facts” as with Colin’s final report, or contradicting students outright when they presented incorrect information. At other times teachers worked to help students make connections between what they had learned during their research with further information from others. In this case, again, the teacher validated the accuracy of the source by inviting the other student to provide information or by referring to that student’s information.

A final note about accuracy involves playfulness. The students in Janey’s classroom were first graders and as playful as would be expected of that age group. So, sprinkled throughout the data are places where the students are playing, and, in those moments, accuracy was often ignored. So, when Casey came up to me giggling to show me her picture for the pretty swan page (referring to how feathers make swans look beautiful), I laughed with her at her illustration of two swans garbed variously in a bow and blouse, and a hat and bowtie. Likewise when Colin announced that he, in his role as his pond animal, the beaver, “accidentally ate Ned and Kane because I eat plants and they live on branches” and then opened his mouth wide and made a crunching sound, Janey and I just enjoyed his cleverness. In some of these moments of play, accuracy and the
legitimacy of the sources was ignored. At other times, however, students used accurate disciplinary knowledge to be playful. So, for example, when Hector drew a moon and star in the sky as part of an illustration for his mosquito research report, I said, “Better watch out for bats then!” After a few seconds, he erased the star and moon and drew a sun, saying, “I don’t want [them] to eat my eggs.” Later, as he continued to illustrate this same page he drew a V shape in the corner of the page, saying, “Yeah, but this one is not a mosquito.” I asked, “What’s that one?” and he answered, “Bird” grinning up at me and then performing being scared. Here Hector and I used accurate disciplinary knowledge about the predators of mosquitoes to play together as he was working on his final illustrations for his research report. I address the issue of accuracy again in Chapter 6.

Using Mentor Texts

Throughout the research report unit Janey made use of texts that she referred to as mentor texts. She used several books from the nonfiction section of the classroom library, research reports written by students from the previous year and also Hector’s book about race cars written earlier that school year, which included a three-page spread. Many of the writing mini-lessons she led during this unit focused on “hybrid” nonfiction books which she used to model certain ways that students could write their information in their reports. Models that she presented during this series of mini-lessons included: Atlantic which used first person; What Can You Do With a Tail Like This? (2003) which included writing detailed information around the illustrations on a page with larger text giving a general fact; If You Were Born a Kitten (2001) which used the pattern If you were a ...; 10 Things I Can Do to Help My World (2008) which included the use of ellipsis.
During these read alouds (which began on March 30) the authors and titles of these mentor texts and what the authors did in them were collected on a chart which Janey referred back throughout the course of these mini-lessons (Figure 5.2). So, for instance, on March 31 she told the students before she began to read aloud *Atlantic*: “We’re going to be thinking about what the author, Brian Karas, does to really make us say Wow!” When they finished reading the book, she asked again: “What do we notice that Brian Karas does in this book that maybe we could do in our own writing?”

She wrote down on the chart (see Figure 5.2) students’ responses about the patterns the authors used as well as other conventions, like writing facts around the illustrations and including information in the back of the book in a coda suggesting to students that they might like to try some of these techniques in their own writing as they researched and took notes.

Then on April 13 Janey began revisiting these mentor texts, practicing with a fact from Hector’s writing to model how students could use the pattern of the text in their own writing. She told the students: “I want to write it as if I were Brian Karas today. So how
would I write that on my paper?” After modeling this with Hector’s fact about what mosquitoes eat, she sent the students off to try to write up some of their facts using the “I am” pattern of *Atlantic*. On subsequent days Janey reviewed *If You Were Born a Kitten* (2001) and *10 Things I Can Do to Help My World* (2008) in a similar way, sending the students off to write using the pattern of that particular mentor text each time, giving directions like the one from April 15, when she told the students to take their information and “make it look like this book” (*10 Things I Can Do to Help My World, 2008*).

During sharing time on April 13 Janey told the students that she wanted to hear about the decisions they had made as authors in their writing. Janey commented on illustrations, the use of labels and specific vocabulary, bold print and speech bubbles. She also encouraged students to keep similar information on one page; so, for instance, she complimented Marcy on crossing out the information about laying eggs that she had included on the page telling how dragonflies fly. She reiterated this on April 15 when she was talking about adding facts around the illustration as in *What Can You Do With a Tail Like This?* (2003): “I want to keep the two ideas together. I don’t want to have an idea about eating and over here what they look like. Cause that wouldn’t make sense, would it?”

Finally, on April 20, after several days of practicing writing like the authors of the mentor texts, Janey told the students: “So now you have to think about what is going to be the best way for you to share your information in your books.” After students had a chance to pair share, she called them back together and had some students share decisions they had made about which pattern they might use. Then, she went on to say: “What if you decide to use *Atlantic* or *If You Were Born a Kitten*, could you still use some of the
other things like Steve Jenkins’ *What Can You Do With a Tail Like This* with facts around your illustrations?” The students responded affirmatively, and she agreed “Absolutely!”

The final time in my data that Janey mentioned the mentor text patterns was on April 26 as students were finishing writing their reports. She talked about why researchers/students would want to go back and reread what they had written so far. One of the reasons she gave to the students for doing this was so that they could remember what pattern they were using as they continued to write up their other research.

Writing using the patterns of mentor texts was one way for students to author an interesting and new research report for an audience that would include their families, other students, teachers and even the principal. Janey provided students with opportunities to practice using the patterned texts of other nonfiction authors using their own research material; she also provided paper laid out in ways to support their use of a pattern when she found that they were struggling with particular patterns. Ultimately the use of mentor texts was constructed as a way to author a research report that would be interesting and help readers learn about pond animals. Once again, each student was responsible for making an individual decision concerning the choices of mentor text patterns available to them as an author. Moreover, this decision reflected the understanding that writers of nonfiction not only assimilated information and disciplinary vocabulary from various sources to author new texts; it also recognized that, as part of this cultural model, nonfiction writers used certain techniques or patterns to produce interesting and informative writing.
Discursively constructing writing with words, research reports

Having delineated the dimensions of “writing with words” that were constructed, acquired and taken up during the research report unit, I now consider how Janey continued to position students as authors or people who learned new things and wrote about them in interesting or engaging ways so that their readers could learn something new, too. In the following transcript I have included two examples in which Janey constructs students as authors who might use the techniques of other authors when writing their own texts. These two examples are presented in chronological order. I use these short pieces of transcribed talk from two days as representative of the ways in which she discursively constructed mentor texts and how students could make use of them. While this talk was embedded in much longer whole group lessons where much more information was discussed, for the sake of cohesion, I have put these samples together to show the ways in which Janey discussed the use of these approved texts as sources.
Transcript 5.2. Discursively constructing the dimensions of writing with words, research report

<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
<th>Dimensions of “Writing with Words”</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 29</td>
<td>1</td>
<td>Janey</td>
<td>The Awesome Turtle</td>
<td>She begins reading a research report by a student from the previous year by reading the title; this is a model for the students of what they will be working on</td>
<td>x x</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>Look how he wrote the word awesome</td>
<td>she points to the word in the title and uses <em>he</em> indicating this is the person who produced the writing—the author</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>He noticed it from some authors</td>
<td>again <em>he</em> refers to a student but is connected to other <em>authors</em></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>who did that in some books that they wrote</td>
<td><em>who</em> refers to other <em>authors</em> who have written books</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>and so he tried that in his own book</td>
<td><em>he</em> is the student who used other authors’ ideas as an <em>author</em></td>
<td>x</td>
</tr>
</tbody>
</table>

[portion of transcription omitted]
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Janey</td>
<td>Are you noticing a pattern</td>
<td>the author has written using a certain technique—a repetitive pattern; there is a correct answer to this question; you is noting that all the “readers” should be noticing</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Janey</td>
<td>Are you noticing a pattern</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>several students talking</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Janey</td>
<td>What kind of pattern is he using?</td>
<td>he, the author, has made use of a pattern or technique</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Ray?</td>
<td>Ray?</td>
<td>calling on a student to answer the question</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Ray</td>
<td>He keeps saying it over and over again.</td>
<td>recognition of some pattern that he, the author, has used throughout the pages of his book</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comment</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>---------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Janey</td>
<td>What’s he keep saying over and over again?</td>
<td>Janey is pushing for a more specific answer that tells what words he has used as he has written his information</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Ray</td>
<td>If you were a turtle, you might, xxx,</td>
<td>student gives one option</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td></td>
<td>or you will</td>
<td>student gives another option</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Janey</td>
<td>Guess where he learned that?</td>
<td>affirmation of answer implied; the author learned how to do this and did not create it out of nothing</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>students</td>
<td>Where?</td>
<td>public display to indicate students are part of the conversation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>one student</td>
<td>From you.</td>
<td>answer based on how students in school generally learn things, not how authors learn things—people as sources</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comment</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>---------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Janey</td>
<td>He learned it from another author.</td>
<td>reconnection of student author with other authors—books as sources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[portion of transcription omitted where Janey finished reading the report]</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>So that’s the end of his story</td>
<td>the expectation is that authors write stories or books and the idea of the research report has not been introduced yet</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>He has a little about the author page</td>
<td>the student is named as an author on this page</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>students</td>
<td>Can you read it?</td>
<td>public display of interest</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>Janey</td>
<td>It says: [Janey reads it]</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>Janey</td>
<td>Would you like to write a book like this?</td>
<td>this is a rhetorical question; sets up the task that students will be writing a book like the one just read; reference</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comment</td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
<td>---------</td>
<td>---------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>March 31</td>
<td></td>
<td>Janey</td>
<td>What about the words?</td>
<td>authors use words when they write as well as the other things that students have put on the chart already</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>Janey</td>
<td>What did we notice when he [Brian Karas] says</td>
<td>he is the author is Brian Karas who has written a published book; we are readers; says means write</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>Janey</td>
<td>I am the ocean?</td>
<td>quote from the text</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td>Comment</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>---------</td>
<td>----------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>26</td>
<td>Colin</td>
<td>Oh he was thinking about the ocean</td>
<td>Colin constructs the task as <em>he</em>, the author, thinking about a topic, in this case the ocean, and then writing about it</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Janey</td>
<td>But</td>
<td>evaluative—not the answer Janey is looking for</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td>how did he,</td>
<td>mis-start directing to what the author was doing</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>did it say</td>
<td>shifts away from this author and his authorial decisions to possible other words that might be in the book (it)</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>the Atlantic ocean is next to North America, South America and Africa</td>
<td>this is said flatly and in a monotone as one utterance</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>That’s, like, kinda boring</td>
<td>judgment that the above was boring; implied is that Karas’ writing/words are not boring</td>
<td></td>
</tr>
</tbody>
</table>
## Transcript 5.2 continued

<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
<th>Dimensions of “Writing with Words”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32</td>
<td></td>
<td>isn’t it</td>
<td>asking for agreement</td>
<td>nonfiction</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td></td>
<td>to say it like that.</td>
<td>reiterating what they are judging; <em>it</em> refers back to the flatly delivered utterance</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>Kane</td>
<td>calling on a student to get ready to answer a question</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>Kane</td>
<td>what does he [Brian Karas] do?</td>
<td><em>he</em> is the author who acts in certain ways, in this case by using certain language</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>Kane</td>
<td>He says, like, xxx, um [long wait]</td>
<td>display of thinking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>Janey</td>
<td>What does he use?</td>
<td>general clarification and repetition of question</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td></td>
<td>What words does he use</td>
<td>further clarification that the answer involves words</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td></td>
<td>to kind of make us know that he’s talking like he’s the ocean?</td>
<td>details of what these words that the author uses do for readers</td>
<td>x</td>
</tr>
</tbody>
</table>
On March 29 during the whole group lesson Janey referred to a student-made research report. The text of this book had been printed on the computer, bound up as a book and was filled with water-color illustrations. Then on March 31 she referred to a published book, *Atlantic* (2002), by author Brian Karas. While they appeared to be radically different, in fact, they were positioned as similar by Janey. She referred to both books as having been written by authors (line 19, unnumbered line beginning March 31 segment). She also asked the students to notice that both authors had used certain words to convey their information to the reader (lines 8 and 11, lines 23-4, lines 28-9). While the student author was positioned as learning from other authors (lines 14, 17), which is not the case with the adult author, nevertheless the student author did not learn from the teacher as is the usual way of school. Rather the student author learned from noticing what other authors did when they wrote.

Along with positioning the student and Brian Karas as authors of texts that students might use as mentors for their own writing, Janey also talked about how these authors made use of words when they wrote texts. In both instances she asked the students to identify the pattern of the words the authors used to frame their writing (lines 8, 11, 23, 38-9). While it was unclear why the pattern of words might be helpful to future authors in the first example, there was some authority provided for the student’s use of the pattern when Janey connected the student’s work to the work of other authors. The reason for using patterns became much clearer, however, when Janey discussed the work of Brian Karas. Providing an alternative text which she delivered in a flat monotone, she indicated to the students that the alternative text was boring (line 31) implying that Karas’ original text was, therefore, interesting.
Using these books and several others on subsequent days, Janey constructed with her students an understanding that nonfiction writers notice what other authors do when they write with words so that they could use those same ideas in their own writing. This was not copying but rather one of the ways in which authors made their writing interesting. While learning and decision making were still integral parts of authoring, the way that an author used words was now constructed as an added dimension of authoring. It was no longer enough to write a text that assimilated information to help the audience learn something new. Now the writing itself had to be interesting, something that made the reader say “Wow!” And the way that one learned how to do that was by noticing the techniques or patterns that other authors used, whether they be student authors or commercially published authors. I refer to this again in Chapter 6.

Recontextualization of the writing with words dimensions

Having looked at the dimensions that were constructed as part of the cultural model of “writing with words” during the poster and research report writing units, I turn now to how these dimensions were recontextualized during the research report unit. In the following table I have delineated the dimensions of “writing with words” as they were constructed during the poster writing and the research report units. I have then noted how these dimensions were recontextualized as they moved from the context of poster writing to research report writing.
### Table 5.1 Recontextualization of the “writing with words” dimensions

<table>
<thead>
<tr>
<th>Poster writing unit</th>
<th>Research report writing unit</th>
<th>Recontextualization</th>
</tr>
</thead>
<tbody>
<tr>
<td>copying to spell words</td>
<td>copying as part of spelling routine so that correctly spelled disciplinary vocabulary is included in the writing</td>
<td>repetition</td>
</tr>
<tr>
<td>using your own words</td>
<td>using your own words and making sure that the information included is relevant to the topic/question</td>
<td>repetition with the addition that the facts and details about the topic are accurate</td>
</tr>
<tr>
<td>using nonfiction vocabulary</td>
<td>using nonfiction vocabulary as a part of the academic, disciplinary field or content area they are writing</td>
<td>repetition with the addition that students were expected to tell what the vocabulary meant</td>
</tr>
<tr>
<td>being an author and making decisions based on awareness of audience</td>
<td>authors have a responsibility to assimilate information and produce new texts for their readers using a question and answer format</td>
<td>repetition with the addition and particularization of patterns from mentor text authors to make the writing interesting to the readers</td>
</tr>
</tbody>
</table>

Janey worked with her first graders across time to help them become more academically sophisticated as nonfiction writers. The poster unit occurred at the beginning of first grade when many of her students were not writing fluently, having to rely on the word wall to spell high frequency words and using invented or temporary spellings to record other unknown words. Further, students were encouraged to spell some of the vocabulary of their content area by copying from their texts since the use of disciplinary language was part of the constructed understanding of being a nonfiction writer. The use of copying, however, created a tension for some of the students which

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Janey addressed after one student had copied a page of text to answer his question. At that time she made explicit that, in fact, nonfiction writers used their own words when they wrote and did not copy what another author had written from their book. Although it was still acceptable to copy single words related to the disciplinary vocabulary of one’s writing, copying large amounts of text was not acceptable because it did not reflect the ways in which nonfiction writers assimilated the ideas they had been researching to author a new text.

These three dimensions (copying to spell, using your own words and using nonfiction vocabulary) were all recontextualized through repetition in the research report unit. There were also additions made to the latter two dimensions. Accuracy, which had only been alluded to in the poster unit as part of the using your own words dimension, was explicitly constructed as part of the work done when writing a research report. Students were told to check facts, not to make things up and, in one instance, even had final work edited because of inaccuracies. Likewise, added to the dimension of using nonfiction vocabulary was the understanding that, as a nonfiction writer, one needed to be able to explain what certain disciplinary words or terms meant.

Most interesting, however, was the way that students were positioned as authors. In both units Janey positioned students as authors or people who learned new things and wrote that learning down to share with an audience that included families, other students and teachers. Further, she constructed the understanding with them that authors had certain responsibilities to their audience, or readers, which involved choices they made in the ways that they produced their information. In the poster unit, these choices primarily involved illustrations and nonfiction text features; the format of writing a question and
answer poster was established by Janey and modeled in front of the students before they began work on their own pieces.

In the research report unit, however, Janey provided students with particularized models for their writing—techniques that might be characterized as literary nonfiction. There were three patterns to choose from as students shaped their research into the writing that would make up their reports. They practiced using the patterns with their own research during three separate Writing Workshop periods; and, while they could mix and match the patterns, it was expected that they would use at least one of them. In fact, the students did take up these patterns to varying degrees. The first person voice (“I am”) was taken up consistent with the mentor text, perhaps because children this age tend to identify with the animals they are researching (Gallas, 2001), or because “I am” was a natural language pattern for them. The “If you were born a...” model was taken up by many students as “If you are...”, again perhaps a more natural language pattern for this age group. The ellipses pattern was also taken up as it appeared in the mentor text. However, whenever students read their writing with the ellipses, they always voiced the three dots of the ellipses as “dot, dot, dot.” This was despite the fact that when Janey had introduced this form of punctuation she had asked what it indicated and had a student model reading the pause that was marked by the ellipses. Part of the reason for reading it in this way, however, may have been that when Janey modeled writing with this pattern, she said “dot, dot, dot” as she wrote it, matching with her voice what she was writing with her marker. Nevertheless, I never heard anyone read this pattern as the punctuation was meant to be read.
In a follow-up interview with Janey I asked her why she used mentor texts with students and she referred me to Katie Wood Ray’s practice to always immerse students in the genre of writing they are going to do before they actually begin writing. This seems consistent with Janey’s practice since, as was reflected on the Wow! Nonfiction chart where the techniques authors used were collected, she was trying to construct with her young nonfiction writers the understanding that authoring text was not just about presenting what they had learned in a new way but was also about writing it in an interesting way. The literary style of writing in the mentor texts immersed students in language and patterns that could serve to make their writing more engaging. Further, while it may have seemed confusing for the students to be told, on the one hand, to use their own words and, on the other, to use the patterns from mentor texts, Janey’s three days spent modeling and practicing how to use their own research with the mentor text pattern constructed the understanding that, as Colin put it when he was asked what he was going to do that day, as authors they were “practicing [how the author wrote] and we have to take our own research.”

Writing with Visuals

In the first half of this chapter I have described the dimensions of the aspect of the cultural model called “writing with words” and shown how these dimensions, associated with the authorship of texts, were acquired, taken up and recontextualized by students during the two nonfiction writing units. I also analyzed how these dimensions were made visible and scaffolded by the teacher’s talk, using transcriptions from whole group lessons that occurred during the poster and research report units. I ended this section by looking at how the dimensions associated with “writing with words” were
recontextualized over time. I now turn to the other aspect associated with authoring texts, “writing with visuals.” Research on young children’s writing indicates that the pictures that accompany writing are an integral part of the actual message for young writers (Graves, 1986). In fact, Rowe (2010) suggests that often the picture and the accompanying actions and talk provide more information about the message the child is communicating than the actual words written on the page. It is also the case that nonfiction visual representations like diagrams, life cycles, and labels contain important information and are an integral part of the genre; they are features that readers can take advantage of as they read, research and write using this genre. The nonfiction writers in this classroom embedded their use of the visual features of nonfiction books in the practices of the other aspects of the cultural model: asking and answering questions using sources and writing with words to produce information and display knowledge. Drawing as a precursor to writing or a form of prewriting was used very infrequently and only during note-taking in the Discovery Journals. Taking up the visual features of nonfiction texts, then, these young writers researched content and represented their learning through their drawings, sketches, labels and other illustrative nonfiction features.

In this aspect of the cultural model, “writing with visuals,” I discuss how Janey introduced and constructed with students understandings of visual representations and how they were a part of the literacy and writing practices of nonfiction writers. Although I have conceptualized this in my model as an aspect of the cultural model called “writing with visuals,” this aspect clearly doesn’t stand alone from the other aspects of the model but is, instead, embedded in them. “Writing with visuals” added to and highlighted the aspects of what has already been discussed as part of the model. So, one might say that
the cultural model of reading and writing with sources, reading and writing with words and asking questions and researching the answers was enhanced in substantial and significant ways through the use of nonfiction visual representations.

Therefore, the dimensions that I describe in this section are slightly different from the previous sections. The other aspects of the cultural model, although they were interrelated to each other, were not as additive in nature, constantly referencing back to understandings previously constructed in other aspects and adding to them. Further, in this aspect, although the use of visuals is substantive, augmenting students’ work in significant ways, it doesn’t stand alone. In this aspect, then, the use of visuals is part of the other aspects of the cultural model, offering nonfiction writers a larger set of ways to represent knowledge but embedded within the literacy and writing practices of the other aspects of the cultural model as well as in the products that the students created.

In this section, I begin with a description of how Janey constructed with the students an understanding of the nonfiction visual features available to them, a repertoire that remained constant across the two units. For each writing unit I then describe how students used these representations to acquire information and then how they embedded these features in their partial and finished products, displaying and producing knowledge in new ways. I also describe in each unit how the participants in this classroom discursively constructed the dimensions of this aspect of the cultural model. After examining the dimensions of writing with visuals during the two nonfiction units, I then briefly discuss how the dimensions of writing with visuals during the poster unit were recontextualized to the research report as the classroom participants engaged in this more academically rigorous form of nonfiction writing.
Writing with Visuals: Part 1, November and December posters

Constructing an Understanding of Nonfiction Visual Features

Although Janey introduced and constructed with students understandings of nonfiction visual representations and how they were a part of the literacy and writing practices of nonfiction writers during the poster unit, the same information (in the form of wall charts) was also referred to during the research report unit. With the understanding that these charts were the basis for later discussions during the rest of the school year, I only address this dimension as part of the poster unit.

During a series of daily mini-lessons, that began around November 16 until the beginning of December, Janey introduced a variety of features that are common to nonfiction texts. Her lessons were based, in part on a book that a professor from a nearby university had loaned her about the visual features of nonfiction and how they might help students who were reading and writing nonfiction. So, while the nonfiction features she introduced during these lessons were not all illustrations \textit{per se}, the participants came to understand that they were visual features that provided information to the reader without requiring the reader to actually decode print text. As part of this series of lessons Janey constructed a multi-paged chart that was kept up on the wall by the meeting area of the classroom throughout the poster writing unit as well as during the research report writing unit. The chart gave the name of the various textual features of nonfiction, described the feature under the heading “what is it?” and then answered the question, “How it helps the reader”? Based on her blog, the intent of these mini-lessons was to talk about how the features helped students in the research process and how they could be incorporated in their nonfiction writing:
For the last week and a half, I have shown an example of a nonfiction convention each day, we talked about how it helped us as readers and we completed our chart. Then the kids had time to look through our books, ask questions, and find examples of the nonfiction conventions. The kids are internalizing their learning and a few have even started writing their own informational books on their own (from Raising Readers and Writers, from December 9, 2009 Archive, Following their lead).

By the end of this series of mini-lessons, the nonfiction text features’ chart included the following: the table of contents, labels, comparison, photographs, captions, cutaway illustrations, bold print, glossary and diagrams.

As Janey introduced and talked about the nonfiction visual features, she positioned them as something that authors used for particular purposes. For instance, on November 17 when she introduced labels, she asked, “So how do labels help us understand what the author wants us to know?” Then again on November 18 when she
was showing the students an example of a comparison where the author/illustrator showed various ordinary objects next to a drawing of an ant, she asked, “Why would the author use objects like sand and paper clips to show us how big something is?....Why would the author do that?” Again, when she introduced the use of photos and captions on November 30, she said, “Something we’ve noticed is that authors use a lot of photos. Why do they do that in informational books?” And then when she read a caption by a photo, she asked, “Did this tell us more about the picture?....Is it telling us about going out for pizza—no, it’s telling us about the picture.” As Janey introduced these features to students, she was constructing the understanding that authors used them as another way to convey additional and significant information and content to their audience.

As students began to find and record answers to their questions, Janey also encouraged them to use these nonfiction visual features as they wrote. So, when Janey introduced the Discovery Journals to the ESL students, she referred to how authors used visuals along with written information. After she wrote the answer to the question, “What is snow and how does it fall?”, she pointed to a place on the page where she was writing, and said, “Now, right here I am going to draw a picture to help me remember, because sometimes authors write their information in pictures....You can write your thinking in pictures, too.” On December 8 she commented to Olivia, “You said that you did some of this in your reading today [referring to some labels that Olivia had put in her reading response journal].... Why did you do this? Did you think it would help me understand your writing better?” The next day she again reminded students that they could put a sketch on the back of their “I Wonder” card as they answered their questions. Again, Janey was constructing and guiding acquisition of the understanding that nonfiction
visual representations gave nonfiction writers another set of ways to represent knowledge within the aspects of writing with questions and sources.

For the participants in this classroom, then, nonfiction visual features were constructed to be certain items which had identifiable attributes and which helped the reader understand the content of nonfiction writing. Authors used these items in purposeful ways to convey significant information and to help their audience understand and learn in conjunction with the written text. Likewise, researchers used these visual features to help them remember information and capture their thinking. Thus, it was expected that the nonfiction writers in this classroom would take up and add these visual features embedded within the literacy practices of the other aspects of the cultural model. The use of nonfiction visual representations could add substantively to their own work. Using the features as readers, they could learn something new; as researchers, they could capture their thinking; and as authors, they could convey information in certain ways for their audience of readers.

Using Nonfiction Visual Features to Read and Research

During conferences with students I observed several events where students took up the use of visual information in a variety of ways. There were several examples when students made use of visual representations to learn something new. For example, on December 9, when Hector and I were working on the answer to his question about how muscles help dogs jump high, Javier joined the conversation at one point by showing us an illustration of the muscles in a person’s arm, indicating that this was a visual representation of muscles. Then, on December 10, Benito, Carlos and I used the illustration of the spider to answer the true/false question about whether spiders have
eight legs. Although the picture was somewhat confusing because it fell across the center of the book and so the drawing of the legs were interrupted, nevertheless I reminded the boys to tell the teacher that they had used the picture to get information when the class gathered for sharing time. During that same sharing time Katie explained how her picture had helped her find an answer to her question about how beavers can swim in the water by showing an illustration of their webbed feet. In all these instances students had taken up the use of illustrations to help them or someone else research something that might be useful in their writing.

Students also made use of visual features in their own notes, producing sketches in their Discovery Journals and elsewhere. On December 9 Ned showed me a book he had written about mealworms, complete with a table of contents, life cycle and picture with a caption. He had been working on nonfiction writing during choice time in the morning as Janey met with reading groups and produced this three page book. During writing time itself, labels and arrows began to appear in many of the sketches that accompanied the writing of questions and answers as was the case when Carlos and Benito drew their sketches to show the sizes of the bird eating and dinner plate spiders. Susannah produced a sketch of the falling snow complete with arrows pointing to the snowflakes and labels saying snowflakes. Later, she also produced a life cycle visual to show how apples grew on apple trees across the four seasons.

However, visual features didn’t always help. On December 9 when I was working with Kane, I asked him what a jib was. He didn’t answer and so I said, “Did you draw it in your picture? Can you show me in your picture what the jib is? Where is it?” pointing to the sketch he had drawn on his “I Wonder” Card. While he had included a jib and
labeled it, he didn’t make any move to point it out to me; instead I pointed to where I thought it is in his sketch. In this case, it seemed that the sketch did not help Kane remember his important information.

*Using nonfiction visual features to display and publish new information*

As winter break approached publication of the students’ learning became a priority. On December 16 Janey told the students that they were going to share the learning they had been engaged in during the past few weeks publicly (i.e., publish their work). She showed the students the format of the poster, the form their publication would take. Using Colin’s question about monkeys swinging from vines, she wrote the question at the top of the large sheet of paper and the answer at the bottom. In this way, she constructed for students that their first step was to complete the writing before they began to work on their visual. In part this was probably because their writing would come from one of their previously written “I Wonder” questions which they had recorded either on “I Wonder” cards or in their Discovery Journals. So, for most students, this first step was a question of choosing a question and answer they wanted to work with and copying them onto the paper.

Having established what students would do as writers with words, Janey then told the students that they were going to draw a picture in the bare space in the middle of the page. This picture should further explain the words they had written. She explained that she had lots of choices of what to put in the middle, running through the options that were listed on the nonfiction text features’ charts nearby. She ruled out the photo indicating that it was unlikely that anyone would have one. She also pointed out that using a table of
contents on a poster would be “silly.” Likewise she said they probably wouldn’t use a glossary or index since those features are only found in books.

Next she had some students share with the whole group what they have been doing in their Discovery Journals and then had all the students pair/share. When the students came back together, Janey asked to hear their thinking. At this point, she introduced the idea of an audience for their work, when she asked, “How will this help the kids at Byrd understand what I wrote about? They will be reading these in the halls.” Kane took this up, mentioning a sibling he had in Kindergarten, saying, “They don’t know how to read, so they can look at the picture” referring to the illustration that each student would be creating as part of their poster. Janey ended this lesson by telling the students that they had to decide as authors what to do, considering the best way to show their learning, and thinking about how the illustration would help the kids at Byrd understand what they had written about. In this way, she constructed with students that, although the visual representation on their poster did not stand alone from the writing on the poster, it did add in significant and substantive ways to the information that they were producing.

The published posters all had an illustration in the center and by far the most frequently used nonfiction text feature was the arrow and label. Almost every poster had some version of this and many used multiple arrows and labels. There were several other visual features used in students’ posters, however, along with the label and arrow. Susannah’s poster, although it had labels and arrows, also featured a life cycle; as well as the arrow for the labels, there were arrows to direct the reader around the cycle that went from snow → flowers → to bees → apple growing. Maddox used a cutaway to show the
underground roots of a pumpkin vine. Two students used comparison; Casey showed a merry-go-round and an octopus side by side; Stewart showed ice, wood and styrofoam floating in a tank of water and a ball of clay sitting at the bottom of the tank.

In several other posters students also added lines to indicate motion. Hector’s illustration of his poster: “How do dogs can jump [sic]? They use their back muscles” showed a standing dog with a label saying “muscles” pointing to the rear back of the dog. There were pencil lines going up from the front of the standing dog leading to another dog inverted in the air over the head of the standing dog. When I asked about the dog and the pencil marks, he explained that it showed that this dog (the standing dog) was jumping. Likewise Katie used lines to show the motion of her frog jumping. In her illustration, “How do frogs jump? They use the muscles in their back legs”, she drew a frog suspended over a lily pad sitting in water. Four lines extend from the frog’s belly, extending out as they move down to the lily pad. When she described the picture to me, she told me that Colin had told her to draw those lines to show how fast the frog was jumping. Finally, there were five black wavy lines in Olivia’s illustration of the sun which she told me were to indicate steam from the gasses that made up the sun.

These data indicate, as has other research, the importance of drawing in young children’s writing. However, this aspect of the cultural model of being a nonfiction writer was not just about drawing a picture to go along with one’s writing. In the final posters and in the sketches that students produced as they conducted their research, they were taking up the nonfiction visual features that had been the subject of many whole group lessons for several weeks. While the posters themselves showed a preponderance of the use of labels and arrows, there were also examples of students using life cycles, cutaways
and comparisons to add to the information presented in their nonfiction texts. Moreover, students added their own visual feature, the black line, to indicate movement or motion in their illustrations. Whatever nonfiction visual feature students chose, they were communicating, through the use of nonfiction visual features, information that was significant to their topic. I address this further in Chapter 6.

Discursively Constructing Writing with Nonfiction Visua...
In the following transcript I examine how “writing with visuals” was discursively constructed during the poster unit. I have included three examples in which Janey constructs for students what they were to be doing as nonfiction writers when writing with visuals, indicating how she signaled that these dimensions were embedded in the practices of the other aspects of the cultural model. These three examples are presented in chronological order. I use these short pieces of transcribed talk from three days as representative of the ways in which she discursively constructed what it meant to be a nonfiction writer when writing with visuals. While this talk was embedded in much longer whole group lessons where much more information was discussed, for the sake of cohesion, I have put these samples together to show the ways in which Janey discussed the cultural aspect of writing with visuals.
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
<th>Dimensions of “Writing with Visuals”</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 17</td>
<td>1</td>
<td>Janey</td>
<td>You know what</td>
<td>bid to get students’ attention</td>
<td>writing with sources</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>If I wasn’t really sure</td>
<td>modeling position of researching and checking information</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>where those parts were on an insect</td>
<td>content specific knowledge</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>this book gives me a really good picture</td>
<td>use of illustration to check information or answer question (writing with questions); book is named as source (writing with sources); addition of a picture to the source and the picture is qualified as “good”</td>
<td>x</td>
</tr>
</tbody>
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<tr>
<th>Date</th>
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<th>Utterance</th>
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<tbody>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>a diagram</td>
<td></td>
<td>writing with sources</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>student</td>
<td>cause there’s like, uh, like, uh, there’s facts</td>
<td>attempt to take up why the picture is “good”</td>
<td>writing with sources</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Janey</td>
<td>Yeah</td>
<td></td>
<td>writing with words</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td>there’s facts</td>
<td></td>
<td>writing with sources</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
<td>And what else do you notice</td>
<td>pushing students to attend to another feature; <em>else</em> is indicating the additive nature of visual representation</td>
<td>writing with sources</td>
</tr>
</tbody>
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continued
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<tr>
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<th>Comment</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>what does the author do in this part</td>
<td>use of the word <em>author</em>; <em>do</em> indicates action/decision making (reference back to writing with words—authoring)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>students</td>
<td>pointing to where it is</td>
<td>responding to question</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Janey</td>
<td>Yeah</td>
<td>evaluating response</td>
</tr>
</tbody>
</table>

Dimensions of “Writing with Visuals”
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<thead>
<tr>
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<th>Comment</th>
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</tr>
</thead>
<tbody>
<tr>
<td>November 30</td>
<td>13</td>
<td>Janey</td>
<td>it’s pointing right where it is.</td>
<td>repeating and affirming correct response</td>
<td>x</td>
</tr>
</tbody>
</table>

| November 30 | 14   | Janey   | Cause sometimes researchers write their information in pictures. | researchers=writers; write, information and pictures are placed in relation to each other; the use of *some times* indicating additive nature (reference to writing with words) | x x                                    |

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<tr>
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<th>Comment</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>They can write their thinking in pictures.</td>
<td>writers=researchers; write, thinking, pictures are placed in relation to each other; use of a matching structure to the previous line implies this relationship is synonymous to the other relationship and again speaks to how the visuals (pictures) are embedded in the other practices (writing, thinking)</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
<td>Now here I’m going to make some snow crystals.</td>
<td>return to / and modeling illustrating after the text has already been written implying how the drawing is embedded in the other literacy practices of the model</td>
<td>x</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
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<td>Utterance</td>
<td>Comment</td>
<td>Dimensions of “Writing with Visuals”</td>
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<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td>And you know what I was thinking I would do?</td>
<td>modeling thinking in relation to picture of snow crystals; <strong>thinking</strong> implies decision making; <strong>do</strong> refers to the action to be taken as an illustrator</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td></td>
<td>I was thinking I would label it.</td>
<td>the action/decision is to add another visual feature to the illustration</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td></td>
<td>You know how we learned how labels can help us?</td>
<td>shift of pronoun to indicate whole group learning about labels; echo of synonymous relationship established above; labels = information (reference back to writing with words—authoring)</td>
<td>x</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
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<td>Utterance</td>
<td>Comment</td>
<td>Dimensions of “Writing with Visuals”</td>
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<td>---------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>December</td>
<td>20</td>
<td>Janey</td>
<td>I decided to just do the monkey’s hand modeling decision making about</td>
<td>picture after having written the text</td>
<td>x</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>But marking that there are more decisions to be made</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td>are kids [from the school] going to know what that is?</td>
<td>kids=audience for the writing/illustration; implied that this illustration will help them learn something (writing with words—authoring)</td>
<td>x</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>students</td>
<td>no</td>
<td>agreement</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>Janey</td>
<td>What should I add asking for a decision; direct reference to additive nature</td>
<td>of visuals</td>
<td>x</td>
</tr>
</tbody>
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continued
<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td></td>
<td>25</td>
<td></td>
<td>so that the other kids know what it is</td>
<td>rationale for why a further decision is needed (reference back to writing with words—authoring)</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Zane</td>
<td>calls on student</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Zane</td>
<td>A vine</td>
<td>student adds further visual feature to picture</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Janey</td>
<td>Oh</td>
<td>filler giving time for evaluation of answer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29</td>
<td></td>
<td>I could do a vine</td>
<td>accepts answer</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td></td>
<td>All right</td>
<td>evaluation of answer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td></td>
<td>so that might be good</td>
<td>evaluation of answer</td>
<td>x</td>
</tr>
</tbody>
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continued
### Transcript 5.3 continued

<table>
<thead>
<tr>
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<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
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</thead>
</table>
|      | 32   |         | that’ll show the kids | beginning to give rationale for this decision  
  (reference back to writing with words—authoring) |
| [the principal enters the room] |       |         |           |         |
| 33   | Janey | You know what | bid for student attention | |
| 34   |       | Maybe [the principal] could help us with this | places all participants in the role of needing advice | x |
| 35   |       | [portion of the transcript omitted] | | |
| 36   | Janey | If you saw this in the hallway | sets up the situation with principal as audience—locates where audience will be reading this writing (writing with words) | x |

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<table>
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<th>Utterance</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37</td>
<td></td>
<td>If you saw this questions and this answer</td>
<td>continuation of the principal as the audience—gives the specific format of this writing (writing with questions and writing with words)</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td></td>
<td>what might help you understand that picture a little bit better?</td>
<td>asking for advice from a reader about what decisions the illustrators need to consider in order to help the reader understand/learn something (reference back to writing with words—authoring)</td>
</tr>
</tbody>
</table>
Across the three days represented in this transcript Janey constructed with students an understanding of several dimensions of writing with visuals as they were embedded in dimensions of other aspects of the cultural model. As noted earlier, the dimensions of “writing with visuals” were additive; while visual representations were not superfluities but rather added significantly and substantively to other dimensions of the cultural aspects, the visuals did not stand alone. On two of the three days in this transcript Janey modeled for the students the ways in which they might make decisions about their use of nonfiction visual representations. In both cases she completed the writing first and then moved to a consideration of the visual representation. I would argue that this sequence of writing first and then illustrating was a clear model to the students of how writing with visuals was embedded in the other aspects of the cultural model.

It would seem that Janey even acknowledged this discursively in this transcript. At several points she alluded to the additive nature of visual representations. On line 9, she asked the students, “And what else do you notice?” referring to the labels pointing to different parts of the diagram. The word “else” here indicated additional information to be gained from this visual feature (the diagram of the ant) by looking at the labels associated with it. On line 14 she said that researchers “sometimes” used visual representations to capture their thinking, again suggesting that this practice was embedded in other practices of the cultural model. On line 18 she decided that she would add more to her illustration, again modeling the additive nature of visual representations. Then on line 42, as she was considering her diagram of a monkey’s thumb centered between the written question and answer, she asked: “What should I add?” Here again we
have the discursive allusion to the additive nature of visual features which substantively enhance the information being presented but are always embedded in a written text.

The nonfiction visual features of labels and arrows were the most commonly used in students’ posters which was, perhaps, not surprising since these were the visual representations Janey used when she modeled the final product, the poster. At the beginning of the unit, on November 17, Janey had modeled how a diagram of an ant could help a reader confirm content specific knowledge about insect body sections (lines 2-4), labeling the diagram of the ant as a “good picture” (line 4). While she did not provide clear criteria for her judgment that this was a “good picture,” she did accept a student’s contribution that there were facts on the page and then went on to encourage the students to notice the arrows and labels that pointed to where the parts of the ant were (a student actually used the word label later in the discussion). Implied in this conversation (lines 4, 13) was the understanding that, if a reader had a question about the parts of an insect, the diagram and labels helped the reader locate that information by naming the parts and then pointing right to them. Further, there was no attempt to read the information in the running text provided on the page (although it had been read earlier); rather, Janey and the students looked only at the labels and where they were pointing. While it may seem that this modeled for the students that they did not have to read all the text on the page, I would argue that, in this case, Janey was also constructing with students the understanding of the substantive, additional information that could be gained by examining nonfiction visual representations like the diagram as part of the cultural model of being a nonfiction writer.
Then on November 30 she modeled thinking about adding labels to the sketch she
had made while asking and answering a question in her Discovery Journal. She connected
several terms (line 14-15). She connected “researchers” (line 14) through the pronoun
chain “their” (line 14) and “they” (line 15) to the verbs “thinking” and “write” suggesting
that researchers were also thinkers and writers. She also connected “information” and
“thinking” as the product of what researchers write in “pictures” (lines 14, 15). Thus, by
constructing these terms in relation to each other, she indicated to students that embedded
in the work they were doing as researchers and writers (i.e., the dimensions of “writing
with questions”) was the use of pictures to represent the information they were collecting
in their notes. Moreover, she went on to model that other visual features could be added
to pictures; as part of the decision making process she modeled how she decided to add
labels to her diagram because labels “can help us.” It is unclear whether the “us” was
referring to the students as information gatherers as they were positioned earlier (lines 1-
11) or whether it was referring to students as researchers, as they were positioned in lines
14-15; in fact, Janey may have been suggesting both roles and foreshadowing the
decision making that she discussed next when modeling how students were going to
illustrate their posters.

On December 16 nonfiction visual features were further constructed as embedded
in the work nonfiction writers did. As Janey modeled for the students how they would
produce their posters, she constructed nonfiction visual features as a necessary part of the
poster, a way to help the audience understand the message being communicated
(hearkening back to the authoring dimension of “writing with words”). She began by
positioning herself as a decision maker (lines 20-21). After having written her question
and answer on the paper, she now had to decide what she was going do in the middle of the paper. It was understood that there would be some sort of illustration (a diagram, sketch, picture) in the middle of the poster; but there were criteria for her decisions about what to draw and what to add to the drawing that had to do with helping her audience understand (lines 22, 25, 32, 38). The students who would be looking at the posters were constructed as the audience in lines 22, 25 and 32. However, when the principal came into the room to pick something up, she was also constructed as an audience. Located as a reader of the posters in the hallway (lines 36 and 37) her advice was requested on what visual representations might help her better understand the picture that Janey had drawn on the model poster (line 38). Through this modeling Janey constructed with students the understanding that, as writers using nonfiction visual features, they needed to decide on what nonfiction visual features to use. The criteria for these decisions were not just based on matching pictures to the words they had written, but also on providing additional information to help their audience understand the information they were conveying.

Finally, it is interesting to note that during the poster unit students did not draw a picture first and then write. As can be seen in the last two examples, Janey modeled writing first and then considered the use of visual features in relation to her writing and the information she wanted to convey. So, when she began her sketch in the Discovery Journal, she had already written her question and answer on the page where she was adding her sketch. Likewise, with the poster she had already written the question at the top of the paper and the answer at the bottom. While early childhood research on young children’s writing indicates that drawing a picture is often a form of prewriting, a way that students think through what they are going to be writing down, in this classroom this
was not the case when writing nonfiction. In general, students used nonfiction visual features in their notes and written pieces to support and add to the information they had already written in much the same way as the writers of the nonfiction books they had been using did. So, in this sense students took up the use of nonfiction visual features in a manner consistent both with its construction within the genre of nonfiction and within the cultural model of the classroom. This is addressed further in Chapter 6.

Writing with Visuals: Part 2, March through May, research reports

In the previous part of this chapter I have described how during the poster writing unit students took up the dimensions of the “writing with questions” aspect of the cultural mode and how Janey talked these dimensions into being. I now discuss how the dimensions were constructed during the research report unit, looking at the actions and reactions of the classroom participants as they constructed their understandings of the dimensions of this aspect (“writing with visual representations”) of the cultural model.

Students referred back to their previously constructed repertoire of nonfiction visual features during the research report unit as they were called on to research and produce illustrations for a multi-page report. The information about nonfiction visual features that had been collected on charts during the poster unit was put back up in the classroom so that all the participants could refer to this information. The few additional features added to this dimension were not so much a part of the genre of nonfiction but rather were related to the mentor texts and the ways in which they had been illustrated (three page spreads, writing words in a shape like concrete poetry, and cutting holes in pages to look through or to create a shape). In this sense, then, deciding on which nonfiction visual features to use in the research report also became a matter of being an
illustrator or artist. In the following section I discuss the dimensions of using nonfiction visuals to research as well as the dimension of producing and representing new knowledge using nonfiction visual features. This dimension was added to and generalized as students relied on previous knowledge of these features, as well as the features as they were represented in their research and mentor texts, to produce multiple visual representations to support the more academic structure of a formal research report.

Using Nonfiction Visual Features to Read and Research

Students continued to use nonfiction visual features as they researched and recorded information in their Discovery Journals. On March 30, at the beginning of this unit, Janey gave each student a Discovery Journal and a folder where they were to collect and store the information from their research. She reminded them that the Discovery Journal was just like what they had used before; there was space where they could write their questions and what they found out, and there was also room for sketches. Later, on April 14, she again reminded students that a little sketch as they wrote their facts using the mentor text patterns would help them remember; further, she suggested that they might want to add labels.

Meanwhile students often used the illustrations in their source books as they looked for and collected information. On March 31 Maddox was telling me about his research and he turned the page in his book. Looking at the illustration there, he said: “Oh, this is an interesting one. What are they doing?” I told him he would have to find out and he said, again looking at the illustration, “Fighting probably.” He went off to work further and came back later to explain to me why deer “battled,” holding the book open to the illustration and motioning to it as he talked. Even later he came back to show
me another “bad” illustration: “There’s a little baby deer and here’s a little baby deer by
the dad here [pointing to the illustration and I respond]. Yeah, and they’re getting chased
and the baby deer might die if they get caught.”

During that same day, early in the research cycle for the research reports, Hector
was looking at the cover of his mosquito book when I walked over. I asked him what he
was doing and he pointed to the illustration on the cover and said: “Oh, I see some blood.
I think it’s blood from here [pointing to the arm the mosquito was sitting on] and then it’s
there [pointing to the abdomen of the mosquito].” Stewart leaned over to look and they
continued to talk about the picture while I checked in with Ray about where the cells
were that bees lay eggs in. After Ray located the illustration by using the table of contents
and pointed out to me a cell with an egg in it, he, too, looked at Hector’s book. Hector
had now turned to a picture of a human arm with a label pointing to “mosquito bites.” I
asked Hector if he knew what the label said; he replied that he didn’t. Ray offered that the
last word in the label was bites. After I explained that the marks were mosquito bites,
Ray said, “Oh, that’s like an arm or something, some kind of person. This is not
underground,” clarifying the information that was presented in the picture. Hector nodded
and turned the page. Then Ray gave a big gasp and made Hector stay on the picture of the
dragonfly chasing the mosquito as he read the labels and told Hector that the big insect
was a dragonfly.

During this part of the research process, then, students were engaged in looking at
pictures that interested them or caught their attention. Sometimes, as they were able, they
went on to read the information in the text itself or in the labels or captions provided as
part of the illustration and recorded this information in their notes. If they were not able
to read the text, and they were genuinely interested by the visual, they would seek out an adult to talk to about the visual feature which frequently led to the adult reading to them or in some cases were read to by another student. Often this close study and discussion of the illustrations was taken up and represented in the final visuals students produced in their reports. So, for instance, Hector, in his final report on the mosquito, included two legs protruding from the edge of the paper with red bumps on them to indicate mosquito bites. He did not include labels; however, he did draw a large question mark over the legs to indicate a question about where the mosquito was going next.

Casey’s description of the way she used illustrations probably sums up what many student experienced as they studied their sources for information: “I haven’t been reading very carefully, like, whenever I see a cool picture that I really want to read, I start reading it. [Here a portion of the transcript is omitted.] When, when the swan has its wings out, I read that page because it looked pretty interesting. Well, at least I tried reading it because my book’s kind of hard, but I tried reading it.” Casey, who was a fluent reader, indicated that she still used illustrations and other visual features to preview what she would actually try to read, looking for pictures that interested her before investing any time in reading.

Students also used other nonfiction visual features to find information. Many students used the table of contents in their books to locate specific information, as Ray did when looking for the illustration of cells in his bee book. Colin and Kane were other students who used this nonfiction visual feature when locating information. When I was working with Zane, I suggested he look in his index at the back of the book. With my support he was able to find the index and locate the word “size”. While he was doing this
Eban was looking on and suggested that Zane might want to turn to the pages about the life cycle to answer his question. In all these instances students were making use of visual features which they had learned about during the poster unit in order to locate specific information. In some instances this was information they had already located and so they knew that it was in the book; in others, they were using the feature to search for information without knowing if they would be able to locate it in that specific text.

A final observation concerning students’ use of nonfiction visual features to locate information concerns accuracy (a dimension from the “writing with words” aspect of the cultural model). In several instances in my data, the use of visuals might have been misleading for students. For example when I asked Stewart where he got the information that muskrats looked like beavers, he told me, “Cause Colin showed me a picture of a beaver and I looked at the muskrat and the beaver and they looked, they kind of looked the same. [Here a portion of the transcript is omitted.] They’re the same shape, they have the same fur.” While, in fact, beavers and muskrats may look the same, Stewart seemed surprised to find out that turtles ate muskrats leading me to believe that he might have thought that muskrats were also the same size and weight as beavers. Another example occurred when Olivia was looking at Casey’s book on swans and came to the picture of swans wearing crowns. “Hey,” she said, “why are these swans wearing crowns?” I explained to her that the information on that page had to do with swans in fairy tales, a discussion that I had had earlier with Casey. In both these examples from the data, the use of illustrations might have provided misleading information without some adult mediation. In Olivia’s case, she sought adult mediation, probably because I was sitting
right at the table with her; in Stewart’s case, he simply took the information from Colin at face value and did not ask further questions or ask for any adult mediation.

*Using Nonfiction Visual Features to Display and Publish New Information*

During this unit students used nonfiction visual features more extensively than they had in the poster unit. One reason for this was because the research reports required many more pages with illustrations and other visual features than the single sketch required on the poster. Another reason was because students made more use of visual features in their notes and practice pages which had not always been the case with the “I Wonder” cards during the poster unit. A final reason may have to do with the fact that the students were now at the end of the school year, and so more sophisticated in their understandings of nonfiction writing. So, during this unit students used nonfiction visual features both to reproduce and to produce new information in their notes as well as in their final publications. In both these scenarios, though, I would argue that the students were generally using the visuals to produce new texts by adapting the use of a feature from one context to a new one or by interpreting information through the use of visual representations. So the first part of the discussion of this dimension looks at how students used visual features to convey information while they were writing their notes and practicing mentor text patterns; the second part looks at how students used nonfiction visual features to produce illustrations for their final reports.

Students used visual representations for several purposes other than collecting information for their reports as they researched and wrote notes and worked on practice mentor text pages. During this time, this aspect of the cultural model was taken up and adapted by the students so that they used these features to ensure clarity for the reader, to
relay information to peers, to check information, to interpret text and to play. On March 30 Eban showed me his page of notes about what fishing spiders ate. He explained to me that he had written the words a little too close together so he had then circled the individual things that the fishing spider ate. He indicated that he had done this so that the reader or perhaps he, himself, would be able to understand his notes when they were read later. Here Eban was producing his own visual representation in his notes, not so much to add information, as to make information clearer to the reader, taking up the construction of visual features as something that helped readers.

During the time students were doing research, Ned drew a sketch to provide information for another student. When I asked Kane, “Where do they [snapping turtles] lay eggs?”, he told me that he didn’t know. Ned, who was sitting across the table from Kane, said, “I think I know.” He then began drawing in a box at the bottom of a page in his Discovery Journal, saying, as he drew, “It’s like this, and here’s the water and they lay eggs right there. So here’s full of water and here’s the eggs. That’s how it would go.” In this example, Ned was drawing the information and describing it while he spoke to Kane and me. The snapping turtle was not Ned’s pond animal; he was researching the walking stick, but he was able to provide a fairly accurate visual representation of how turtles make nests in the sand by water. Kane went on to check Ned’s information by looking it up in his book and Ned erased the sketch. In this case, then, the sketch was only used to relay information and was not reproduced as such in Ned’s or Kane’s further work.

While it is unclear where Ned’s inspiration for his picture came from, Arturo used an illustration from a source text to produce his own drawing to go with his writing: I am
a garter snake. I sleep in the winter. He then checked his drawing later with the one in the
book in order to add details to his mentor text practice page. When I said to him, “I
wonder where the garter snake lives, sleeps in the winter. Do you think it sleeps under a
rock?”, he replied, “No, it makes a little hole. [Here a portion of the transcript is omitted.]
Yeah, it digs a hole all the way down,” and then he drew a picture to show a hole in the
ground covered by snow. I admired his illustration and then asked him if he thought the
snake would be curled up or all stretched out. He said, “There’s a book about snakes” and
he went to get it, bringing it back and turning to the page where there was a similar
illustration to the sketch he was drawing in the box on his mentor text practice page. In
this case Arturo had used the illustration to inform his own sketch. Although he had
included many details, like the leafless tree, the snow on the ground and the hole under
the ground, when I asked him about how he was going to draw the snake sleeping he
went back to the source to check the picture to see if the snakes were curled up. He then
added one snake curled up in the hole to his sketch (the illustration showed many snakes).
In this way he used the visual feature from a book to check the information he was
writing on his practice page.

Another example of the ways students used visual representations to present
information during the research and mentor text practice writing was Zane’s illustration
accompanying his mentor text writing: “I am a walking stick. I live in any kind of trees.”
His sketch showed a tree on the right hand side of the page with the cloud-like
representation at the top to indicate leaves. Drawn under the “leaves” was a walking
stick. On the left side of the paper was a tree with many bare branches with a walking
stick sitting on one of those branches. This visual representation gave the teachers an idea
of how Zane interpreted the information that walking sticks lived in any kind of tree. Later, Zane told me, “I’m gonna do this page again and draw more branches and then treat it like it has, like it’s a hunt for the walking stick, like you’re supposed to look for the walking stick or walking sticks.” For Zane, then, the sketch both represented the way he was interpreting information and also provided him with other ways to represent this information in a playful, or game like, way.

As students turned to their notes and practice mentor text pages to produce the final illustrations for their research reports, they sometimes abandoned ideas completely; at other times they reproduced or refined previous visual representations. In most cases they created new visual representations by assimilating information from texts and from visual features they had studied. In the following, I examine how students took up this aspect of the cultural model. First I give the example of how Casey produced a life cycle of the swan, using her understanding of the visual feature of a life cycle and an illustration from her swan book. I also look at Marcy’s use of the visual feature of a comparison to illustrate the textual similes she used to describe dragonfly’s wings and how they flew. Finally I end with Hector’s illustration of a mosquito as an example of how students used visual representations to represent knowledge embedded within the literacy and writing practices of the other cultural aspects of the model.

Casey’s representation of the life cycle of the swan was first constructed during the research phase of the research report unit and then reproduced in her final report. In the following event, Casey and I were collaborating during a conference to collect more information for her report on swans. Casey had begun the conversation by posing the question, “Do swans have life cycles?” I confirmed that she understood what a life cycle
was and asked what she would be looking for in the book. It is important to note here that the convention of using a circle with arrows to indicate a life cycle was one that had been introduced during the poster unit; so I asked her this question to see if she was looking for that convention in the book.

Melissa It sounds like you’ve already said what the life cycle was.
Casey Yeah, but, I was just making a guess, but I
Melissa Making a guess? So if we look in the book what would we look for to see if your guess was right?
Casey We’d look for the life cycle.
Melissa Do we have, you’re saying we actually have to see, like, the circle.
Casey Well, maybe we could just find it in words like this [pointing to text on page] or we could find it in a circle
Melissa So if we could, we might see it in words?
Casey We might see it like in this word or in a circle
Melissa [portion of the transcript addressing another student omitted] Huh.
Casey I haven’t seen any circle pages.
Melissa So there are no circle pages.
[portion of the transcript addressing another student omitted]
Melissa All right, we’re looking for, all right, I kinda see a life cycle right here because, look, what’s under her [pointing to picture]?
Casey Eggs.
Melissa And what’s here?
Casey Chicks.
Melissa Cygnets, is that what they call them, cygnets? And then we know the cygnets grow up to be.
Casey The swan.
Melissa So could that be a life cycle?
Casey Mm-hmm. But then they, um, grow up to be a swan and then they have
babies and it keeps going on like there [making circular motion with hand on page of book]

Melissa   Exactly. So that’s the circle part.

At the beginning of this conversation I proposed that Casey seemed to understand the concept of a life cycle in terms of swans and Casey responded that she was just making a guess. So I asked her to compare what was in the source book as a way to check if her guess was correct. Casey’s responses indicated that she was looking for a life cycle that matched the circular format constructed in the classroom on earlier occasions. I took this up by proposing that together we look for the text feature of a circle. Casey noted that there were no circles in this book, though, as we continued to review illustrations.

I then directed Casey to a double page illustration showing a swan sitting on a nest on the left page while another swan swam in a pond with babies. Casey took this up accepting and confirming with both her words, “But then they, um, grow up to be a swan and then they have babies and it keeps going on like there” and with her circular hand motions. Using these elements from the illustration, Casey then transformed them into her own version of a swan life cycle complete with the numbered elements of eggs, cygnets, and an adult swan, with these items arrayed in a circular shape. After I suggested that Casey add an illustration of a swan sitting on the eggs into her cycle, she added a cutaway illustration to show the eggs in the nest where the swan was sitting.

Likewise Marcy’s illustrations for her dragonfly report provided insight into the complex ways in students took up and transformed the visual representations available to them to represent information in new ways as part of the cultural model of being a nonfiction writer in this classroom. On two practice pages she produced complex
sketches to support the information she had written about dragonflies. In the first example she had written: “I am a dragonfly. I can fly as fast as some birds. I can backward and forward and left and right.” She had produced two sketches on different sides of the paper; on one side of the page she showed a dragonfly flying ahead of a bird; on the other side she drew four dragonflies at ends of arrows connected by dotted lines arranged in a cross shape that extended across the page. This visual representation did not appear in her final report which only showed a dragonfly flying ahead of a person running with black lines coming of the back of both to show movement. The other sketch she drew did appear in her research report. The text read: “If you are a dragonfly, your wings will be as clear as a window.” She had drawn a line down the middle of the box for her sketch. On the left side she had drawn a dragonfly body with its wings spread out. As though one were looking through the wings, one saw trees, a house and the sun. On the other side of the line in the sketch box she had drawn a rectangular shape with the crossed T shape of window panes. Again, as though one was seeing through the glass, there were trees, a house and the sun. Here, through the use of visual comparisons, Marcy added substantively to her written work and helped the reader gain a clearer picture of the information she was conveying.

Finally Hector’s visual and discursive representation of mosquitoes also illustrated the ways in which students’ use of visuals offered nonfiction writers a larger repertoire for representing knowledge embedded within the literacy and writing practices of the other aspects of the cultural model as well as in the products that they created. In the following transcript, Hector and I were conversing while he was illustrating the page of his mosquito research report with the text: Mosquitoes...are not mammals. They can
lay up to 300 eggs. He had drawn a line of dashes ending with a mosquito sitting on a lily pad; in turn, the lily pad itself rested on a wavy line representing water. Around the female on the lily pad were a number of circles meant to represent eggs. At this point, Hector had begun to draw lines of dashes coming from the top of the paper. He had told me earlier that he intended to draw some other mosquitoes, friends of the “dad” mosquito, coming to see the eggs.

Melissa: You’re going to have some friends flying in?

Hector: Yeah they’re some coming from there, from there, from there, from there, there, there, there [drawing lines of dashes from the top of the paper].

Hector: There not much people cause it’s for the all the whole world.

Melissa: Why are all these mosquitoes flying in?

Hector: From, from up there [he points to the ceiling with his pencil].

Melissa: Why?

Hector: Because they’re like, you know, where, where like, there like, they’re going from there and he’s calling all his friends to come back because they’re getting nectar from the flowers so he said come here so all of his friends are coming back [he is lifting the paper up and pointing and motioning around it both forwards and backwards with his pencil in hand].

Hector’s visual representations and accompanying language are like watching a cartoon—a narrative in motion. With his gestures he seemed to locate the actual position from whence the mosquito friends were flying. In fact, I understood Hector’s gestures to indicate that the other mosquitoes were flying in from above or even from the previous page where they were eating nectar from the flowers. He visually represented this with
the short lines of dashes he made at the top of the page as well as with the pointing motions that accompanied his final utterance. He also signaled this with several deictic references in his language (“he’s calling all his friends to come here” and “they’re going from there and he’s calling all his friends to come back”). Eventually a swarm of mosquitoes was drawn hovering above the “dad” and the lily pad. In this example, then, Hector made use of visual representations embedded within the other dimensions of the cultural model including local knowledge and lived experiences to add significant, if perhaps inaccurate, information to his writing.

Discursively constructing writing with visuals, research reports

I have described the ways in which Janey continued to construct with students an understanding of the ways in which “writing with visuals” provided a larger set of ways of representing knowledge embedded within the other aspects of the cultural model of being a nonfiction write. We have also seen how students continued to acquire and take up their use of visual representations as they provided illustrations in their notes, on their mentor text practice pages and for their research reports. In the following transcript, I look more closely at the language that the teacher used as she discursively constructed and guided students’ acquisition of these dimensions. I have included examples in which Janey talked with students about a technique that a photographer used in one of the mentor texts they have read, called on students to discuss decisions they had made in their own visual representations, and then described to the students their task as they begin to illustrate their research reports. These three examples are presented in chronological order. I use these short pieces of transcribed talk from three days as representative of the ways in which she discursively constructed mentor texts and how
students could make use of them when “writing with visuals.” While this talk was embedded in much longer whole group lessons where much more information was discussed, for the sake of cohesion, I have put these samples together to show the ways in which Janey constructed writing with visuals.
Transcript 5.4. Discursively constructing the dimensions of writing with nonfiction visuals, research report

<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>7</td>
<td>Janey</td>
<td>Look at what the photographer did here</td>
<td>referring to photographer as someone who creates a visual feature; <em>did</em> indicates decision making</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>what they did in the book</td>
<td>reference to writing with sources with use of <em>book</em>; refers <em>they</em> to photographers</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>We have a close-up picture</td>
<td>using technical language to describe the visual feature; <em>we</em> refers to the group of students as an audience to the book</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>and we have, like, a further away picture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>close-up picture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>students</td>
<td>it’s a pattern</td>
<td>students answering with what they have been discussing in mentor text dimension of writing with words</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Janey</td>
<td>and then farther away picture</td>
<td>describing the visual feature</td>
</tr>
<tr>
<td>April</td>
<td>8</td>
<td>Janey</td>
<td>Olivia</td>
<td>Janey calls on a student</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
<th>Dimensions of “Writing with Visuals”</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>9</td>
<td>I’d like you to share this [pointing to one of her pages]</td>
<td>exerts her authority over student’s choice of what to read</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>so you can talk about your picture</td>
<td>gives explanation related to use of visual feature</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Olivia</td>
<td>I am a fish. People found me half a billion years ago. I was the first animal to have a skeleton in my body</td>
<td>reading from her mentor text practice page</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Janey</td>
<td>Now show the picture</td>
<td>returns to the visual feature</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>and tell us about your picture</td>
<td>calls on student to explain to the group (us) about the visual feature and the decision made when creating it</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Olivia</td>
<td>I drew a sun</td>
<td>begins with the sun probably because this is what Janey and I had commented on when she showed us the picture during Writing Workshop time</td>
<td>x</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
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<tbody>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>because I was thinking</td>
<td>use of the word <em>thinking</em> discursively constructs her as a decision maker/author (writing with words)</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td>maybe there used to be water here</td>
<td>qualifies the possibility of water in the picture</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td>and I thought maybe it dried up</td>
<td>qualifies the possibility of water drying out; does not make a clear connection between the sun drying up the water</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>and there was a skeleton</td>
<td>describing the other important feature of her illustration as she has constructed it in this context (i.e. she does not refer to the person in the illustration)</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Janey</td>
<td>And you know</td>
<td>bid to take turn</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>that really did happen</td>
<td>confirmation of the information from the illustration</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>It used to be almost all of our earth was underwater</td>
<td>confirms that water that used to be there</td>
</tr>
</tbody>
</table>

Dimensions of “Writing with Visuals” | writing with | writing with | writing with |
<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td><strong>writing with questions</strong></td>
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<tr>
<td><strong>writing with sources</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>writing with words</strong></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
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<td>---------------------------------------------------------------------------</td>
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<tr>
<td>22</td>
<td></td>
<td></td>
<td>and then things changed</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td>and now we have a lot of land</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[portion of the transcript omitted]</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>Casey</td>
<td>I am a swan. I do bite people when they bother me and I whack them with my wings. They go out ten feet.</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>students</td>
<td>Whoa</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>Janey</td>
<td>Oh my gosh</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td>Wow</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td>[students talking]</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>Janey</td>
<td>Show us your illustration again</td>
</tr>
</tbody>
</table>

continued
### Transcript 5.4 continued

<table>
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<tr>
<th>Date</th>
<th>Line</th>
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<th>Utterance</th>
<th>Comment</th>
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<tbody>
<tr>
<td></td>
<td>30</td>
<td>Casey</td>
<td>What is that person saying</td>
<td>asks for specific information about the talking bubble</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Casey</td>
<td>Ow</td>
<td>Casey reads the word in the talking bubble</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>casey</td>
<td>Why do you think</td>
<td>teacher ask for the students as readers/audience (writing with words) to respond</td>
<td></td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>casey</td>
<td>she would have a person saying ow?</td>
<td></td>
<td>x x</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>Marcy</td>
<td>calls on a student to answer the question</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>Marcy</td>
<td>Why do you think</td>
<td>repeats the question asking for the individual student’s response (you) to perhaps represent the class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>Marcy</td>
<td>she would do that</td>
<td>recognizes she as the decision maker/author</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>Marcy</td>
<td>Cause it would hurt if a swan bit you</td>
<td>Marcy give response</td>
<td>x x</td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>Maddox</td>
<td>And also</td>
<td></td>
<td>Maddox bids for the floor</td>
</tr>
<tr>
<td>39</td>
<td>Janey</td>
<td>Yeah</td>
<td></td>
<td>Janey evaluates Marcy’s response</td>
</tr>
<tr>
<td>40</td>
<td>Maddox</td>
<td>swans have bones in their wings</td>
<td></td>
<td>Maddox gives a response</td>
</tr>
<tr>
<td>May 5</td>
<td>41</td>
<td>Janey</td>
<td>We’re like real artists</td>
<td>each person in the collective is constructed as doing what artists do</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td></td>
<td>We’re doing all different kinds of different media</td>
<td>the criteria for what artists and the students do that makes them real artists</td>
</tr>
</tbody>
</table>
As previously noted, Janey did not introduce any more nonfiction visual features during this unit. However, in the first section of this transcript, she did note the techniques that authors and illustrators were using in the mentor texts the class was hearing. Here she was explaining the pattern of a close up shot used with a question and the zoomed out shot used with the answer (lines 3-5, 7). She positioned the photographers in relation to the source book, constructing them as decision makers and embedding their decisions as part of the authorship of the book (lines 1-2). Likewise, when she had students share their illustrations, she positioned them as decision makers, too (line 13, 30, 32-33, 35-36).

When looking at student illustrations Janey also constructed some other understandings about how visual representations added to the work these nonfiction writers were sharing. She used visual representations from Olivia’s and Casey’s work (lines 9-10, 12-13, 29-30, 32-33) to do this. Olivia discussed two elements in her illustration, the sun and the fish skeleton (lines 16-18) and did not refer to the person she had also drawn. (This may have been due to the fact that Janey and I had commented on these features only when Olivia showed us the picture during Writing Workshop time.) Janey did not draw attention to the person in the illustration, but instead accepted Olivia’s choice to talk about the sun, the dried up water and the skeleton, confirming what Olivia had drawn and explained (lines 19-23). Through this interchange, then, Janey constructed with students the understanding that visual representations added important information to the writing; in this case, Olivia had added a subtext about the earth drying up in her illustration that was not included in her written text.
With Casey Janey also directed the class to attend to a specific visual representation, the talking bubble, in her illustration (line 30). She then asked the class to explain why Casey might have decided to do this in her illustration (lines 32-33, 35-36). Here she was constructing with students the understanding that, not only did visual representations contain information that writers purposefully added because it was significant, but it was also the responsibility of the reader to interpret this information (lines 32, 35). Perhaps because Casey had been quite clear in her writing, Janey asked a student to confirm the information included in the visual (line 34), rather than doing it herself. In fact, two students were able to confirm the information added by the visual (lines 37, 40).

Finally on May 5 Janey spent the almost ten minute whole group lesson modeling for students how they would be producing their illustrations and using these nonfiction visual features in them. She told them that their illustrations had to incorporate “some of the nonfiction conventions like labels and captions.” She then went on to describe how they would trace their illustration with a black crayon before using their watercolors to paint them. The labels and other features would be added in using a sharpie or marker after the paint was dry. Although this was not the first time that students had been told they were decision makers and authors, it is the first time in my data they were referred collectively as artists (line 41). And in this context, as they began the several day process of illustrating their research report, the criteria for being real artists (line 42) was the use of different kinds of media (e.g., crayons, water colors, sharpies, markers). I discuss the authoring process and the roles and responsibilities again in Chapter 6.
Recontextualization of the writing with visuals dimensions

I end this chapter with an examination of how the dimensions of “writing with visuals” were recontextualized during the research report unit. In the following table I have delineated the dimensions of writing with visuals as they were constructed during the poster writing and the research report units. I have then noted how these dimensions were recontextualized as they moved from the context of poster writing to research report writing.

| Table 5.2 Recontextualization of the “writing with nonfiction visuals” dimensions |
|---|---|---|
| Poster writing unit | Research report writing unit | Recontextualization |
| constructing a repertoire of nonfiction visual features | adding to the repertoire through examination of illustrators’ art in mentor texts | particularization |
| researching using nonfiction visual features | researching using nonfiction visual features | repetition |
| producing knowledge through publishing a poster | producing knowledge through note taking and through publishing a report | repetition and addition |

Because writing with visuals was embedded in the other aspects of the cultural model, the dimensions that I have discussed in this section were only recontextualized through repetition as students continued to make use of the dimensions as they were
constructed in the poster unit. Students referred to the nonfiction visual features that had been collected on charts during the poster unit using them in various ways. They also represented and displayed knowledge by assimilating information from textual sources with their understandings of visual representations. Since the research report was a multi-page product and more academically sophisticated, students had many opportunities to use visual representations in their Discovery Journals and their practice mentor text pages as they researched and wrote rough drafts. Then, finally in their reports, they produced multiple visual representations to support the more academic structure of a formal research report.

Summary

This chapter continues to address the question of the cultural model(s) being constructed by classroom participants as they socially and discursively come to understand the composing processes associated with authoring or “writing with words” and “writing with visuals.” It also addresses the question of the metacognitive and rhetorical composing practices first graders take up when they write nonfiction texts. The dimensions of the cultural model, “writing with words,” included using one’s own words, using nonfiction vocabulary and making decisions as an author would. The dimensions of the cultural aspect, “writing with visuals,” included the use of nonfiction visual and text features when researching and producing knowledge.

The participants in this classroom understood that they had certain roles and responsibilities as authors of nonfiction writing. First and foremost was the understanding that they had to take responsibility for their own learning as they engaged in the work of writing nonfiction. This was constructed in several ways within this cultural model. As
has been described in Chapter 4, students were expected to ask and answer questions that were of interest to them or addressed something they wanted to learn about. Moreover, they were to ask and answer questions to which they did not already know the answer so that they would be learning something new. Further, as students researched and answered their questions, they were expected to assimilate information they gathered from their sources and write and/or illustrate the information in their own words. In this way they showed, through the production of new or “novel” text or visual that they were learning something new.

It was also expected that, as nonfiction writers, students would make this new, interesting information available to their audience of readers. In order to do this they had to consider the possibilities that were available to them and make decision about the best way to communicate with their readers. To this end students came to understand that their learning was communicated, not just using their own words, but also by using: the frameworks provided by mentor texts; content area vocabulary; and visual representations of their content matter.

Using the language of mentor texts and the structures of other students’ pond animal research reports as models, students enacted possible ways to produce the knowledge that they had collected during the research portions of their writing process so that their written work would be interesting to read. The use of content area vocabulary, on the other hand, created some tension as students navigated a course between copying words that reflected the disciplinary language from the sources they were using to author “novel” texts, and the need to define and use the vocabulary on their own terms. Thus, as they interacted and questioned their way through read alouds, and as they read or were
read to when doing their own research, their conversations indexed the ways they acquired and took up, or attempted to take up, the use of disciplinary vocabulary.

Finally, nonfiction visual representations like diagrams, life cycles, and labels were understood to contain important information—an integral part of the genre of nonfiction as well as representing important disciplinary knowledge. Drawing as a precursor to writing or a form of prewriting, as is often the case in early childhood classrooms, was very infrequent as these young writers used visual representations to convey significant information and to help their audience understand and learn in conjunction with the written text. Whichever nonfiction visual feature students chose, they used it to communicate substantive, additional information that was significant to their topic. Thus, the role of the author and the responsibilities associated with it reflected the understandings that writers of nonfiction were decision makers who considered the preferences or needs of their audience in relation to the words, disciplinary vocabulary, mentor text patterns and visual representations they used as they produced their written work.

As is apparent, the audience was an important participant in this process. As research with older students has shown (Greene, 1995; Many, 1996), a sense of audience is important for writers. This understanding provides purpose for writers and affects the decisions they make as they write, as well as influencing the roles that they envision for themselves within the instructional setting (e.g., readers and writers, critics and decision makers, knowledgeable authorities and consumers of disciplinary information). In this classroom, the participants came to understand their audience in very literal terms, as their families, schoolmates, other teachers, etc. Further, they recognized this specific
audience in their talk as they referred to the need for illustrations so the Kindergartners could understand their posters or as they talked about which family members would be coming to the pond museum.

A final dimension, accuracy, was constructed as a matter of judging which knowledge was authoritative. Students were asked to support and check their facts; however, the teachers were the final authority, able to validate and even change “written” facts. This is not to suggest that everything that the first graders wrote was “true” or accurate as judged by the discipline. While every effort was made to support accuracy, these were first grade children. As such they made sense of the world on their own terms; so the earth tilting caused the seasons, swans could be made out of rulers and surely mosquitoes could fight each other the same way as stags and turtles battled. At other times, the playfulness and sense of fun of this age group came to the fore and the teachers joined in the laughter, letting accuracy and legitimacy go momentarily, at least.
CHAPTER 6: FINDINGS AND IMPLICATIONS

This study is concerned with developing a series of grounded theoretical hypotheses about the ways in which young students construct an understanding of nonfiction and what it means to write nonfiction. This study addresses the following questions:

- What cultural model is constructed by participants in a classroom as they socially and discursively come to understand the genre of nonfiction and the composing processes associated with it; and how do they acquire, take up and recontextualize the practices of the cultural models made available to them as they write nonfiction?

- As students construct an understanding of the components of nonfiction, how do they take up this knowledge in their discourse and their writing?

- What metacognitive and rhetorical composing practices do first graders take up when they write nonfiction texts and how do they come to construct their knowledge of what these processes are?

- What sources do young nonfiction writers take up as they research and write nonfiction? How do these sources support or constrain how students construct their understanding of the being a nonfiction writer?
Overview of the Study

I began this study to address a gap in educational research surrounding the issues that exist for young children as they construct their understanding of nonfiction and how to write it. My research suggested that in the early school grades writing nonfiction from sources involved issues different from those in upper grades (Greene, 1995; Hayes, 2006; Nystrand, 2006). For instance, teachers of young children did not expect them to verify the sources they were using or to synthesize content from a variety of textual sources. Likewise argumentation structures were not considered to be age appropriate. However, content was expected to be believable and certain “nonfiction” structures (e.g. illustrations, captions, and other nonfiction text features) were modeled and discussed with the expectation that they could be used in writing (Jenkins, 2006; Many, et al., 1996; Oyler, 1996; Tower, 2002). However, there was little empirical research that described how young children and their teachers negotiated these issues and how young children came to construct their understandings of what it meant to be a writer of nonfiction.

The study examined how a “culture” was created in a classroom and how the participants in the classroom interacted with each other and enacted classroom and literacy practices. The study followed a group of first-grade students and their teacher over the course of an academic school year and used the principles of ethnographic research and discourse analysis to explore how the understanding of being a nonfiction writer was “talked into being” (cf. Green and Dixon, 1993). The study was guided by the understanding that meaning is constructed through actions between people that occur
over time and there is a history to the joint actions and the relationships as understanding is constructed (Gergen, 1999, 146).

I examined the public display of knowledge and the use of routine as dialogically enacted to explore the culturally shared, socially constructed ways of “thinking, perceiving, believing, acting, feeling, evaluating,” and using language (cf. Goodenough, 1971). I also researched the ways in which language was used to guide acquisition, or reflected uptake and recontextualization of the dimensions of the cultural model as participants constructed a particular vision of nonfiction writing.

Theoretical and Methodological Frames

In the course of this study, I employed theoretical frames from scholarship related to social constructionism and interactional sociolinguistics to understand the shared experiences and understandings people constructed as members of social groups and in relationship to each other. I used ethnographic principles to study the ways in which the participants in a classroom constructed social and cultural understandings and ways of being together. I used discourse analysis methodology to examine the role of language and other systems of representation as participants acted and reacted together and as classroom and literacy practices were constructed, acquired, taken up and recontextualized. These theoretical and methodological frameworks helped me describe the dimensions of the ways in which a cultural model for being a nonfiction writer was constructed by the classroom participants.
The Research Site

The first-grade classroom chosen for the research was located in a large suburban school district in the Midwest. The classroom was self-contained and one of four first-grade classrooms in the school. There were 24 students and one teacher in the classroom. The students participated in multiple opportunities to construct and co-construct themselves as nonfiction writers and then publicly display that knowledge within the structured classroom time of Writing Workshop. They took part in whole group mini-lessons where the teacher guided acquisition of the literacy practices associated with being a competent nonfiction writer. They wrote independently, conferred with adults, read books and took notes during the bulk of the writing time. They also shared their work within informal sessions during classroom time and through publication of their work in more formal ways.

Data Collection

As a participant observer in the classroom, I collected audio and video data from November 2009 through December 2009 and from March 2010 through May 2010. The complete corpus of data consisted of 27 days of video-recording which included whole group lessons, sharing times and/or individual conferences lasting from one to two hours each day, and typically occurring in the afternoons. From the analysis of this body of data and an analysis of selected transcribed events, I was able to observe the public construction of understandings of what it meant to be a nonfiction writer and the ways in which classroom participants acquired, took up and recontextualized these understandings as they took part in classroom activities and the associated literacy
practices. From this analysis I generated theoretical constructs to provide a way of conceptualizing nonfiction writing for early elementary students. As well, my data provided a view of learning from the perspective of learning as a social and interactive process. Further these data also described a model of pedagogy for early nonfiction writing grounded in socially constructed processes that were conducted through language-in-use.

Overview of Research Findings and Theoretical Constructs

In the following I present the research findings from this study. These findings describe a classroom cultural model comprised of instructional and literacy practices associated with writing nonfiction which were constructed, taken up and adapted by classroom participants across two writing projects which took place during an academic school year thus answering my overarching research question. These literacy and instructional practices included:

- the ways in which the teacher constructed and guided students’ acquisition of the dimensions of the cultural model for being a nonfiction writer; and
- the ways in which the classroom participants constructed an understanding of what counted as knowledge.

As students constructed an understanding of the genre of nonfiction and how to write it, they took on the identity of being a nonfiction writer foregrounding the ways in which they came to understand themselves as authors and members of a writing community. Further, they took up certain rhetorical and metacognitive practices including:
• the ways in which audience was constructed by the classroom participants;

• the ways in which illustrations and nonfiction visual features were taken up and adapted by students; and,

• the ways in which these practices were recontextualization over time as students took on more academically sophisticated projects.

Finally, students took up a variety of sources; however, these sources were positioned in an hierarchy of more or less authoritative by the classroom participants.

In the following sections I begin with a discussion of how the learning in this classroom was socially constructed through the interactions and language of the participants and the ways in which this helped conceptualize nonfiction writing for early elementary students. I also include a discussion of a model of pedagogy as socially constructed processes conducted through language-in-use for teaching nonfiction writing with young students. As I discuss the findings generated by the study I refer back to events from previous chapters and include some further transcripts from events to illustrate the theoretical constructs I develop in this chapter.

*Talking a Cultural Model into Being: Guided Acquisition*

Over time the teacher in this classroom dialogically constructed and guided students’ acquisition of the literacy practices and dimensions of being a nonfiction writer. Janey “talked into being” what nonfiction writers did, as readers, researchers, writers, and illustrators. Through the use of language and modeling she guided students and helped them become writers of nonfiction. The teacher also acted as a mediator as students took
up, adapted and recontextualized the dimensions of the model that were socially constructed.

She did this in a variety of ways. At times she provided explicit instruction to the students as she constructed and oriented students to the dimensions of the cultural models of nonfiction as a genre and how to be a nonfiction writer. So, as was discussed in Chapter 4, she modeled and talked to students about how to ask interesting questions using nonfiction text features like the labels and captions they might find in nonfiction books from the classroom library. As students took up this dimension (asking interesting questions), she monitored their acquisition during whole group lessons and conferences. When students began to ask questions to which they already knew the answer, she provided explicit instruction to make clear her assumption that an interesting question was one to which one didn’t already know the answer. In this way, she introduced a new dimension to writing with questions (writing questions the writer doesn’t know the answer to) based on what she noticed and heard during conversations with the students as they acquired and took up the dimension of writing interesting questions.

Another way in which Janey and the students “talked into being” their understanding of being a nonfiction writer was through the construction of the understanding that being a nonfiction writer was a matter of acting in particular ways. Through their actions and social interactions students embodied the dimensions of the cultural model of being a nonfiction writer. While they constructed a shared understanding of the genre of nonfiction, and while they engaged in specific activities associated with producing nonfiction writing, they embodied these dimensions through
active social engagement and bodily movement. As members of this particular culture, for example, students moved to the classroom library or the school library as they searched through collections of books and within individual books for interesting questions; they sat and wrote questions and answers on “I Wonder” cards or in Discovery Journals and drew sketches to accompany the words they wrote; and they acted like authors by sharing their writing with an audience. In this way they were given opportunities to embody the dimensions of the aspects of the cultural model, learning to be a nonfiction writer by writing nonfiction.

Finally, Janey’s pedagogical model provided space and time in which students were able to acquire, take up and recontextualize the dimensions of a cultural model of being a nonfiction writer at different rates. As first graders, the students in this classroom were all still learning to read and write at a variety of levels. By providing high quality nonfiction children’s books, students found sources they were able to look through and “read” as they were able. By providing time to explore these sources and conduct research, students were able to engage in conversations with others to mediate their understandings of what they were reading or, as was often the case, have someone read to them from their sources. Because of the recursive nature of the nonfiction writing students produced over the course of the academic school year, they were able to produce more individually sophisticated writing; consider, for instance, how they began with a simple question and answer in the poster project and continued to a multi-page research report on a single animal from the pond habitat. Further in the research report their information was written using the framework or pattern of a mentor text which was not
the case in the poster unit. In the time and space constructed as Writing Workshop, then, students engaged in visual, oral, and textual modes making this space multimodal as well as dialogic; further the recursive nature of the structure accommodated different rates of student acquisition across time and space.

*Talking a Cultural Model into Being: What Counts as Knowledge*

Part of the cultural model of being a nonfiction writer in this classroom was a way of thinking. What I am discussing here as “a way of thinking” is not an “in the head” practice but rather the social behaviors that were given the label “thinking” and talked about in certain ways. So, throughout the data, Janey often used metacognitive language, talking students through the ways that she was “thinking”: she posed problems that nonfiction writers might meet; she and the students “wondered” about interesting questions and talked about “knowing” information and facts; and during the research report project, in particular, Janey talked about the decisions that students needed to make as authors and illustrators who were interested in helping their audience learn new things. Likewise, students took up this language and referred to “wondering” about things and “knowing” information.

Further, what counted and was taken up as knowledge in Janey’s classroom involved a knowledge/procedure nexus. That is, certain routines connected with certain kinds of information produced students who were “experts”, “researchers”, and “authors.” The routines or procedures that were instantiated in this classroom generally involved some kind of initiation. The initiation of the routine was most often a question or some task that did not involve a known answer (or had not involved a known answer
initially). Thus, it was often the case in the data that students came up to me and asked, “Did you know?” While the student knew the answer at the point of query, the information that they subsequently shared was not information they had known before; rather it was new information to them that they were expressing in their own words, not by copying from a text or the teacher.

After the listener responded, the routine then required that the information or reasoning be validated by an authoritative source (i.e., the writer warrant their knowledge). This occurred in several ways. Sometimes the listener(s) asked the student how they had come to “know” the information; at other times the student offered the warrant for their information without being asked. So, for example, in the following conversation, Casey initiated the routine by asking me a question.

Casey: And did you also know that they [swans] whack people with their wings?
Melissa: Well, he didn’t whack me, but I would believe that because I could see it flapping its wings like that, yeah.
Casey: I even have a picture of it in this book [turning to a page in the swan book and pointing to picture and circling the swan with her forefinger].

In this example, although I did not ask for the source of her claim, but, in fact, agreed that the claim seemed warranted based on my own experience, nonetheless Casey directed me to an illustration which showed a swan spreading its wings to threaten a person using this to explain how she had come to “know” the information. This was typically how the routine played out when it was student initiated.
At other times listeners offered the writer additional knowledge which was either taken up or rejected by the writer. For example, when Olivia was puzzling over the sun’s energy and Renee offered the information that the sun was a star, the information, though accurate and offered within the framework of a helpful suggestion, was rejected by Olivia. On the other hand, Olivia’s suggestion to Hector about how to write about mosquitoes laying eggs was taken up by him (with adult assistance) in his final writing. Again her information was accurate and offered within the framework of using a mentor text to represent one’s own research; in this case, because the student’s suggestion was supported by a teacher, it was seen as more authoritative and thus accepted by the other student.

Besides offering other information after the writer had read their writing, throughout the data there were many times when Janey and I mediated students’ reasoning at this point in the routine. Generally we focused on issues of accuracy or perceived comprehension during these events; so, although the routines were valid, the knowledge was discounted as inaccurate or as not fully warranted. This was the case when Janey changed Colin’s final page about when beavers learned how to swim from the five years he had written to 30 minutes after birth. As a knowledgeable adult, she found it illogical that the young of an animal that lived in water would not learn to swim until it was five years old and checked the information on the Internet even though Colin had followed the procedures for writing his information into a final form for his research report.
Another instance of the sort of mediation that occurred as teachers evaluated what knowledge counted within the knowledge/procedure nexus was the case of Marcy and the tilting earth. Marcy had finished the rough draft of her poster when I came up to look at it. We had accomplished the routine of reading her question and answer, and I had made some comments about the arrows she had drawn around the picture of the earth. I then pointed to the arrow at the top of the earth which is drawn in the middle of the poster (Figure 6.1). (Please note that at this time there was no sun or color in the illustration.)

Melissa: And then is this, what is this arrow up here at the top here?
Marcy: Um, like it means it’s tilting cause I can’t like actually [elongates the last two syllables of actually]
Melissa: You can’t actually draw it tilting.
Marcy: Yeah [elongates the word]
Melissa: So where, if it’s tilting, where should you put the sun in your picture?
Marcy: Um
Susannah: [gesturing to top left of earth on page] You should put it here.
Marcy: [gesturing to top right of earth above the page] right here
Susannah: [gesturing to bottom left of earth on page] or right here
Melissa: What’s going to help the reader the most, do you think?

When I asked Marcy where she should put the sun in her picture, I was interested in Marcy’s reasoning. She had written in her answer that the earth tilted away from the sun and had drawn an arrow to represent the motion of the earth tilting; I wondered where she would place the sun in relationship to the motion indicated by the arrow as an indication of her comprehension of what she had written. Marcy held the floor with her initial “Um”, but then Susannah entered the conversation, and suggested several places where Marcy could draw the sun; Marcy resisted her suggestions, pointing to a different space. I then suggested that Marcy consider her audience, referring back to Janey’s talk during the whole group lesson earlier, that the illustrations should help the audience which included Kindergartners, who might not be able to read the words.

At this point there was a long pause in the conversation between Marcy and me during which Marcy was quiet, looking down at her poster and then raising her hand and beginning to wave it to break into the conversation Susannah was having with me about the life cycle of an apple tree.

Marcy: I know where I can put the sun [said with a quick breath as though she is about to speak again immediately]
Melissa: Oh, okay, got a decision about the sun
Marcy: Right there because the earth is tilting that way because the earth is pointing that way and the, and the sun has to be away from the earth.
Melissa: Good thinking. That will really help us.

During her description of where she was going to draw the sun, Marcy gestured to the top left of the earth in the drawing and made tilting motions with her arms. I validated her knowledge, labeling it as “good thinking” and information that would be helpful to an audience of readers. In short, after the researcher initiated the routine with a question, the student took it up, using knowledge from previous conversations, and the routines instantiated in the draft of the poster which included the question, answer, partial illustration and the nonfiction text feature of the arrow to make a claim about where to place the sun in her illustration and to warrant that claim. In this case her reasoning was validated as logical.

The knowledge/routine nexus was enacted consistently throughout the academic school year in this classroom. It provided a space during which adults held a “conference” with students. Like many writing conferences it began with the student reading their writing, in this case usually the question and answer and perhaps talking about any visual representations. It continued with praise or compliments from the adult listener which could be also be accompanied by suggestions to add to the writing or by further questions. Often the further questioning occurred when the adult had reason to believe that the information that had been written was inaccurate or the adult was checking to see if the writer had understood what they had written. It was during the talk that accompanied these “conferences” that much of what had not been written on the
page was made clear to the listeners, in particular the reasoning processes that students had used in their writing.

*A Hierarchy of Authoritative Sources*

Regarding books as a privileged and authoritative source of information in nonfiction writing is common to much research done in classrooms of all ages. Despite the issues of varying readability levels of nonfiction books, as well as the vocabulary load and conceptual demand for young students, books were constructed by the teachers and the students as the most authoritative source for research. In Chapter 4 (transcripts 4.3 and 4.4) Janey discursively constructed books as the main source for students’ research. Further, as students began to write their research reports, the range of books available was narrowed to “approved” texts (i.e., those on the library cart or selected from the classroom library, or white papers printed from the Internet).

In the narrative descriptions of the classroom there were several examples where students indicated, through their silences and through specific remarks to their peers that, unless other sources have been validated (usually by an adult), they were not interested in the information that was being offered. In the following segments taken from a longer transcript, Casey’s talk with me explicates the range of sources that students had available to them as they researched for their nonfiction writing and suggests some of the value that she placed on the sources. In these examples she made use of the people sitting at her table by initiating a question to them, she made use of her approved textual sources, she encouraged me to get on the computer to do further research, and then she
constructed a swan out of rulers making use of materials in a practice that had been made available in the classroom on previous occasions (see Figure 6.3).

In the following I use segments from several days of transcriptions. These segments are not in chronological order but rather presented as they relate to the construction of a hierarchy of authoritative sources and the ways in which Casey’s classroom and literacy practices are illustrative of them. I begin by looking at a piece of writing that she shared at the end of the transcribed sequence and then look back to reflect on some of the writing and talk that surrounded it.

I am a swan.
I do bite people when they bother me and I whack them with my wings.
They go out ten feet.

Figure 6.2 Casey’s mentor text writing page
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>comment</th>
<th>Aspects of a cultural model of being a nonfiction writer</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/5</td>
<td>1</td>
<td>Melissa</td>
<td>All right</td>
<td>gaining the floor</td>
<td>writing with questions</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>here’s my question to you (.)</td>
<td>keeping the floor with a rhetorical question</td>
<td>writing with sources</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>Do you have to get your information just from the book</td>
<td><em>just used to indicate other sources not just privileged source of books</em></td>
<td>writing with words</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>or can you ask somebody?</td>
<td>*you is general—as a researcher who <em>asks questions</em></td>
<td>writing with visuals</td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>comment</th>
<th>Aspects of a cultural model of being a nonfiction writer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>Casey</td>
<td>Well, um,</td>
<td>filler</td>
<td>writing with questions</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>I was asking people at my table</td>
<td>acting as a researcher by interviewing</td>
<td>writing with people</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>and none of them had an answer.</td>
<td>them as sources; not helpful</td>
<td>writing with people</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Melissa</td>
<td>You can ask me.</td>
<td>permission to be used as a source</td>
<td>writing with people</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Casey</td>
<td>Do you know if swans bite?</td>
<td>acting as a researcher by asking questions</td>
<td>writing with people</td>
</tr>
</tbody>
</table>

continued
Transcript 6.1 continued

<table>
<thead>
<tr>
<th>Date</th>
<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>comment</th>
<th>Aspects of a cultural model of being a nonfiction writer</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Casey</td>
<td>And did you also know</td>
<td>adding information with rhetorical question; gaining the floor</td>
<td>writing with questions</td>
<td>writing with questions</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>that they whack people with their wings?</td>
<td>interesting information</td>
<td>writing with answers</td>
<td>writing with answers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>writing with visuals</td>
<td>writing with visuals</td>
</tr>
<tr>
<td>21</td>
<td>Casey</td>
<td>I even have a picture of it</td>
<td><em>I</em> indexes individual source books; <em>picture</em> is a visual</td>
<td>writing with book</td>
<td>writing with book</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>writing with visuals</td>
<td>writing with visuals</td>
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<th>comment</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>22</td>
<td></td>
<td>in this book [she is pointing to picture and circling the swan with her forefinger].</td>
<td>deictic reference to book with <em>this</em> and action with pointing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[portion of the transcript omitted]</td>
<td></td>
</tr>
<tr>
<td>4/7</td>
<td>39</td>
<td>Casey</td>
<td>I haven’t been reading very carefully,</td>
<td>beginning a narrative that gains her the floor and let’s her keep it</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
<td>like, whenever I see a cool picture that I really wanna read</td>
<td><em>wanna</em> indexes the interest/passion of researchers</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td></td>
<td>I start reading it</td>
<td>an action of researchers</td>
</tr>
<tr>
<td>Date</td>
<td>Line</td>
<td>Speaker</td>
<td>Utterance</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>46</td>
<td></td>
<td>When, when the swan has its wings out</td>
<td></td>
</tr>
<tr>
<td></td>
<td>47</td>
<td></td>
<td>I read that page because it looked pretty interesting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48</td>
<td></td>
<td>Well, at least I tried reading it because my book’s kinda hard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>49</td>
<td></td>
<td>but I tried reading it.</td>
<td></td>
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Aspects of a cultural model of being a nonfiction writer
<table>
<thead>
<tr>
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<th>comment</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>[portion of the transcript omitted]</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td>Melissa</td>
<td>We need to get on the computer</td>
<td>use of the word <em>we</em> does not indicate that student really will get on the computer; the adults only could do that for research</td>
</tr>
<tr>
<td>51</td>
<td></td>
<td></td>
<td>for you</td>
<td><em>you</em> here is indexing the understanding that Casey needs to research her topic</td>
</tr>
<tr>
<td>52</td>
<td></td>
<td></td>
<td>I think</td>
<td>qualifying phrase</td>
</tr>
</tbody>
</table>

Aspects of a cultural model of being a nonfiction writer

continued
<table>
<thead>
<tr>
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<th>comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td></td>
<td>Casey</td>
<td>But they don’t have a paper for me.</td>
<td>they indicates construction of some human authorities perhaps, like librarians; for me indexes the topic of her report</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>Melissa</td>
<td>There’s no paper for you?</td>
<td>repeating with a questioning intonation not to call statement in question but as solidarity—expressing disbelief, support, etc.</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>Casey</td>
<td>Because</td>
<td>taking the floor</td>
</tr>
<tr>
<td>56</td>
<td></td>
<td></td>
<td>I’m not getting very much research done</td>
<td>use of the word research to index asking and answering questions; in the first person since this is her individual endeavor</td>
</tr>
</tbody>
</table>
Transcript 6.1 continued

<table>
<thead>
<tr>
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<th>Line</th>
<th>Speaker</th>
<th>Utterance</th>
<th>comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td></td>
<td></td>
<td>because I can’t find any good information</td>
<td>use of the word <em>information</em> to index answering questions</td>
</tr>
<tr>
<td>58</td>
<td></td>
<td></td>
<td>in my books</td>
<td>indicates books as sources; <em>my</em> denotes the specific books that are approved for her topic</td>
</tr>
<tr>
<td>59</td>
<td></td>
<td></td>
<td>that I really want to know about</td>
<td>this indexes asking interesting questions that you don’t know the answers to</td>
</tr>
</tbody>
</table>

[portion of the transcript omitted]
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</thead>
<tbody>
<tr>
<td>4/9</td>
<td>60</td>
<td>Olivia</td>
<td>[students are grouped around the swan that has been created with rulers]</td>
<td>you refers to the individual; museum references publication of information</td>
<td>writing with questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>You should put this in your museum.</td>
<td></td>
<td>writing with sources</td>
</tr>
<tr>
<td></td>
<td>61</td>
<td>Casey</td>
<td>Yeah, maybe we can do that.</td>
<td>qualified agreement; use of <em>we</em> to refer to authors</td>
<td>writing with words</td>
</tr>
<tr>
<td></td>
<td>62</td>
<td>Melissa</td>
<td>Well, I took a picture</td>
<td>made use of camera</td>
<td>writing with visuals</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td></td>
<td>and Mrs. Jones says we can use the picture in your museum.</td>
<td>permission from the teacher</td>
<td>writing with visuals</td>
</tr>
</tbody>
</table>

continued
Transcript 6.1

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td></td>
<td></td>
<td>Is that all right?</td>
<td>checking with author</td>
<td>writing with questions, checking with sources, writing with visuals, author choice</td>
</tr>
</tbody>
</table>
Firstly, it is important to note how, throughout these conversations, Casey has taken up different dimensions from the aspects of the cultural model constructed in this classroom. Although the focus of this transcribed talk is to describe the range of sources she made use of as she worked on her swan report, this examples makes visible how the aspects of the cultural model overlapped and were intertwined as students enacted being nonfiction writers.

Turning to the transcribed talk, in the first segment (lines 1-9) Casey reported that she asked people at her table if they knew the answer to her question (lines 6-7). I had overheard her asking her questions and invited her over to ask me since I had a story about being bitten by a swan (line 8). In this instance, Casey was using people as sources, not one of the most authoritative sources as the hierarchy was constructed in this classroom, but a source that she had taken up because the answer was not apparent in the text. In what followed (lines 15-22), which occurred after our conversation about swans biting people, she asked me if I knew that swans whacked people (lines 15-16). She then showed me an illustration in her source book of a swan with its wings spread out attacking a frightened looking person (lines 21-22). She even pointed to the picture of the swan circling it with her finger to add emphasis to the information. At this point she had used the illustration in the book to “prove” her statement about swans.

On April 7 Casey explained the way in which she made use of books as she researched to find questions and answers (lines 39-41, lines 47-49). She described the pictures that she looked for as “cool” (line 40), possibly a variant on the word “interesting” (which she uses in line 47), and indexing the dimension of asking interesting questions. She went on to explain that although she used the book as a source,
there were some shortcomings for her as a reader since the text was not necessarily at her reading level (lines 48-49). Then, later that same day (lines 50-59), I suggested that we might have to find information by using the computer (lines 50-52). Casey explained to me there was no Internet information for her (line 50) and went on to express her frustration with her books as sources (lines 56-59). Here, Casey seemed to be expressing some frustration that the most authoritative source and the teacher validated source for this project were not helping her as a researcher.

Finally in the last segment (lines 60-64), I went to the computer and searched for swans’ wingspans for Casey who had not been able to find the information using any of her other sources. Having learned that swans could stand as tall as five feet with a wingspan of up to ten feet, we constructed a “ruler swan” with five rules arranged vertically to indicate the body of the swan and ten rulers spread out horizontally (five on each side of the “body”) to indicate the wingspan (Figure 6.3). This was a use of materials that has been validated by the teacher on other occasions. Several other students came over to help in the construction of the ruler swan and to admire the finished product. One student suggested that the swan be a display in the pond museum (line 60). I suggested that we could use the picture I had taken, an action that had been approved by the teacher (lines 62-63).

Casey provides information on how students in this classroom constructed, acquired and took up their understandings of writing with a variety of sources. While books were considered the most authoritative source and positioned as such by the teacher, Casey made use of other sources, and, in fact, found books as a source for the research project to be somewhat frustrating. Casey consulted people as sources, initiating
the questions; she used some of her own local knowledge (in a section of transcript that was omitted she told about some “mean ducks” she had encountered in Florida); she made use of books and the Internet, of course; and she also used material sources—the approved rulers to create her ruler swan, a pop-up paper construction of a swan (Figure 6.3); in a later conversation she also talked about providing feathers for people to touch when they visited the pond museum.

In the end, by examining the text that Casey produced in conjunction with the talk that surrounded it, one sees that much of her information came from the large collection of nonfiction books available from the classroom and school libraries. However, she also made use of many of the other sources that existed in this classroom including material objects, information from other people and her own experience. The provision of high quality nonfiction children’s books and the opportunity to make use of such books and other sources through talk as well as the ways in which the sources were positioned within the classroom mattered for Casey and the others. Students constructed and acquired an understanding that there was a hierarchy of sources they could use as nonfiction writers. Certain epistemological claims could be made with these sources, and students came to understand how to make these claims and warrant them as they used all the sources available to them in their writing.

Before leaving Casey, I want to take note of how this transcript documents a key characteristic associated with this cultural model of being a nonfiction writer—that is, being able to use talk around writing by gaining and keeping the floor. There are several examples in this transcript where Casey did just this (lines 15, 21, and 55), gaining the floor and holding it to talk to me about the research she was doing and some of the
problems she was experiencing. Further, at line 39 she began a narrative that allowed her to keep the floor until the narrative was concluded.

The example of Casey provides evidence of how, in this cultural model, talk was constructed as an important part of nonfiction writing, often indexing much more than what was written on the page. So, there was an ellipsis of sorts, an unwritten part that did not appear in the writing itself; rather the writing represented for Casey both texts that had been spoken as they were being written, as well as the texts to be spoken as they were shared. In this way the talk surrounding the writing presented information about how students constructed and displayed, not just knowledge about the topic, but also their understanding of what it meant to be a nonfiction writer and how they took up this identity.

**Constructing the Audience as a Participant in Nonfiction Writing**

A sense of audience is a rhetorical matter that is often not taught in early elementary grades; however, research with older students indicates that an awareness of audience has an effect on writers, impacting both how students perform the writing tasks (Greene, 1995) as well as what kinds of strategies they use while composing (Many et al., 1996). In this classroom part of the responsibility of a nonfiction writer was to convey interesting information through words and visual representations to a reader who would learn from reading and viewing the writing. This addressee or audience was constructed in very concrete and literal ways by Janey and the students. For instance, during the poster project, Janey characterized the audience as “the kids at Byrd” who would be walking by the posters hanging in the hallway and stop to read them to “learn some new things.” Kane, in fact, took this up, referring to how the Kindergartners (he had a sibling
at this grade level) who did not know how to read yet could look at the pictures on the posters. Janey returned to this comment later as she talked to students about how to go about illustrating their final poster projects. Similarly, during the research report project, the audience was constructed as families who would be coming to the pond museum to learn about the animals that students were researching as well as Kindergartners, fifth grade buddies and other teachers and students at the school. Several of the students took up the idea of having an audience at the pond museum to include the need to provide artifacts related to their topics, including feathers, the photo of Casey’s ruler swan and a plastic toy snail for Renee’s snail report.

Since this particular model constructed part of the definition of being a nonfiction writer as having an addressee, students explored several dimensions in particular as they communicated with their audience. This sense of audience was part of the impetus for asking interesting questions to which one didn’t know the answer. Presumably, if the writer learned some interesting information by asking and answering such questions, then so would the audience of readers. The issues of not copying and accuracy were also important dimensions which related to an understanding of audience. If students did not provide accurate information, then the audience would not learn anything or they would learn something that was fictional. Likewise, if writers did not use their own words to write their research, then they would not be showing what they had learned and again the audience would be cheated of the opportunity to gain new information. Finally consideration of audience was an important part of the decision making role of the nonfiction writer. Using mentor texts to help make one’s writing interesting, using
nonfiction vocabulary, and providing visual features to support one’s meaning all helped
the readers as they read to learn about the information conveyed by the writer.

This particular model constructed an understanding of the ways in which a writer
communicates with an audience; further it provided opportunities for students to explore
several particular dimensions as they did this. Participants constructed their
understanding of audience in a very concrete way, envisioning them as the particular
people who might read their writing in the hallways of the school or during a special
celebration. As they prepared for publication, they made reference to the fact that they
were going to do their “best work.” Nonetheless, the sense of audience was rarely
expressed by students as they talked about their writing. The one clear instance that I
have of it was a comment by Casey when she was talking to Olivia and me about her
swan report: “You guys, can like help me think of this stuff because I’m studying the
swans so I am, am, like, well, I am gonna read it and I won’t be very interested because I
already learned about it. But you guys can, like, help me think of stuff to write because
you can help me find out if it, like, would be interesting for you guys.” Casey expressed
her understanding that her nonfiction writing should provide interesting information to
her readers, positioning Olivia and me as representative of the general audience. Given
that these students were early elementary aged children, their understanding of audience
may not have been extremely sophisticated. However, it seems that these young writers
did have some understanding of audience for their writing, and that understanding may
have impacted some of the choices they made. Further, while their understanding of the
rhetorical traditions of audience was still rudimentary, within their instructional setting
they had begun to see the roles that writers can take up in relation to audience (e.g.,

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readers, decision makers, knowledgeable authorities and consumers of disciplinary information).

**Issues with Taking on the Identity of a Nonfiction Writer**

Students’ understanding of their audience was part of a larger issue of a writer’s identity. Janey positioned all the students in the classroom as nonfiction writers. As a nonfiction writer, there were certain opportunities available to do certain things that were played out to varying degrees as students embodied the various dimensions of the aspects of a cultural model of being a nonfiction writer. I do not mean to argue that all students acquired the model fully; clearly some students struggled more than others and some students engaged in procedural display (Bloome, et. al, 1989). What I would argue, however, is that all students acquired and took up some dimensions of the aspects of the model to some degree. In the following example I examine one event in which I argue that the teacher perceives one student as engaged in procedural display and another student as struggling and reacts differently according to her understanding of their actions and the ways in which they were embodying the identity of a nonfiction writer.

Towards the end of a whole group lesson in November, when students had been looking at the use of labels in a book on ants, Janey asked them to generate some questions they were wondering about when they looked at labels in the ant book. Maddox had asked, “Why do queen ants have wings?” and Jeannie had asked: “How many lenses does an ant have?” These questions were accepted by the teacher as “great” questions. Then Stewart asked a question:

**Stewart: Why do ants have legs?**

Janey: Why do ants have legs? [with a rising tone]
Janey: Why **do** you think ants have legs? [emphasizes word *do*]

Stewart: To walk.

Janey: I think that you probably need to do a better job of paying attention, OK?

Janey went on to reiterate what she wanted to students to do during Writing Workshop ending with:

Janey: So think about all the different things you’re wondering about.

Janey: Hector [she calls on a student who has raised his hand]

Hector: How can the, the, those can see out of their xxx?

Janey: How do they see?

Janey: That’s a great question because you know what? They have so many lenses on their eyes. It’s kind of interesting the way that they can see.

In looking at the questions these two boys asked, “Why do ants have legs?” and “How do they see?” the questions seem to be quite similar. The answers to both questions would appear to be surface level answers needing little research or thought—not the sorts of questions that would be regarded as interesting questions or questions to which one didn’t know the answer. Yet, Janey’s responses to the two boys were very different. She repeated Stewart’s question the second time in a teacherly tone with the emphasis on the word “**do**”, not really asking a question but almost delivering an admonition. When Stewart answered after she repeated the question twice, she told him to pay better attention and moved on with the conversation, not acknowledging anything further about his question. Yet Hector’s question, which seemed to be a question that should have been labeled equally uninteresting, was validated as a “great question” with Janey even adding details to the question to show how interesting it was.
I would argue that Janey’s differentiated responses had to do with the ways in which students were identified and supported as nonfiction writers. Her response to Stewart’s question seemed to indicate that she interpreted his question as procedural display, a response oriented towards completing a task or activity in a lesson “rather than substantive engagement in academic substance” (Bloome, et al., 1989, p. 284). She evaluated his question as an attempt to join in the conversation about using labels to ask interesting questions as inconsistent with his ability to assume the identity of a nonfiction writer; in other words, she saw him as “clowning around”, trying to gain the floor without making any real contribution to the conversation. Hector, on the other hand, was an ESL student who was learning to speak English and was just beginning to take on reading and writing in either of his languages. While his question might have seemed simple, Janey valued his contribution, supporting his attempt to frame a question by revoicing the question and extending it with further details. Hector, Janey judged, had made a legitimate attempt to assume the identity of a nonfiction writer by asking his question.

Through this example I have attempted to explicate the ways in which students took on the identity of a nonfiction writer. Certainly, not every student took on the identity fully; some students resisted and some struggled. Others, like Stewart, sometimes chose to “clown around” but, when reminded of the roles and responsibilities of the nonfiction writer, revealed themselves as competent members of the community, going on to ask interesting questions to which they did not know the answer. However, while some students needed more support from the adults available in the classroom and others acquired and took up the dimension with little support, all the students made some progress as nonfiction writers during the course of the academic year.
Illustrations and Other Nonfiction Visual Features

While early childhood research on young children’s writing indicates that drawing a picture is often a form of prewriting, a way that students think through what they are going to be writing down, in this classroom this was not the case when writing nonfiction. In general, students used nonfiction visual features in their notes and written pieces to support and add to the information they had already written in much the same way as the writers of the nonfiction books they had been using did. The ways in which students did this matched with rhetorical approaches to nonfiction writing that recognize the importance of sign systems other than written texts (Kress, 1999; Pappas et al, 2009). Further, the sign systems that students took up were those that were talked about during read alouds and whole group lessons. So it mattered what visual text features were available in the books they read and looked at and in the lessons that Janey taught.

Further, as Many et al. (1996) discovered, a simple drawing with a feature like a label might involve very complex “ways of thinking.” There are many examples of this throughout the data. Marcy’s use of the arrow to show the earth tilting and the thought she put into where she should place the sun as well as Casey’s edited drawing of the swan with its wings spread are examples of what Many described in her research. Through the numerous examples available in the data it was clear that drawing in this classroom was not done because students didn’t have the words to write. Rather the drawing they did was part of their constructed understanding of the genre of nonfiction; that is, they illustrated their writing with the intention that illustrations had a particular importance in nonfiction. So, in this sense, students took up the use of nonfiction visual features in a
manner consistent both with its construction within the genre of nonfiction and within the cultural model of the classroom.

Recontextualization over Time and Projects

Over time and across the different nonfiction writing projects the dimensions of the aspects of the cultural model were recontextualized so that the knowledge and the model were not fixed but rather changing and evolving. These changes occurred in response to the ways in which participants acquired and took up various dimensions. Thus, over time the participants found that they did not have to focus as much attention on one dimension and so they were able to attend more fully to another dimension; or another dimension was added to an aspect of the model as students became more knowledgeable and capable.

As students wrote with questions across the course of the academic year, their constructed understanding changed from one where students wrote down any questions they were interested in and found answers which they put into their own words, to an understanding that they were to ask questions focused on one topic, questions that would help their audience learn about that topic. Further, if there was other information relevant to the topic, and not necessarily a question, it could be added to the writing. This recontextualization makes sense as one considers the age of these young students. For many first graders asking a question is a challenge; often, children of this age “ask a question” by sharing some information from their local knowledge or background experiences. So, as Janey worked with her first graders to help them become more academically sophisticated as nonfiction writers, she began the first grade year by helping her students construct an understanding of how to ask “interesting” questions and then
how to answer those questions using their own words. By the end of first grade, students were able to read and write more, and they were able to build on previously constructed understandings of asking and answering interesting questions by particularizing the questions they asked to one specific subject and adding any other pertinent information that they found in their research.

Likewise writing with sources also evolved as students became more capable readers and writers. During the poster unit, Janey encouraged students to use all the books available to them in their classroom library and in the school library in order to ask and answer questions. This is not to suggest that she did not construct with the students the understanding that they would have to eventually locate specific information in a book with which to answer their questions. However, there were always multiple book titles available for students to look through as they considered broad topics like the weather, animals, and plants. During the research report, specific approved sources which were largely controlled by Janey and the school librarian were provided for students to use as they researched their pond animal, and it was expected that students would use these sources. This recontextualization occurred, to some extent, as part of Janey’s support for first graders writing research reports. As their topics were narrowed to a choice of pond animals and as their questions were specialized to help the audience learn about their topics, so, too, were the sources that were available for students to use. These sources were chosen to provide information on the many pond animals that the students might choose to research. Moreover, these texts were chosen to be accessible to students both in terms of readability and in terms of their earlier understandings of nonfiction texts and text features.
The dimensions of writing with words were also recontextualized across time and projects as Janey’s students became more academically sophisticated nonfiction writers. The poster unit, occurring as it did at the beginning of first grade when many of her students were not writing fluently, found a number of the students relying on the word wall to spell high frequency words and using invented or temporary spellings to record other unknown words. Further, students were encouraged to spell some of the vocabulary of their content area by copying from their text since the use of disciplinary language was part of the constructed understanding of being a nonfiction writer. While copying created some tension as students worked on their poster writing, students came to understand that nonfiction writers used their own words when they wrote and did not copy what another author had written because that did not reflect the ways in which nonfiction writers assimilated the ideas they had been researching to author a new text. These dimensions were recontextualized with little change except in the level of sophistication that students brought to them during the research report unit; additionally understandings of the need for accuracy as well as being able to explain what certain disciplinary words or terms meant were recontextualized in more exact ways.

As students became more fluent writers Janey began to position them as authors. In both units Janey constructed the understanding with her students that authors were people who learned new information, shared their learning with an audience and made choices that would help their audience learn, too. In the research report unit, however, Janey provided students with specific models for their actual writing using mentor texts which might be characterized as literary nonfiction. This is consistent with the ways in which Janey supported her students to become more sophisticated as she added to the
understanding of her young nonfiction writers that authoring text was not just about presenting what they had learned in a new way but was also about writing it in an interesting way. The literary style of writing in the mentor texts immersed students in language and patterns that could serve to make their writing more engaging.

Writing with visuals, embedded as it was in the other aspects of the cultural model, was recontextualized through repetition of what the students learned in one project (i.e., nonfiction visual features that had been collected on charts during the poster unit). The poster unit only required a single illustration while the research report required many; through the task complexity Janey supported students to become more academically sophisticated as they represented and displayed knowledge by assimilating information from textual sources with their understandings of visual representations. Hence the illustrations and visual representations of the poster project formed the basis of the multiple pages produced for the research report.

In these ways, then, recontextualization supported students as they constructed an understanding of what it meant to be a nonfiction writer. Students began first grade by asking and answering questions to produce a poster; gaining knowledge about the genre of nonfiction both in writing and in visual representations. Over time and across the projects dimensions were added or added to, and as students acquired and took up certain dimensions, their attention shifted to new dimensions that further constructed their understandings of what it meant to be a writer of nonfiction. The model presented intentional teaching that was consistent, repetitive, recursive and additive in response to the ways in which the students acquired and took up the dimensions.
Implications

In this section I discuss my findings in terms of what they imply for future research and for the field of education as well as teacher practice. These implications are not made at the level of specific actions but rather are about ways of framing practice and instruction within early childhood nonfiction writing instruction. Moreover, although this study looked in depth at one particular “positive case” classroom as opposed to many classrooms, the findings are not idiosyncratic; rather, the varied pedagogical strategies and techniques comprise a set of instructional practices which have implications beyond writing in the early childhood classroom.

An instructional model

Although there are studies done with older students that show the ways in which students construct, take up and adapt literacy practices, these are not solely focused on students writing (Floriani, 1994; Santa Barbara Discourse Group, 1992; Yeager et al., 1998). Moreover, in my perusal of the research literature, I have not found any work that has focused on the ways in which early childhood classrooms construct the type of nonfiction writing instructional model that occurs in Janey’s classroom. Further, in the current educational climate, teachers are concerned with the practice of “balanced literacy”, with creating a “6 step lesson plan” or with activities deemed as “best practices.” While these are not necessarily bad practices, the instructional model that I describe as occurring in Janey’s classroom allows for a different framework and one that provides for a varied range of students, expanding rather than constraining their opportunities for learning.
In this example of an early childhood classroom where students acquired, took up and adapted the cultural practices of being a nonfiction writer (as opposed to a set of skills or activities), we have a framework that has implications for teachers interested in helping students acquire the cultural and social practices of writing nonfiction. One component of this instructional model was that students had time and many opportunities to read and write nonfiction. As they read books, and wrote their own research, they also had time to talk to each other about interesting questions and answers, as well as share writing of their own and others. There was room for and acceptance of mistakes, and there was time to explore the topics they were researching. There were daily opportunities to write a variety of nonfiction texts including notes, drafts, visual texts, posters and research reports. Through the practices of this model students began to write to learn what they thought.

Another component of this instructional model was the teaching that occurred. While teaching is often constructed as a journey through the curriculum without reference to student acquisition of constructed understandings, in this instructional model the teaching was iterative and spiraling, becoming more academically sophisticated over time. In didactic or teaching sessions, the teacher guided the students to acquire certain practices, making visible and layering onto understandings as the need arose (e.g., what is an interesting question?). Students then had opportunities to take up and adapt these practices with the support of the teacher before further teaching occurred. In turn, the further teaching was guided by the teacher’s observation of the students’ acquisition and adaptation of the cultural practices.
Finally, I address the issue of collaboration as part of the cultural practices of this classroom. This instructional model did not have students working together to produce a jointly authored piece of nonfiction writing. Instead students were encouraged to be the authors of their own work; so even when there is collaborative sharing and critique, students were reminded that they were the decision makers regarding any change to their work (unless it is inaccurate). As a result of the ways in which students were constructed as authors, then, it is probably not surprising that there was little collaboration around writing. However, that is not to say that there was not collaboration in this instructional model. There were many times that students shared books, information from books, and interesting facts that they had gleaned from their reading or writing. Further, there was at least one occasion in the data when one student read to another, and there were other occasions when students overheard conversations between students or the teacher and students and made decisions or asked questions that were framed by those overheard conversation (e.g., Alan and the fighting mosquitoes). All that is to say that, in this particular classroom, students did not hold peer conferences, or critique each others’ writing at the disciplinary content level; however, there were many times when students were talking together about the work they were doing and offering critique in more guided situations (and usually under the auspices of a teacher).

**Audience**

While work done with older students often addresses the need for audience and the ways in which audience is constructed as a rhetorical device, audience is rarely addressed books on writing instruction aimed at early childhood writing educators (Fletcher, 1992; Graves, 1983; Ray, 1999). Based on this study, however, it seems likely
that early childhood educators could and should attend to audience with young writers. Students of this age group may embody the notion of audience very literally, envisioning the audience as their family, their fifth grade reading buddies or their Kindergarten sibling who can’t read; nonetheless, these young writers were able to talk about what might be interesting to their reader and presumably make authorial decisions based on their construction audience.

*Play*

Early childhood research in writing (Dyson, 2003; Gallas, 2001; Rowe, 2010) has described ways in which students play as they engage in literacy practices. The students in Janey’s class, much like those students, also had opportunities to “play” in a variety of ways as they adopted and adapted the dimensions of the literacy practices that the teacher guided them to acquire. This suggests that teachers provide students with opportunities to take up the role or identity of being an expert, a researcher, an author and illustrator. As students perform or play with these roles they come to understand themselves as the scripter or author of readers’ experiences; further they come to understand that they have agency over what goes onto a page. In the same way that the authors they read make decisions about their writing, these students perform the role of being a nonfiction author as they make their own writing decisions. Further, as students “play” with the literacy practices of being a nonfiction writer, they adopt and adapt these practices allowing teachers to judge where to go next with their teaching.

Further, like the students in Gallas’ work (2001), teachers need to recognize the imaginative play that occurs as students “play around” with the facts that they are learning. Gallas, for instance, reported on how students took on, or embodied the persona
of the animal they were researching. Likewise the students in my study also “became” the
topic of their research report imagining themselves in those roles. Sometimes this play
was game-like as they created games like the “food chain game.” At other times, the play
was embedded in stories where students narrativized disciplinary knowledge into tales
replete with jokes, conflict, and cartoon like visuals, as Alan did with the mosquito
predators and the mosquito family. Although the play may take many forms, teachers
need to be prepared to accept such play into their classrooms and curriculum recognizing
it as an important part of the instructional model that complements didacticism with play.

Books as sources

As other research has indicated books are an integral part of nonfiction writing
(Jenkins, 2006; Many, et al., 1996). Given that they are such an authoritative source, the
choice of books for the nonfiction writing classroom seems important. Janey gave a great
deal of thought to the books she purchased for the classroom library. For instance, she
considered readability, accessibility of information for her students, appropriateness and
accuracy of content, and the text features used as she selected books. However, she also
used nonfiction books that were different in their structures. For instance, many of her
mentor texts had literary qualities; and some of the read alouds were hybrid information
books combining fantasy elements with factual information about a certain topic.

Teachers need to be aware of and informed about the different forms that
nonfiction for young children can take so that they can make a careful selection of books.
For instance, if hybrid information books are part of the collection, teachers might want
to name them as such and discuss how they have characteristics of both fiction and
nonfiction. Further, when teachers choose books to use as mentor texts, they should be
aware of the literary features of their selections, and how the language of these texts might support or constrain how students take up the texts in their own writing.

In Conclusion: Of tilting earths, ruler swans and fighting mosquitoes

This study examined one way in which a cultural model for being a nonfiction writer might be constructed; such models might be constructed differently within varying communities. What wouldn’t be different, however, is the realization that through talk the cultural models are constructed and acquired, taken up and recontextualized over time. The talk between the teacher and the students made the model visible and helped students acquire its dimensions. Moreover, talk over time provided opportunities for the students to become more competent and sophisticated nonfiction writers as they acquired and took up the dimensions of the cultural model.

Further, through the talk surrounding the writing, teachers gained information about students’ knowledge and thinking. The writing students composed indexed much more than what was written on the page. The importance of talk, both to guide students as they acquire and take up the cultural models, and to inform the teacher about what students have come to understand, influenced the ways in which the classroom was organized. For these reasons, then, the teacher provided time and opportunities to talk, as well as knowledgeable others with whom to talk.

As I consider the role of talk within this classroom, I return to the title of the dissertation. The stories referenced in the title represent the spectrum of ways in which the dimensions of the cultural model were constructed in Janey’s classroom. Marcy and the tilting earth is a story that makes visible the ways in which students were guided in constructing an understanding of how visual representations substantively added to their
writing and their responsibilities as an author and writer to explain the relationship between the writing and illustration. Casey and the ruler swan exemplifies the ways in which students took up the use of the sources made available to them as part of the cultural model (see Figure 6.3) and articulated how to use these sources (or not use them, in some cases)—an important strategy for a nonfiction writer. Finally, the story of Hector and the fighting mosquitoes provides an example of some of the ways in which students came to ask and answer questions as nonfiction writers. In all the stories participants talked, using “language to achieve goals, to learn, and to participate in the everyday activities of the classroom” (Green, 1983, p. 184). Likewise, the stories reveal the ways in which participants “got on together,” using the shared patterns that had been co-constructed by the community. Those stories and many others, then, suggest that young children are able to write nonfiction when the adults working with them are mindful of the challenges, accepting of the tenuous, risk-filled attempts this type of writing requires, and ready to support students as they become writers of nonfiction.
Figure 6.3 Casey’s representations of a swan:
Material

Visual
References


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Children’s Literature References


