



Reading Horizons: A Journal of Literacy and Language Arts

Volume 38
Issue 1 *September/October 1997*

Article 7

10-1-1997

Reading Horizons vol. 38, no. 1

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(1997). Reading Horizons vol. 38, no. 1. *Reading Horizons: A Journal of Literacy and Language Arts*, 38 (1). Retrieved from https://scholarworks.wmich.edu/reading_horizons/vol38/iss1/7

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ISSN 0034-0502

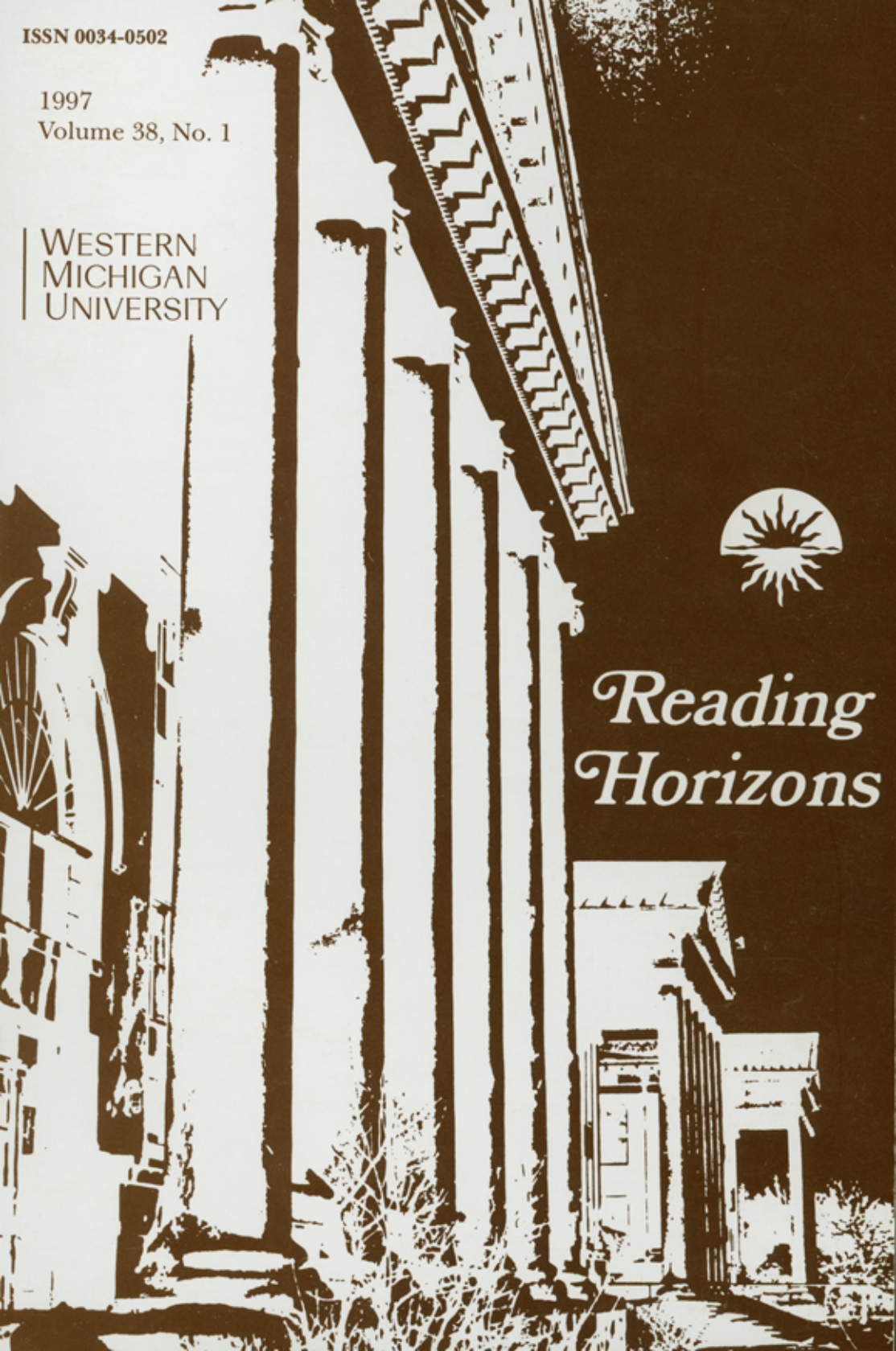
1997

Volume 38, No. 1

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Reading Horizons





READING HORIZONS:
A Journal of Literacy and Language Arts

Editors: Paul T. Wilson & Karen F. Thomas
Executive Assistant: Susan Standish

Begun in 1960 as a local newsletter, *Reading Horizons* has developed into an international journal read across the United States and Canada, and world wide. Devoted to literacy instruction and research at all levels, the *Reading Horizons* tradition is to serve as a forum of ideas from many schools of thought. Through original articles and research reports, theoretical essays, opinion pieces, policy studies and syntheses of best practices, *Reading Horizons* seeks to bring together school professionals, literacy researchers, teacher educators, parents and community leaders as they work collaboratively in the ever widening horizons of reading and the language arts.

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READING HORIZONS (ISSN 0034-0502) is published quarterly by the Dorothy J. McGinnis Reading Center and Clinic in the College of Education at Western Michigan University. Postmaster: Send address changes to *Reading Horizons*, WMU, Kalamazoo, MI 49008-5197. For subscription and back issue information, please see the inside back cover.

**There is no more crucial or basic skill in all of
education than reading.**

READING HORIZONS

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Self-Selected Journal Writing in the Kindergarten Classroom: Five Conditions that Foster Literacy Development

**M. Jean Bouas
Pat Thompson
Nancy Farlow**

Based on their research, the authors discuss five conditions that they feel should be evident if daily journal writing is to facilitate literacy development.

"What can kindergarten children write?" This question came from Doris, a middle school language arts teacher when she was told about Nancy's kindergarten classroom. Nancy had a regularly scheduled self-selected journal writing time. The children were allowed to choose their messages and forms of writing. Children scribbled, drew, wrote nonphonic letter strings, and demonstrated phonetic and conventional spelling. These are all forms of spelling exhibited by emerging writers according to Sulzby, Teale, and Kamberelis, 1989.

Research on emergent writing was given little attention prior to the 1980's (Sulzby, 1992). Sulzby (1992) points out that "... a tragic paradox lies between kindergarten classrooms in which children are treated as if they cannot write except through handwriting drill or copying from models and those classrooms in which all children, regardless of background, are writing freely and eagerly" (p. 260). Sulzby, Teale, and Kamberelis caution that a "destructive assumption" teachers sometimes make is that children cannot write (compose meaning) until they have mastered the mechanics of letters and sounds. Goodman (1986), Harste, Woodward and Burke (1984), and Sulzby (1983) explored a variety of methods to elicit reading and writing behaviors in young children. Sulzby concluded that

the simplest method to teach writing is to simply ask children to write. Teachers should capitalize upon the desire to make meaning of print by creating risk free, enabling environments where children's "can-do" attitudes toward writing are nurtured and nudged.

In our experience we have encountered primary teachers who, like Doris, still hold to the belief that kindergarten children cannot write. Goodman (1992) points out that children's literacy abilities have been underestimated. He suggests that we have not given young children the chance to write on their own. As a result of a one year qualitative research project focusing on the inclusion of a daily self-selected journal writing time, we have concluded that kindergartners are able to write when certain facilitating conditions are evident. In this article we will discuss the five conditions we feel should be present during self-selected journal time to foster literacy growth and development. In so doing we wish to encourage teachers to make "constructive assumptions" about young children's writing ability.

Condition 1: Print Rich Environments

Journal writing should be supported by a print/rich literacy environment where there are daily opportunities for students to explore language in a variety of contexts. Listening to and reading quality literature, engaging in social interactions with adults and peers, reading environmental print, and interacting with real-life literacy props in activity centers are examples of practices that invite children to engage in meaningful literacy experiences (Routman, 1994; Stewig and Jett-Simpson, 1995). It is important that the teacher guide children to use these practices and materials as references when writing. A print rich environment that is not used as a resource can be little more than a display of a teacher's decorating skill.

In Nancy's classroom, print materials related to current themes are widely available and visible. Quality literature is read aloud daily to the children. Martinez and Nash (1995) point out that "the key to successful writing is rich experience, and literature is incredibly rich" p. 219. Poems, songs, and environmental print decorate the room. Children refer to

books, song charts, and other environmental print as they draw and/or write in their journals. The print in the dramatic play center is changed periodically according to the theme. During the thematic unit on food and nutrition, the children voted to change this area into a restaurant. They listed the props and materials necessary to run a restaurant. The center was then equipped with the following: a variety of menus, food containers with logos on them, telephones and phone books for call-in and take-out orders, play money and cash registers, note pads, pens and pencils for taking orders, open and closed signs and newspaper ads for various restaurants. Even the aprons were stitched with the name of the restaurant on the pocket. (This was done by a parent volunteer).

During another unit of study, the children voted to turn the dramatic play area into a travel agency. A travel agent was invited to talk to the class and then the children began to gather materials to set up their travel agency. It was stocked with travel brochures, maps, desk calendars, appointment books, travel itineraries, tickets (with carbons), a computer terminal, phones and phone books. The walls were covered with travel posters. The children chose brochures for their destinations, contacted "agents" to plan trips, ordered tickets, chose types of travel via boat, plane, train, etc. and wrote up trip itineraries complete with arrival and departure times. Abundant supplies of writing materials are accessible to the students at all times. Children have daily opportunities to author and make their own books, and to make signs labeling classroom procedures and materials. They make their own class phone or address books and write, mail and deliver notes and letters to their friends. In addition, each learning center, (e.g., science/discovery center, art center, and construction center) has a writing component that reflects the current theme of study.

Condition 2: Scheduling

A consistently scheduled writing time helps children expect it, value it, and look forward to it (Routman, 1994). Routman states that daily journal time allows for oral discussion, mini-lessons, demonstrations, and teacher time to conference with children individually. Children in Nancy's class feel cheated if they do not get to write in their journals. On the few

occasions when Nancy did not have the journal time, at least one child would ask why or would remind her they had not written in their journals that day. The children seem to sense that what is valued is given part of a daily routine.

Children who have the opportunity to write every day have prolific practice in manipulating letters, words, and completing sentences even though conventional capitalization and punctuation may not be evident. Growth in phonemic awareness is facilitated as youngsters learn to use the sound/symbol system to communicate something that has personal meaning to them. The environment is safe, supportive, and social as children interact and collaborate about their self-selected journal entries.

Condition 3: Teacher Modeling

To help children develop proficiency and confidence in their ability to write, teachers must surround them with meaningful demonstrations of language, e.g., the teacher modeling writing in front of the students, taking dictation, and reading quality children's literature aloud on a daily basis. Fields and Spangler (1995) state, "Models of writing, both from reading materials and from adult demonstrations play an essential role as children learn to write, with adult demonstrations emphasizing the thinking involved in writing" (p. 179).

Nancy takes advantage of the many opportunities that occur naturally in the classroom to model the purposes, processes, and conventions of written language. Her practice of reading quality literature to the children on a daily basis is supported by Hayes (1990); "Quality children's literature is a powerful model of good writing and should be included daily in the program" (p. 67). She frequently invites children to help compose thank you letters, invitations, messages, and lists. For example, as Nancy records children's thoughts and ideas for the message of the day, she calls attention to many different features of print. Each day as the message is written with input from the children, different literacy skills are introduced and reviewed. The children find familiar words, look for letters in initial and ending positions, and notice punctuation, capitalization, sentence

structure and spelling. Early in the year the children even begin to notice such features as plurals and compound words.

By mid-September the children are telling her how to spell words as she writes the message. The following quotes reflect the children's awareness of literacy concepts of print in the messages, e.g., "Mrs. Farlow, the word soup is in our message four times!" "I see six H's/h's in our message." "I see the word to. I see a 2 too, but it's not the same as yours!" "There's a 'P' in the middle of the word pumpkin — it's like the one at the beginning!" "You forgot to write that it is Tuesday." "You didn't put in that there are only six days left until Halloween. You need to fix that!"

Journal writing time affords the teacher the opportunity to model writing for students on an individual basis. Many journal entries produced by kindergarten children, especially at the beginning of the year, are in a scribble form. Stewig and Jett-Simpson (1995) recommended the teacher ask the children to read their entries individually so their dictations can be written in standard form on their entries. (However, before the teacher writes in a child's journal, the child should approve where the adult writing will be located on the page.) After the dictation is completed, the teacher reads it inviting the child to read along.

Condition 4: Honeybee Conferences

During the self-selected journal writing time, teachers need to hold "momentary conferences." Ruddell and Ruddell (1995) refer to these as honeybee conferences because the teacher only lights for a short period of time to talk with and encourage emerging writers. Honeybee conferences allow a teacher time to provide individual coaching in a number of children within a 15-20 minute writing period. In these conferences, teachers take cues from what children have written in their journals and what children say about journal entries. Because emergent writers are at an ego-centric stage of development (Sawyer and Sawyer, 1993), they want to be noticed and affirmed. Therefore, it behooves teachers to honor children's attempts to express themselves in writing. The following quotes come

from our field notes as participant observers in Nancy's classroom during daily journal writing time.

I see you have drawn some of the vegetables that were in the story we read today. Can you tell me the names of the vegetables?... Can you write the names of the vegetables?

Tell me about your picture.

You have written a lot of letters/words. Can you read what you have written?

Tell me about the striped animal you have drawn. What does zebra start with? Can you write the letter? Let's see if we can find the 'z' on our key word cards.

I see you have written some family names; can you read them to me?

Each quote reflects part of several different one to two minute conferences held with kindergarten youngsters. Honoring children's attempts to communicate by putting something on paper is the first order of business in each honeybee conference. Youngsters are invited to try writing or reading something. For example, Ellen read the fruit and vegetable words she had written. The words were in the concept book that had been read in class before the journal time. Tim described the toucan he had drawn and when prompted to tell what the first letter of toucan was, he voluntarily wrote two 't's' and said "It's a tropical toucan." The theme at the time of Tim's journal entry was jungle animals. Cathy was invited to write something about the picture of her garden. She wrote "My grdn is pride" and proudly read "My garden is pretty." All of this reading and writing was done with prompts such as "Will you read to me what you have written?" "Will you tell me about your picture?" "Will you write about that?" Or, when children asked an adult to spell a word the adult replied "Write what you hear." If we want children to be risk takers, we have to convince them that it is safe to try. It is the trying that counts at the emerging literacy stage.

Honeybee conferences support children as they are engaged in writing that is meaningful to them. According to Labbo, Hoffman and Roser (1995), teachers should follow the child's lead. However, it is important that teachers not take a hands-off attitude during journal writing time.

Interacting with the learners and holding honeybee conferences is how individual instruction is provided. Goodman (1993) says that "knowledgeable teachers give enough support to build on children's strengths and help them over their hangups and plateaus" (p. 109). Teachers scaffold (Bruner, 1978) learners and encourage them to use strategies that move them toward writing competence. The amount of support (scaffolding) needed by each child is a matter of individual development. During honeybee conferences, children can be cued to use key word cards (the alphabet with pictures), phonics, environmental print, books that have been read, language experience charts, etc.

Following is an example of how honeybee conferences provide the touch of encouragement young writers need. Nearly all of Daniel's journal entries had been pictures. He had not responded to invitations to write letters and words. Late in March of the kindergarten year, Daniel drew a boat. Pat stopped for a honeybee conference. "Daniel, tell me about your picture." Daniel proudly explained that he had drawn a boat. Pat asked him to write "boat" below his picture. His response was "Oh, no, I can't spell it." Pat asked him to look at her (to see her lips). Pat said the word boat very slowly and asked, "What does that start with?" Daniel said "p." Pat asked him to write it on his paper. He wrote "b." Pat then said "Look at me again" and she pronounced boat and asked what he heard in the middle. The lights flickered to signal the end of journal writing time and Daniel announced, "I'm done."

As children were assembling for sharing time, Pat told Nancy what had occurred in the honeybee conference. When Daniel shared his picture, he pointed to the "b" and said, "I wrote boat." Nancy reinforced Daniel's emerging understanding of the sound/symbol correspondence by saying, "That's great, boat starts with 'b!'" It is interesting to note that when Daniel shared his journal entry he said, "I wrote boat." He referred to his writing rather than his drawing. Thus, Daniel's "writing event" was brought to a meaningful closure during sharing time. Episodes such as this enable children to see themselves as writers. Daniel's experience illustrates the value of teaching children at the point of need and interest. It is an

example of basing instruction on quality kid-watching. We witnessed this kind of nurturing and encouraging over and over in Nancy's classroom. Honeybee conferences provide the routine for such personalized teaching.

Condition 5: Sharing

Sharing is an integral part of the entire process of journal writing in the classroom. Thus opportunities for sharing should occur before, during, and after the children write. Sharing before journal writing helps children make decisions about what they will write. Prior to journal time in Nancy's classroom the children are immersed in some type of meaningful learning experience related to the theme, e.g., going on a field trip, listening to a book being read aloud, viewing a video, sharing personal experiences, etc. During the discussion that follows, children make comments, raise questions, and/or relate experiences in some way to their own lives. At some point Nancy might suggest a possible topic for the day's journal writing. However, this is always posed as a suggestion. The children know they have the freedom to write about whatever they want in their journals. Giving children freedom to choose their own topics communicates to them that their thoughts and experiences are worthy to be put on paper (Sawyer and Sawyer, 1993).

Sharing during journal time should be spontaneous and natural as children talk about their writing in progress. This is more likely to occur if the children are immersed in a safe and supportive literacy environment that invites children to interact socially. Journal time in Nancy's classroom is not a quiet time. The children are given freedom to sit where they choose and to talk with one another. Children can be found sitting alone during journal time or sitting with one or more friends at tables, in centers, or on the floor. Comments such as "I'm writing about ...", "Look, I wrote boo and bat!", or "See my boat!" are frequently heard as well as questions, "How do you make a ...?," "How do you spell ...?," "What are you writing?" The feedback and assistance from a genuine and appreciative audience of peers supports the journal writing process.

A scheduled sharing time which follows journal time allows children the opportunity to showcase what they have drawn or written with an attentive audience. Sharing is important because it validates the children's efforts, thus giving them a sense of purpose and a feeling of pride. Equally important is the peer modeling that occurs during this time. In Nancy's classroom the five minutes following journal time is established as a sharing time. While there is no pressure to share, most children enthusiastically volunteer to read their entries or to discuss their illustrations. For a few moments they bask in the glow of success as Nancy and their peers ask questions and make reinforcing comments. Such was the case of Daniel when he shared his boat illustration. The positive feedback from Nancy and his peers sent a strong message to Daniel that what he wrote was appreciated and valued. Children can learn much about literacy during share time as a result of peer modeling. Those who are ready to take a literacy leap need to have the opportunity to observe and to interact with peers at various developmental levels who are taking risks as writers. Models provided by peers reinforce children's ideas about print, challenge them to think about the purposes and processes of language, and motivate them to continue to grow as writers.

Conclusion

By spring, all of the children in Nancy's kindergarten classroom viewed themselves as writers. They wrote stories, copied environmental print, made lists, wrote letters, songs, messages, and labeled drawings. The regularly scheduled journal time played an important role in helping the children develop courage and confidence. While various developmental levels were represented (See Figures 1, 2, and 3), all the children willingly and enthusiastically participated. Writing was not pushed on the children; it was modeled and celebrated. Stewig and Jett-Simpson (1995) explain,

Because not all children experience strong physical and social environments for learning, they will come to school with wide-ranging abilities. Every child, however, is capable of doing something. The teacher's role is to recognize what each child can do and provide a positive, supportive environment that nourishes and sustains growth (p. 280).

We believe the five conditions detailed in this article cultivate such an environment. "Yes, Doris, kindergarten children can and do write!"

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The Influence of Drawing on Third Graders' Writing Performance

**Edith A. Norris
Carla Reichard
Kouider Mokhtari**

This study compared the writing products of 60 third grade students who drew before writing a story on a self-selected topic (Experimental Group) with the writing products of 59 third grade students who simply wrote without drawing (Control Group). An analysis of the students' writing products revealed two important findings. First, students who drew before writing tended to produce more words, more sentences, and more idea units, and their overall writing performance was higher than the students who wrote without drawing. Second, these results were consistent for boys and girls regardless of group membership. The findings indicate that the differences in writing performance were probably due to the integration of drawing and writing. Implications for writing research and instruction are discussed.

The lack of writing skills among American school children has been widely discussed by parents, teachers, and education critics. Why do children not write more often and more skillfully? Graves (1978) contends that poor writing by school children occurs because writing has been changed by inappropriate, formal, scholastic demands, from a pleasure or even a skilled discipline, into what is viewed by some students as a punishment. In many instances, the mechanics of writing, in which the students have not been adequately grounded, have been assigned much more importance by teachers and parents than the content of the writing. In spite of children's apparent resistance to this mechanistic approach, Graves asserted that there is a need in human beings to express themselves through writing since the act of writing helps them to examine the human

experience. He further maintained that in American schools, "We have substituted the passive reception of information for the active expression of facts, ideas, and feelings," (p. 25) and a more equitable balance needs to be struck. Graves (1983b) affirmed the importance of children's desire to write when he insisted,

Children want to write. They want to write the first day they attend school. This is no accident. Before they went to school they marked up wall, pavement, newspapers with crayons, chalk, pens, or pencils ... anything that makes a mark. The child's marks say, 'I am.' (p. 21).

Anxiety about the decline of writing ability in American school children and the subsequent consequences of that decline is not a new issue. Graves (1978) reported that in the American elementary schools he surveyed in the late 1970s for the Ford Foundation, student writing was neither encouraged nor emphasized, and, even more disheartening, largely non-existent. While reading and listening skills were stressed, students seldom formally wrote subjective answers to questions. In fact, on the average, children in elementary schools averaged only one written assignment a month (Graves, 1983a). Cooper (1997) noted the two most common reasons teachers historically gave for ignoring writing in the classroom were, first, that they felt writing was not very important, and second, there was not enough time because of the other required subjects.

On behalf of the National Council of Teachers of English (NCTE), Applebee (1981) conducted a survey of secondary schools in the United States in the late 1970s. Results showed that less than one-half of one percent of students' class time was spent on any form of creative or personal writing. In addition, schools spent only one dollar on writing programs for every thirty dollars spent on reading programs. Although the survey was undertaken at the secondary school level, the conclusions also reflected on the probable lack of writing activities in the country's elementary schools. To further project the possibility of a bleak writing future for school children, Applebee pointed out that courses available to prospective teachers which concerned methods in the teaching of writing were almost never required by colleges of education, while, at the same

time, those same institutions were increasing their requirements of the number of courses in the teaching of reading. Silberman (1989, p. 8) maintained that "As a result of lopsided training and skewed values, school systems have had to resort to hiring teachers who have learned neither how to teach writing nor how to write themselves." Further, Graves and Stuart (1985) noted,

The anxiety that inexperienced writers feel when they try to teach writing is as natural as the anxiety of a non swimmer trying to teach swimming. If teachers are to feel confident about themselves and their work, they must feel confident in their ability to do the very things they teach others to do." (p. 147).

Fortunately, there have been some slight improvements at the university level. More recently, Donald Graves and Carl Wilcox reviewed the elementary education requirements for future teachers at what Graves and Wilcox considered to be the top 50 state universities in the United States. In an interview, (Routman, 1995) Graves stated that he was encouraged by the fact that more than half of those state universities were, at that time, offering courses in writing.

Also on a more optimistic note, there has been a growing movement in elementary schools to expand the amount of time that is devoted to writing. Giving students daily classroom time to write in response journals has become commonplace (Gunderson and Shapiro, 1988), and teachers interested in the importance of writing are searching for ways to inspire and encourage their students, especially those students who write reluctantly.

Chew (1985) wrote that in the years since the movement to encourage writing in the schools began, much more has been learned about the stages of young writers' development and of the significance of the teaching of writing. For example, research synthesized by Anderson, Hiebert, Scott, and Wilkinson (1985) has verified the importance of writing as the most consequential way in which children learn to spell and develop their ability to use grammar. In a written interview quoted by Jensen (1993) Peter Elbow, a noted children's writing authority, offered the premise that

writing is learned in a natural way, since children "can write anything they can say," and [writing] "is the gateway to literacy" (p. 291). As teachers learn more about the relevance of writing, more classrooms are being supplied with ample writing materials, and teachers increasingly are setting aside time during the school day to make writing a formal part of the curriculum. Some states, such as California and Vermont, have gone as far as establishing statewide writing programs for students.

Another often neglected aspect of the elementary school curriculum is the discipline of visual arts. According to Morris (1987), art has been a standard part of the American public school curriculum since the latter part of the nineteenth century. Arnheim (1979, p. 219) wrote that it was well-known by art teachers that the visual arts, "when intelligently pursued," helps students develop their individual mental resources, because of the cognitive problems posed by the production of the art form. Notwithstanding the recognized importance of art in children's lives, numerous schools in the United States are increasingly affected adversely by budget cuts, with visual arts programs frequently at the top of the elimination list. At the same time, classroom teachers are frequently reluctant to allot school time to art, especially when faced with the demands of more publicized academic needs.

Many elementary school teachers can attest to their students' evident enjoyment of classroom time devoted to creative art activities; therefore, perhaps the best aspects of both art and writing would be enhanced by combining the two. Janet Olson (1992, p. 36), a professor of art education, calls her version of this solution "the visual-narrative approach," and feels that students can be trained to move back and forth between the realms of writing and drawing with little trouble. Platt (1977) seemed to establish a foundation for Olson's contention by stating:

There is a direct correspondence between the drawn symbol and the written symbol. Graphic images are part of a visual vocabulary which has intense personal meaning of the child. There is a symbiotic relationship among drawing, writing, reading, speaking, and listening (p. 262).

Indeed, the random marks made by young children were described by Reutzel and Cooter (1996, p. 92) as "the wellsprings of writing discovery." The researchers further stated that children soon discover that drawing and scribbling are alternate forms of written expression. Investigation by several researchers have shown that initial drawings seem to enhance writing by giving the young students a scaffold on which to build ideas, or a pathway which leads them to the words they later select (Bissex, 1980; Calkins, 1986). As noted by Sticht and McDonald (1992, p. 322), the alphabet itself is but "a graphical representation of spoken language."

Although much research has focused on the separate subjects of children's art and children's writing, relatively little research had been published on the integration of the two until the work of Olson (1992). Her research and work with young students, spanning more than twenty years, suggested numerous benefits of such an integration. As a result of her extensive investigations, Olson came to believe that children's visual vocabulary improved as much as their drawing skills when the two processes were integrated. As she detailed in her book, characters who children have first brought to life in drawings, "characters who cry, who are frightened, who are happy or angry" (p. 18), are easier to develop in stories. In Olson's opinion, some students need the help such drawings provide.

If children are able to draw a variety of characters, make them move, change their emotions, as well as control a variety of changing environments, they then have access to a rich visual vocabulary that will serve them well when developing an interesting and meaningful plot (p. 276).

The relationship between drawing and writing has been discussed in literature which considers the literacy development in children (Bissex, 1980; Calkins, 1983, 1986; Graves, 1978, 1981; Harste, Woodward, and Burke, 1984). Researchers (Atwell, 1990; Graves, 1983a; Calkins, 1983; and Wilson and Wilson, 1979) also have written about the unique kinship of drawing and writing during the planning phase of the writing process used by children. Tompkins and Hoskisson (1991) recommend using drawing and other art activities as a strategy before writing takes place, especially with children who otherwise have problems expressing themselves

in written form. The importance of that strategy further was emphasized by Hoyt (1992) who noted that such children may find "that artistic expression focused on a learning experience can help them to organize thinking and rehearse for more traditional means of expression" (p. 583).

Studies by Sarnoff (1981) and Rubin (1990) converge with the work of Olson (1992) who stated, "children with highly visual aptitudes are capable of complex problem-solving and thinking processes." (p. 2). She continued by asserting, "the elements of plot are frequently more complex and detailed in children's drawings than is evident in their writings" (p. 3). Olson also stated that there is an untapped reservoir of visual experience and understanding that can be translated more effectively into words by using a visual approach to writing. The close relationship between writing and the visual arts previously had been noticed by Sealey, Sealey, and Millmore (1979, p. 6) when they wrote,

Writing is a graphic form; it involves making marks on paper. As such, motor skills are involved, but one also needs to develop a sense of order and pattern ... Some approaches to the correct formation of letter shapes have been through art, but picture and pattern making also seem to release energy in some children for speaking and writing. In many classrooms where there is art of a varied and high standard, the writing is of corresponding quality.

Friedman (1985), a first-grade teacher who researched the writing ability of her students over a number of years, believed that the majority of even her very young students, able to function in a regular classroom also were able to write competently. She found that incorporating drawing with her writing program seemed to be a helpful method to inspire students suffering from writer's block, suggesting each child first should draw a picture. After the children were finished with their drawings, they were asked if they then could write about their pictures. The answer was always an enthusiastic affirmative. More recently, Reutzel and Cooter (1996, p. 412) noted that the practice of drawing before writing seems to have the power "to help children hold the world still for a moment — long enough to select a topic for writing."

There has been limited formal study of the role of drawing in the writing process of children in specific primary grades. We define primary grades for the purposes of this study as grades one through three. Two of the studies which investigated such a relationship are unpublished and include Zalusky (1982) who analyzed the relationship between drawing and writing in first grade children, and Skupa (1985) who conducted a somewhat similar study with second grade children. The findings in both studies stress the importance of drawing as a way of facilitating idea generation for writing. The study presented here seeks to explore the influence of drawing on third grade students' writing performance. Our guiding question was: Do children who draw pictures before writing produce better stories as measured by number of words, sentences, idea units, and overall writing grades?

Method — Subjects

The subjects used in the present study consisted of 119 third grade students from three elementary schools in a small, midwestern, lower to lower-middle class socioeconomical rural community. School records indicated similarity in student populations; children shared similar linguistic, cultural, and socioeconomic backgrounds. None of the children was identified as having any specific learning problems or handicapping conditions. All of the children had completed their first and second grade years in the same school district with comparable records of socioeconomic status, student achievement, and teacher competency. Permission to conduct the study was granted at the beginning of the school year by the classroom teachers, the school principals, and the parents.

Six third grade classrooms available in the school district were randomly assigned, three to each of two treatment conditions. Sixty students became the subjects for the experimental group, who drew prior to writing stories, and fifty-nine students in the control group wrote without drawing. Students who attended the three schools in the study were predominantly caucasian in the lower to lower-middle socioeconomic classes. The majority of the students in the three schools received free or reduced-price

breakfasts and lunches while at school. A more detailed description of the subject populations used is presented in Table 1.

A letter of information was distributed by the participating teachers to the parents/guardians of each of the subjects. The letter contained information about the purpose of the study, an explanation of the method of collection of the writing samples, and of the two tests that would be administered, the assurance of confidentiality, and the assurance of the parents'/guardians' rights to deny their child's participating in the study. Two copies of a consent form also were sent to the parents/guardians of each subject. The parents/guardians were asked to sign one copy of the consent form and return it to the subject's teacher, while keeping one copy of the form for their personal use. Additionally, during a visit to each classroom by the first author, the subjects were informed of the purpose of the research, that participation in the study was entirely voluntary, and that they would have the option of refusing to participate at any point during the study.

Data Collection

The data collected consisted of 1) an initial assessment of writing and creative ability and 2) drawing and writing samples. The Test of Written Language-2 (TOWL-2, Form A) by Fammill and Larson (1988) was administered to check for possible existing differences in writing ability between the experimental and control groups. T-test analyses showed no significant differences ($t=0.366$, $df=117$), suggesting that the two groups began the study with similar levels of writing ability. However, TOWL-2 composite scores were used as a covariate in the analyses with the aim of increased precision (Keppel, 1991) despite the lack of significant initial differences between the groups.

The Torrance Test of Creativity (TTCT) (Torrance, 1974) was also administered to the subjects in order to check for possible existing differences in creative ability between the experimental and control groups. The results indicated similarity in creative ability between the groups, but the

TTCT was not found to correlate highly with any of the dependent variables in the study ($r < .20$), so it was excluded from all statistical analyses.

Table 1

Description of Subjects by Age, Gender, and Ethnicity

	<u>M</u>	<u>F</u>	<u>Total</u>
<hr/>			
Experimental Group			
Subjects (n-119)	27	33	60
Mean Age	8.92	8.97	
Ethnicity:			
Caucasian	21	22	43
Native American	05	08	13
African American	01	03	04
Total	27	33	60
<hr/>			
Control Group			
Subjects (n-119)	31	28	59
Mean Age	8.91	8.98	
Ethnicity:			
Caucasian	17	18	35
Native American	12	09	21
African American	02	01	03
Total	31	28	59
<hr/>			

Each subject was asked to write three different stories during three separate sessions approximately one week apart. Subjects were given several choices of story topics, as well as the option of choosing their own topic. Subjects in the control group were given thirty minutes in which to write their stories, following the presentation of suggested topics which were written on the board with instructions. Subjects in the experimental group were first given thirty minutes in which to write their stories, following the presentation of suggested topics which were written on the board with instructions. Subjects in the experimental group were first given

thirty minutes in which to draw a picture about their chosen topic, then given an additional thirty minutes in which to write a story about the topic.

Analyses

Four dependent variables were selected as measures of the subjects' writing performance: the number of words; the number of sentences; the number of ideas units; and an overall story grade. An idea unit was defined as a focus of consciousness that is linguistically expressed in written form, the completion of which is often, but not always, signaled by a period or other end mark (Chafe and Danielewicz, 1987; Gere and Abbott, 1985; Kroll, 1977). Since idea units and overall story grade contain some subjectivity, efforts were made to reduce the degree of subjectivity. The number of idea units for each story was determined by a jury of three raters, all of whom have graduate degrees and experience as elementary school teachers. Any written selections for which differing numbers of idea units were obtained were discussed by the jury members until unanimous agreement was reached.

The overall quality of the subjects' writing was evaluated using a modified composition scale developed by Hughey, Wormuth, Hartfiel, and Jacobs (1983) used in scoring the stories. This scale weighs content 50%, organization 30%, and mechanics 20%. The scale directs the rater's attention to specific features of the piece of writing and suggests relative point values for each feature. The overall score is derived by summing scores on the various subparts of the scale. Each subject's story was rated three times using this scale. The three scores were averaged with the average used for purposes of analysis. The interrater reliability obtained from the three ratings was .88. The four measures used, words, sentences, idea units and story grades, taken together, reduce measurement bias and provide a more comprehensive picture of the subjects' writing performance than any one measure.

Results

The data obtained were analyzed using repeated measures ANCOVAs with group (experimental and control) and gender as

independent variables. Story number was a repeated measures variable (each child wrote three stories), and TOWL-2 composite standard scores was a covariate, to control for any pre-existing differences in writing ability. The main variable of interest was group: Did children who drew pictures before writing produce better stories as measured by number of words, sentences, ideas, units and overall writing grades? Gender was checked for any possible interactions: Did drawing make a difference for one sex but not the other? The story variable was used to obtain more data without greatly increasing error variability.

Table 2

Means and Standard Deviations by Group

<u>Experimental Group</u>		
<u>Dep. Variables</u>	<u>M</u>	<u>SD</u>
Words	113.81	70.94
Sentences	10.02	5.80
Idea Units	1.39	6.31
Overall Grade	69.34	16.77
<u>Control Group</u>		
<u>Dep. Variables</u>	<u>M</u>	<u>SD</u>
Words	71.20	18.17
Sentences	7.05	2.67
Idea Units	7.65	2.95
Overall Grade	45.37	18.17

Since there were four dependent variables, the alpha level for each result was set at .0125, which was obtained by using a modified Bonferroni adjustment, determined by dividing the desired alpha level of .05 for the whole experiment by the number of dependent variables. Following the advice of Huberty and Morris (1989), the use of a preliminary MANCOVA was deemed unnecessary, since the study was exploratory in nature. The results are presented in Tables 2 and 3.

Table 3

F-Values for Group, Gender, Story, and Gender by Group Interaction

Variables	df	F	pr>F
<u>Group</u>			
Words	1	19.26	.0001
Sentences	1	12.98	.0005
Idea Units	1	17.98	.0001
Overall Grade	1	60.04	.0001
<u>Gender</u>			
Words	1	.96	.3302
Sentences	1	3.88	.0513
Idea Units	1	4.72	.0319
Overall Grade	1	1.05	.3085
<u>Gender by Group</u>			
Words	1	.06	.8116
Sentences	1	.51	.4787
Idea Units	1	.60	.4404
Overall Grade	1	.10	.7495
<u>Story</u>			
Words	2	.51	.5828
Sentences	2	.17	.8418
Idea Units	2	.27	.7669
Overall Grade	2	.67	.5142

Significant at alpha = .0125

Values adjusted by Huynh-Feldt epsilon correction.

The results revealed significant differences between the experimental and the control groups with respect to each of the four dependent variables. As shown in Table 2, students who drew before writing (e.g., the Experimental Group) wrote significantly longer and better stories, on average, than those in the control group who did not draw before writing.

These subjects wrote more words ($M=113.81$ vs. 71.20), more sentences ($M=10.02$ vs. 7.05), produced more idea units ($M=11.39$ vs. 7.65), and earned higher story grades ($M=69.34$ vs. 45.37) than did their counterparts in the control group. However, there were no significant interactions between gender and group, nor were there any significant gender differences, for any of the dependent variables (See Table 3). The story variable also was not significant for any of the four dependent variables, indicating that children did not change their performance across the three different stories that they wrote, making all of the story data valid. Overall, the results were highly consistent across all four dependent variables.

Discussion

Two important findings resulted from this study. First, significant differences were found between the experimental and control groups on all the measures used. The students who drew before writing tended to produce more words, sentences, and idea units, and their overall writing performance was higher. Such results strongly indicate that the physical act of drawing ideas prior to writing about those ideas appeared to be beneficial to writing performance among third grade children. Anecdotal evidence collected by the first author during the course of the study supports this explanation of the results: the students who were allowed to draw first seemed to be much more enthusiastic about the visits from this researcher than did the children who simply wrote stories without drawing. Groans often were heard in the classroom each time they were told the time with the researcher had come to an end, and it was time to stop writing. Also, between the researcher's visits, some of the students in the experimental group independently drew about and composed extra stories, according to their teachers. The test of whether things are going well in the classroom is whether the students really want to write, and evidence of writing pleasure was apparent among the students in the experimental group.

During the course of the study, the students in the control group often seemed to be suffering from lack of confidence in their writing ability, indicated by comments they made such as, "I don't know what to write," or "I know what I want to say, but I don't know how to say it." Some

appeared to be stymied completely after writing only a few lines. Even after beginning a story, a number of the students in the control group stopped writing well in advance of the required time limit of thirty minutes. As found by Skupa (1985, p. 179), the process of idea generation "can be a serious obstacle for writers if they do not possess procedures for gaining access to their resources that generate the ideas for writing," which in this instance seemed to be the opportunity to complete drawings before writing was begun.

Also, the high level of enthusiasm found among the experimental group students appeared to be lacking among the control group students. Some in the control group already were receiving extra instruction from a special writing instructor who visited their school, and they felt it was "not fair" that they were allowed only to write during the study, when they knew some of the other students were drawing before writing. The second findings was that these results were consistent for both boys and girls, regardless of group membership. This was a welcome discovery, since in most elementary schools, boys' writing usually lags behind that of girls (Silberman, 1989). In fact, one of the teachers of some of the experimental group students expressed surprise when she was told that all the boys in her class had participated willingly in the writing portion of the study.

The combination of quantitative data and informal qualitative observations collected in this study suggest several observations about the effects of drawing before writing for third grade students. Drawing provided students with the opportunity to speculate, contemplate, and reflect about their ideas and thoughts prior to actually writing them down, and this appears to have been a catalyst that caused an improvement in their writing. The technique of drawing seemed to precipitate unconscious planning, which helped students when they began to write their thoughts down. The act of representing ideas visually through drawing also seemed to enhance the enjoyment of the writing task for the members of the experimental group. Results indicate that drawing became a very effective planning strategy for the students, and they appeared to rely on their drawings as a

reference point to prompt them toward what should come next in their writing. While it may be presumptuous to state that drawing always should take place before writing occurs, perhaps it would be reasonable to suggest that drawing before writing could become a valuable adjunct of the overall writing curriculum in third grade classrooms.

Many elementary teachers view themselves as being extremely unartistic, and seldom have the benefit of an art teacher being on the faculty in the schools in which they teach. Beyond early elementary grades, it is a fairly common practice for classroom teachers to "save" art activities to do with other classes on Friday afternoons or on bad-weather days, when the students can't go out for recess. However, Broudy (1979) on the question of the role of art in general education, pointed out that if a balanced education is to include the aesthetic domain of a child's experience, art should be considered just as basic and necessary as any subject in a required curriculum. In addition, in many elementary schools, only occasionally are students given the opportunity, once they are past the first or second grades, to coordinate art with writing, and that coordination is usually in the use of art as an "after-the fact" activity, as a decoration or illustration when stories are completed (Williams, 1977).

The findings of this study are encouraging, especially to those elementary school teachers who are concerned about their students' writing skills. Integrating drawing and writing may be used as a way of motivating students to write and have fun doing it. However, since the study was conducted in intact classrooms, its generalizability is limited to third grade students. Further research at different grade levels is strongly suggested. Since this study was conducted with primarily rural students, it needs to be replicated in a number of geographical areas, in a variety of school settings, and with a number of diverse socioeconomic and ethnic groups.

Another aspect of the study which might be seen by teachers and researchers as a potential area of concern is the length of time given to each group for the drawing and writing tasks. The experimental group was given 30 minutes to draw and 30 minutes to write, while the control group

was simply given 30 minutes to write. Thus, the experimental group had a longer total amount of time in which to think about the chosen topic. However, the classroom observations by the original researcher suggest that a longer period of time for the control group would not have made much difference in the quantity of writing, since children did not appear to need more time to finish their stories. Rather, it appeared from their actions and verbal comments that the act of getting down their thoughts on paper was difficult and not always enjoyable.

In contrast, the members of the experimental group were able to use their drawing time productively, laying out their ideas in a visual format which was easy for them, then translating those ideas to the more difficult written format. This possible limitation does, however, suggest some avenues for further research; in particular, a more in-depth observation and analysis of the drawing/writing process as it occurs should provide valuable data for helping teachers and researchers realize the importance of integrating drawing and writing.

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PDS Collaboration in the Design and Delivery of a Reading and Language Arts Methods Course

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This paper describes the study of a site-based, six-credit hour, integrated course in reading and language arts methods designed to tie theory and practice for university students in a Professional Development School. A multidimensional approach to data collection and analysis used both quantitative and qualitative methodologies. Findings demonstrate that the collaboratively taught course had a positive impact upon involved teachers, university students, children in the school, and members of the team who developed the course.

The integration of theory and practice has long been accepted as a major goal of teacher education. Yet, it remains common for teacher education students to point out that their most meaningful learning of classroom practices occurs when engaged in field experiences, and is unrelated to the context of university courses (Richardson, 1996). If educational reform efforts are to succeed, teacher training must become a valuable, meaningful, memorable experience with the power to effectively tie theory to practice in the minds of preservice teachers. Substantive changes are needed in which field experiences become opportunities for students to apply theories introduced in methods courses systematically and reflectively (Hoffman, Reed, and Rosenbluth, 1997).

Collaboration between universities and public schools has been cited as essential to successful educational reform. To achieve this goal, the

establishment of Professional Development Schools (PDS's) has been recommended. PDS's are expected to be sites where the gap between theory and practice will be bridged (The Holmes Group, 1986). The establishment of PDS's means that significant change is expected on the parts of both PDS teachers and university faculty (Goodlad, 1988). Teachers and university faculty are expected to collaborate for the purpose of gaining shared knowledge, professional growth and the development of new, improved methods of providing instruction for children. In addition, collaboration between teachers and university faculty is expected to lead to changes in the ways in which prospective teachers are trained (Goodlad, 1988). Creating and implementing new structures in PDS's involve a slow process, and there is no limit to the kinds of PDS models which can effectively support teacher preparation (Hoffman, Reed, and Rosenbluth, 1997). This paper describes a site-based, six credit hour, integrated course in reading and language arts methods designed to tie theory to practice for university students in a PDS.

Context of the Study

West Virginia University has engaged in a major teacher education restructuring effort called the Benedum Project. As a part of the project, West Virginia University established six Professional Development Schools, one of which was Central Elementary. Anita, a Chapter 1 teacher at Central, and Mary Alice, at that time a professor at West Virginia University, decided to work together to create a collaborative relationship. They hoped to establish an environment in which issues of power and control could be dealt with effectively and teachers and university faculty could begin to develop high levels of trust. They formed a group called the "Literacy Discussion Group" (LDG) composed of West Virginia University instructors, Central Elementary teachers and principal. During the first year of work, the group made great strides in building trust, learning to collaborate, and developing shared understandings of literacy development and children's literacy learning (Barksdale-Ladd, Isenhardt, Nedeff, Oaks, and Steele, 1995).

Since that time, the group has worked on a variety of collaborative projects. One of these was an integrated undergraduate reading and language arts methods course taught at the school site. The idea for the on-site course began to develop when Mary Alice was teaching the course on campus and Anita was supervising some of her interns. At a weekly LDG group meeting, Anita asked the question, "Don't you teach these students the writing process?"

Mary Alice was stunned. She explained that she had spent a month focusing primarily upon the writing process and its integration into reading and the content areas in elementary classrooms. She modeled every step of the writing process for her students, then involved them in writing process activities. As a group they published a book. She worked hard to make it explicit to her students that she was modeling for them ways in which she would expect them to work with children in teaching writing. After Mary Alice's detailed description, Anita asked, "Well, why don't they know it? Why can't they use it with the children here?"

The LDG began considering explanations for the fact that the reading and language arts students were unable to use what they had learned in the course when placed in instructional setting with children. A generally accepted explanation was that the undergraduates needed more immediate opportunities for application, and that immediate feedback was needed in order for students to refine and improve their applications of instructional strategies. In response to the problem, the LDG began to develop plans for redesigning the course and delivering it at Central Elementary, with attention to: (a) providing immediate opportunities for practice with children and feedback from professors and teachers, and (b) matching course content to classroom experiences.

The following semester, the on-site course was piloted for the first time. Class sessions were held at Central on Mondays and Wednesdays when the library was available, but it was unavailable on Fridays. Friday classes met at the university. On Mondays and Wednesdays, the class met

for two hours in the library at Central, and then the students in the course worked for one hour with groups of children in Grades 1, 3, 5 and 6.

Of twenty-one class sessions held in the school, Mary Alice had major responsibility for instruction of seven sessions. On the other fourteen days, teachers in the school, the principal, and members of the LDG had major teaching responsibilities. The topics covered by these participants included: (1) modeling and conducting reading think-alouds with children; (2) modeling and conducting writing think-alouds with children; (3) the WORM project (a school-side "Students as Authors" project); (4) the basal reading approach; (5) surviving the elementary teacher education program; (6) whole language theory and methods; (7) children's literature and the West Virginia Children's Book Award; (8) literature-based reading instruction and cooperative learning; (9) being a beginning teacher and learning to manage; (10) behavior management, teaching and school life; (11) book talks; (12) using a peer mediation teams to facilitate solutions to student problems; (13) working with poor readers and special education students; and (14) working with second language learners. One full morning was used for classroom observation. To make it possible for the elementary classroom teachers to teach sessions to the college students, Mary Alice taught their classes.

In order to study the impact of the course, the following research questions were developed: (1) What were the effects on the elementary school teachers who taught the course?; (2) What were the effects of the site-based course upon the students enrolled in the course, as compared with a more traditional university-based course? Third, what were the effects of the course upon the children of Central Elementary? And fourth, what were the effects of the course upon the LDG?

Design

Procedures and Participants

Because of the nature of the research questions and the fact that four groups were being studied (the teachers at the school, the university students in the site-based course [as compared with a university-based group],

the students in the school, and the members of the LDG), we employed a multidimensional approach to data collection and analysis. Both quantitative and qualitative measures were used, calling for a complex design. In introducing the research design, each participant group and the methodology/ies used for the group are discussed separately.

Teachers: Instruments and Participation. There were a total of nine teachers at Central Elementary. There was one teacher for each grade level at K-6th grades. There was also a Chapter I teacher and a Special Education teacher for the hearing impaired. The kindergarten teacher taught a half-day program in the afternoons. Because the Reading/Language Arts course was taught in the mornings, the kindergarten teacher was not involved and did not participate in the study. The second and fourth-grade teachers chose not to participate in the course, or the study. Thus, the goal was to collect data from six of the nine teachers in the school. To study teacher perceptions of the course at Central and possible effects of the course upon the teacher concerns and beliefs, we used three sources for data collection.

First, to look at effects of the course upon teacher concerns, pre-post course data were collected using the Stages of Concern (SOC) instrument developed by Hall, George, and Rutherford (1977). During the first and last weeks of the course we asked each teacher in the school to respond to the SOC. The SOC measures attitudes toward innovation, and can be adapted to examine differing types of innovations. It contains 35 items, with a 0 to 7 response range for each item and is reliable with a coefficient alpha of .91 (Reed, 1990). There are seven stages of concern and 5 items for each stage. The seven stages are: (1) awareness of the innovation; (2) concerns about informational aspects of the innovation; (3) concerns about the personal affects of the innovation; (4) management concerns related to the innovation; (5) concerns about the consequences of the innovation; (6) concerns about collaboration with others related to the innovation; and, (7) concerns which involve refocusing and refinement of the innovation. The basic philosophy underlying the SOC is that, when introduced to an innovation, immediate concerns are self-oriented and

personal. Once people become comfortable with an innovation from a personal perspective, the focus of concern begins to center upon managing the innovation, the effects of the innovation, and working with others related to the innovation. When these concerns have been settled, the final stage of concern is upon refinement of the innovation and decision making regarding further use of the innovation (Hall, George, and Rutherford, 1977). Five teachers completed both pre and post SOC instruments.

Second, to examine teacher perceptions regarding the on-site collaborative approach to the course, each teacher was asked to respond in writing to 5 open ended questions regarding the collaborative approach to teaching the reading and language arts course in the school. In the pre-course condition, questions were as follows: (1) How do you perceive your role in working with the university students?; (2) What do you hope to learn or gain from Reading/Language Arts at Central?; (3) Do you perceive the teaching of Reading/Language Arts at Central as valuable to you? How?; (4) Do you perceive the teaching of Reading/Language Arts at Central as valuable to the university students? Why? In the post-course condition, the questions were worded in the past tense. Six teachers responded to both pre and post open-ended questions.

Third, to examine possible effects of the on-site course upon teacher beliefs, each teacher was asked to complete The Propositional Inventory (Duffy and Metheny, 1979) at the beginning and end of the semester. The Propositional Inventory is a 45 item questionnaire with a 5 point Likert scale. The neutral or undecided choice was eliminated and the instrument was administered using a 4 point Likert scale. Responses are divided into two categories of content-centered beliefs and student-centered beliefs (Duffy and Metheny, 1979; Isenhardt, 1994). Percentage scores representing numbers of items within each category were calculated for each teacher, pre and post. (Percentages do not equal 100% because they were calculated comparing numbers of indicators to numbers of possible responses within each category. There were more items in the student-centered than the content-centered category.) Four teachers completed pre and post Propositional Inventories.

Reading/Language Arts Students: Instruments and Participation. To examine the effects of the course upon the students, we chose to compare the site-based students with students in a more traditional university-based course. While Mary Alice taught the course at Central Elementary, Janet taught the same course on campus. Janet was, at the time, in the final semester of a doctoral program with Mary Alice as her advisor. Janet and Mary Alice had worked very closely together for four years. They had previously developed the syllabus for the course collaboratively and taught it in a similar manner, from a holistic, literature-based perspective. They considered themselves equally experienced in, comfortable with, and knowledgeable about the teaching of the integrated reading and language arts course.

Both Janet and Mary Alice used basically the same syllabus used in previous semesters. Both sections of the course had the same textbooks, and both required the development of portfolios containing the same components as the major course assignment. The major difference in the teaching of the two sections of the course was that Mary Alice's section was taught collaboratively with the teachers at Central Elementary and her students' field experience was provided at Central. Janet's section was taught on campus two mornings per week, and her students were given individual field experience assignments in classrooms throughout the local school district on one morning per week. Thus, Janet's students had three continuous hours in which to work in classrooms once per week, and Mary Alice's students had two one-hour opportunities to work with small groups of children each week. It should be noted that Janet's field experience day was on Friday. There was a great deal of snow and bad weather during the semester, with numerous snow days falling on Fridays; thus Janet's students had fewer field experience days than planned. Because Janet's students had three hours per week in their internships, as opposed to two hours per week for Mary Alice's students, the two student groups spent almost exactly the same amounts of time in classrooms with children.

To compare effects of the site-based and university-based models for the course upon beliefs about reading and reading instruction we

collected two sets of data. In the first week, students completed the pre data set of The Propositional Inventory (Duffy and Metheny, 1979). Then we collected the post data sets during the last weeks of the course for 13 of Janet's and 19 of Mary Alice's students.

Second, as a qualitative measure of effects, students in both sections provided written responses to open-ended questions during the first and last weeks of the course. In the pre condition, the students responded to the following three questions: (1) What are some of your expectations for this course?; (2) What concerns do you have about your field experience?; and, (3) What are some differences between whole language instruction and basal reading instruction? This third question measured prior knowledge, as both topics would be dealt with in the course and the question would be posed again at the end of the course. In the post condition, the following six questions were posed: (1) What are some ways in which Reading/Language Arts met your expectations?; (2) What are some ways in which Reading/Language Arts did not meet your expectations?; (3) Tell us some valuable experiences you had with teacher/s in your field placement.; (4) What were some of the most valuable aspects of the field placement for you?; (5) What were some of the least valuable aspects of the field experience for you?; and, (6) What are some differences between whole language instruction and basal reading instruction? Pre and post responses involved 12 of Janet's and 18 of Mary Alice's students.

Children: Instruments and Participation. To examine the effects of the course upon the children of Central Elementary, the third and fifth-graders completed a questionnaire containing open-ended questions. The third and fifth-grades were selected for participation in the study in order to gather data from both early and upper elementary children. The questionnaire was administered after the university students worked with the children on the last day of the course. The questions were: (1) Did you like having the university students working with our class?; (2) Tell a few things you liked about the small group work you did with your university student; (3) If there was anything you did not like about working with the university students, please write about it; (4) What did

you do with the university student that you probably would not have done with your teacher?; (5) Do you think it was a good idea for university students to come to Central School to have their class? Why?; (6) What should we change if we have the university students at Central next year?; and, (7) Anything else? Fifteen third-graders and 11 fifth-graders responded to the questionnaire.

The Literacy Discussion Group. The LDG felt that it was important to look at the effects upon them of teaching the course in the school. Our examination of these effects was qualitative. Field notes from our weekly meetings from the beginning of the project through the summer after the courses were taught comprised this data source.

Analysis

Teachers. Due to the small numbers of teachers participating in the study, we did not conduct statistical analyses of the quantitative teacher data. for the SOC results, we converted raw scores for each of the seven stages for each teacher to percentile values. Pre and post percentile values were compared to examine changes in stages of concern.

We analyzed teachers' written responses to the open-ended questionnaire qualitatively. Researchers read teachers' responses independently to identify categories. We met to compare categories and reached agreement on a limited set of themes. Then we reread the teacher responses for instances of the themes and checked examples of themes with one other. Pre and post course themes for the teachers were compared.

For teachers' responses to The Propositional Inventory, raw scores were converted to percentages of totals for (a) content-centered responses or (b) student-centered responses. For each teacher, we compared pre to post content-centered and student-centered responses to determine whether or not changes had occurred.

Reading/Language Arts Students. Researchers determined raw scores for responses to The Propositional Inventory and used paired t-tests

to compare content-centered beliefs and student-centered beliefs from pre to post course across the two student groups. We determined qualitatively the responses to the open-ended questionnaire as described previously (regarding teachers' written responses). Themes for the two groups were compared from pre and post course.

Children. For the third and fifth-grade groups for each question, we compiled responses and examined results qualitatively, in the manner previously explained.

Literacy Discussion Group. Taking a phenomenological approach (Hycner, 1985), we analyzed field notes to identify concerns, perceptions and beliefs of individual group members. The members of the research team repeatedly read the field notes, identifying the central themes which we discussed during each meeting and noted the focus of concerns, perceptions and beliefs among the LDG members. Having elicited themes from each set of field notes, we made comparisons across the semester identifying changes in focus.

Results

Teachers

Stages of Concern. Table 1 displays results of our analysis of pre and post scores for the Stages of Concern instrument. Teacher 4 differed from the other four teachers in that, after the course had been taught, she had an increased level of concern related to her awareness of the reading and language arts course being taught at her school, and decreased levels of concern in all of the other areas. This reflected a teacher still questioning her role and how the teaching of the course in the school would affect her and her students.

Based on the data collected from the other four teachers, one can conclude that across the semester there were decreased or equal levels of concern related to awareness of the course, information about the course, personal effects of the course, and the management of the course. There was a trend toward increased levels of concern over the consequences of

the course, and refocusing and refining of the course. There was no trend regarding concerns about collaboration.

Table 1

Percentile Values and Direction of Changes in Stages of Concern

	<u>Awareness</u>	<u>Informational</u>	<u>Personal</u>	<u>Refocusing</u>
<u>Teacher 1</u>				
Pre	86	90	80	57
Post	89 =	66 D	55 D	65I
<u>Teacher 2</u>				
Pre	46	95	52	96
Post	10 D	95 =	52 =	98I
<u>Teacher 3</u>				
Pre	10	97	91	81
Post	10 =	88 D	57 D	97I
<u>Teacher 4</u>				
Pre	93	69	52	26
Post	94 I	40 D	5 D	20D
<u>Teacher 5</u>				
Pre	96	99	92	10
Post	29 D	99 =	95 I	60I
	<u>Management</u>	<u>Consequences</u>	<u>Collaboration</u>	
<u>Teacher 1</u>				
Pre	69	16	19	
Post	52 D	33 I	22 I	
<u>Teacher 2</u>				
Pre	2	33	99	
Post	2 =	82 I	93 D	
<u>Teacher 3</u>				
Pre	9	96	99	
Post	7 D	96 =	95 D	
<u>Teacher 4</u>				
Pre	65	16	48	
Post	43 D	8 D	31 D	
<u>Teacher 5</u>				
Pre	95	21	28	
Post	85 D	33 I	97 I	

Note. I represents an increase in level of concern from pre to post. D represents a decrease in level of concern from pre to post. = represents no change in level of concern from pre to post.

Open -Ended Questions. Qualitative analyses of teachers' responses to open-ended questions during the first week of the course identified the following themes: (1) teachers felt they had a lot to offer the reading and language arts students; (2) teachers were confident that they would learn new techniques from the students, and possibly from listening to sections of class lectures; and (3) teachers felt that the children would benefit from working with the students.

In teachers' written responses at the end of the course, resultant themes confirmed that teachers had enjoyed having opportunities to teach the reading and language arts students and had learned some new techniques from the students. Teachers also noted that it was good for university students to spend so much time in their school, "to become a part of the school family," and to develop understandings of the day-to-day workings of a school. One teacher indicated that the site-based course made it possible for students to immediately apply what they learned in the course to real situations with children, and to see how teachers in a real school applied knowledge and research about reading and language arts to their own teaching.

Five of the six teachers were enthusiastic about the responses of children to their work with the university students. For example, one teacher said, "Their small group work was excellent. The activities presented were always age appropriate." One of the teachers had some concerns about the work of the university students with her children. She commented that some of her children with behavior problems became bored, and felt that the time segment of two hours per week was too extensive. She explained, "I really can't spare my students for that long."

Propositional Inventory. Table 2 displays results of our analysis of pre and post scores for The Propositional Inventory. Because differences in teacher responses to The Propositional Inventory were so slight from pre to post, we concluded that there were no effects upon the beliefs of these teachers as a result of being involved in teaching the site-based reading and language arts course.

Students

The Propositional Inventory. The paired t-test comparisons of pre and post scores for student responses to The Propositional Inventory are displayed in Table 3. For students in the site-based course, there were significant differences in pre to post test scores with regard to both student-centered beliefs and content-centered beliefs. There was a significant difference toward more student-centered beliefs, and less content-centered beliefs.

Table 2

Pre and Post Percentages for Teacher Responses to The Propositional Inventory

	Content-Centered Beliefs	Student-Centered Beliefs
<u>Teacher 1</u>		
Pre	57	84
Post	36	86
<u>Teacher 2</u>		
Pre	57	74
Post	61	71
<u>Teacher 3</u>		
Pre	57	74
Post	61	71
<u>Teacher 4</u>		
Pre	67	70
Post	69	70

For students in the university-based course, there was a significant difference in pre to post test scores for student-centered beliefs, but no significant difference for content-centered beliefs. That is, across the course, these students became more student-centered in their beliefs, but there was no change in their content-centered beliefs.

Open-Ended Questions. Qualitative analyses indicated that when students from the two groups responded to the questions at the beginning of the semester, their expectations for the course were very similar. They wanted to learn to teach children to read and write, and to have experiences with children. When asked about their concerns about the course, most

students said they had no concerns. Some students stated that they were scared or nervous about the course.

Table 3

Paired t-test Comparisons for Student responses to the Propositional Inventory

	DF	Mean	Paired t value	2-tail probability
Site-based course, content-centered beliefs	18	6.24	4.67	.0002
Site-based course, student-centered beliefs	18	-8	-4.45	.0003
University-based course, content-centered beliefs	12	4.77	4.34	.001
University-based course, student-centered beliefs	12	-.54	.43	.67

At the beginning of the course, there was a difference in the two groups with regard to knowledge of basal reading instruction and whole language. Most of Janet's students entered the course with a working knowledge of what basals were and how they were used. Janet's students reported that basal programs were skills-based and included texts and workbooks. They knew that whole language involved using authentic literature, integrating content areas, engaging children in decision making, and being child-centered. Some of their responses were sophisticated. For example, one student said, "The whole language environment allows for more kinds of interest groupings among children. The children are able to learn from each other. The children become more involved in literature, and make better use of all the language arts domains, and maintain this increased involvement." Some students in Janet's class had already formed opinions about these two methods. For instance, a student wrote, "Basal reading instruction, I feel, is based more on the children's learning level. I feel there is more of a possibility for a child to develop

intellectually using the basal reading instruction. Whole language instruction is not sufficient enough."

Mary Alice's group did not enter the course with a strong knowledge base or beliefs about basal or whole language instruction. Most students didn't respond to the question about basals and whole language, or indicated, "not sure," or "no idea." No opinions about basal and whole language instruction were offered.

The student groups had been randomly assigned at the beginning of the semester (as opposed to remaining in the course sections for which they had signed up). By chance, many more of Janet's students had previously taken a series of two early childhood courses in which concepts about basal reading and whole language instruction had been introduced. Thus, Mary Alice's students could be characterized as having entered the course with more of an "open slate" regarding basal reading and whole language instruction than Janet's students.

At the end of the semester, there were some differences in the two groups. When asked about ways in which the course met expectations, the most common theme among Mary Alice's students indicated that they had learned a lot of strategies for working with children in reading and writing. They also discussed being able to work with real children, dealing with students on different levels, feeling prepared for their final two semesters, finding direction about what kinds of teachers they wanted to become, and gaining confidence in their abilities. In Janet's group, there was not a single predominant theme related to how the course met expectations. Themes included learning methods and techniques, gaining a better understanding of how children learn to read and write, understanding different styles of teaching reading, recognizing the importance of literature in teaching reading, and appreciating the fact that they had been provided with a field experience in which they got to teach lessons on their own. When asked about ways in which the course did not meet expectations, the most common response in both groups was that "it met all expectations." Janet's students made some statements about their limited opportunities to

work with children in the schools. In both groups, comments indicated that some students wanted to teach whole classroom lessons and didn't have the chance.

One question involved the valuable experiences students might have had with the teachers in their schools. Mary Alice's students pointed out that they had not had enough contact with the teachers, but that they had received good ideas from and enjoyed the class sessions taught by the teachers. Janet's students had more positive comments about their work with the teachers, noting that the teachers had shared good ideas and advice, that they had helped students identify personal strengths and weaknesses, and that they had provided encouragement.

When asked about the most valuable aspects of the field experience, Mary Alice's students most frequently noted that in working with the children for two hours a week, they got to know them very well. They felt that they learned from working with students at differing reading levels, writing lesson plans, teaching a three-day unit to their groups, and having opportunities to "practice instead of just learning in class." For Janet's students, teaching the three-day unit became the most frequently identified valuable experience. In addition, they appreciated having opportunities for whole group instruction and tutoring, and seeing the excitement of children reading and writing.

Students were also asked to identify least valuable aspects of the field experience. Most of Mary Alice's students stated that all aspects of the field experience were valuable. Some commented that they did not get enough time to observe in the classroom, and they didn't have opportunities to get to know their teachers and receive feedback from them. The majority of Janet's students did not respond to the question. Several of Janet's students felt that the field placement should start earlier in the semester, and others noted that they did not get enough time in the field placement. Finally, on the question about basal reading instruction and whole language instruction, at the end of the semester, both groups had similar and equally sophisticated answers.

Children

There were many similarities in the themes identified from the responses of third and fifth-graders to the open-ended questions. All fifteen third-graders, and nine of the eleven fifth-graders liked having the university students working in their classroom. When asked what they liked, the children identified kinds of activities they enjoyed including: playing games, reading books, learning about England, learning about dinosaurs, keeping a journal, talking, writing, etc.

The children were also asked what they did with university students that they wouldn't have done in their regular classroom. In answering this question, the children identified specific activities which they found to be particularly motivating or fun.

When asked if there was anything they didn't like, most children did not note any objections. Several third-graders were unhappy about the fact that one third-grade tutor brought lunch from MacDonald's to his group and took the group on a picnic at the end of the semester. A couple of fifth-graders disliked vocabulary activities such as word banks.

The children were asked if it was a good idea for university students to come to Central for their class. Again, all of the third-graders and nine of the eleven fifth-graders responded positively. The children provided a number of reasons why they thought the university students should have class in their school. Representative statements included: "they can see what it's like to be a teacher," "for them to learn what we do," "because they could learn more about us kids," "because we can learn with them," and "because they can learn from us and our teachers."

The last question for the children asked, "anything else?" Overwhelmingly, the children who responded to this inquiry issued words of thanks to the university students.

Literacy Discussion Group

Analysis of the field notes from the LDG elicited several similar themes across group members during the semester. As the course started, members of the LDG had two primary concerns. The first was anxiety. The teachers became anxious about the sessions they would teach to the university students. They felt a great deal of pressure to do a good job in front of adult students. For instance, Ruth said, "I'm so used to working with third graders. I'm afraid I'll be nervous about the WVU students." Simultaneously, Mary Alice experienced anxiety about working with the children while relieving the teachers to work with the university students. She felt pressured to do a good job with the children, "I am an education professor. If I'm the one who teaches the teachers, don't you think I'm expected to walk in and do things well?"

A second concern, early in the semester, was with regard to the teachers who had elected not to participate in the course. Their early statements had indicated that it would be fine with them if the course was taught in the school, as long as they did not have to be involved and it did not affect them in any way. However, as the course got started, a couple of these teachers became quite critical, and somewhat hostile. All of the LDG members worried about the responses of these teachers and how they would affect the project.

As the semester proceeded, Mary Alice became frustrated for about a month during the middle of the semester. Because she worked with the children in the classrooms in order to free the teachers to work with the university students, she got the sense of "being out of control ... I don't know what's happening in my own course." Also, she found herself very frustrated with the fact that a number of the sixth-graders were not cooperative with their tutors, and she was not able to resolve some of these situations. In fact, on one day, she reached an impasse with a sixth-grade boy, and they had to go to the principal's office to solve the problem. Interestingly, this moment of humility for Mary Alice had the effect of causing some of the teachers in the school to gain greater respect and appreciation for her.

While Mary Alice was feeling frustrated and out of control, the teachers were having a very different response. They displayed great enthusiasm for teaching the university students. They were excited when their lessons with the students went well, and because of positive student responses, they felt affirmed that they had a great deal to offer preservice teachers. Their fears and anxieties about working with the university students "melted away quickly," as stated by Anita.

As the semester ended, there was the sense of fulfillment among members of the LDG. Themes from the field notes included: (a) pride in the fact that the LDG had tackled a difficult problem, designed a complex solution, and implemented it over formidable odds, and (b) appreciation that everyone in the group had gained knowledge and confidence through the experience.

Another theme indicated that members of the LDG were beginning to see tangible evidence of progress made by university students and the small groups of children with whom the students had worked. Numerous examples cited progress in specific university students, individual children, and relationships between small groups of children and their university tutors. For instance, Ruth said, "At the beginning, he [university student] tried too hard to be friends with them [the four third graders in the students' group], to be their buddy ... he finally learned that he could keep them under control, teach them, and still have a great friendship with them. I wouldn't have believed it would happen at the beginning."

The final theme determined that the LDG wanted to continue teaching the reading/language arts course in the school. As soon as the semester ended, the group began analyzing the data that were collected, identifying the weaknesses of the course as it had been taught, and designing methods of strengthening those weak aspects for the following semester.

Discussion

The term "Professional Development Schools" implies a very comprehensive relationship between a school or school system and a university. Yet, the heart of Professional Development Schools is found in the day-to-day activities of school and university faculty coming together to learn and grow together for the purpose of improving teaching and learning at both school and university levels. The experience with a site-based course reported on in this paper is only one example of the result of a collaborative relationship between a school and a university.

This collaboratively designed site-based reading and language arts course had a number of effects upon the teachers in the school. For most of the teachers, by the end of the semester there were fewer concerns about how the course would affect the teachers personally, and greater concerns about how the course would affect the children and the university students. There were also increased concerns about refining and improving the course in the future. The teachers learned some new techniques for reading and language arts instruction, felt good about their ability to teach methods to the university students, and were generally enthusiastic about the work of university students with children in the school. They felt that the site-based course was valuable in that university students became a part of the school and developed understandings of day-to-day school life which would not otherwise have been developed. Further, these teachers were pleased that the relationship between university course information and school information were brought together in such a powerful and meaningful way for the university students, also benefiting the school and its students. The teachers, wanted the course to continue to be taught in their school, and wanted higher levels of ownership of the course. The course had changed the nature of the school and brought most of the teachers together in a teacher education mission.

In comparing students in the site-based and university-based courses, results showed that students in both groups became more student-centered in their beliefs over the semester. At the same time, students in the two groups had a differing focus and tone. Responses for the site-

based course were more similar than for the university-based course. This was not surprising since the site-based students had the same type of field experience in the same school while the university-based students had differing types of field experiences directed by many cooperating teachers assigned to them across a three county area.

The students in the site-based course learned to use a variety of literacy instruction strategies and experiences with children. These students enjoyed getting to know the children well by working with them twice a week, but they did not establish close relationships with the teachers in the school. The students in the university-based course tended to become close to their cooperating teachers and reported gaining valuable information through these relationships, but they did not report making gains in using literacy teaching strategies with children.

This finding leads to the question, what is more valuable? Is it more valuable to have university students develop close relationships with children and successfully apply what they have been taught in methods classes with these children? Or is it more valuable to provide opportunities for developing a close relationship between a preservice teacher and a cooperating teacher allowing the preservice teacher to learn about the profession from a more experienced peer?

Recall that prior to this project, students in a university-based course with Mary Alice were unable to apply strategies taught in their university class with children in the field, although presumably, they had good relationships with teachers in their internships such as Janet's students in this study. The site-based course provided a viable solution to this problem of applying theory to practice in that all of the students demonstrated the ability to successfully apply reading and language arts teaching strategies they were taught. It is reasonable to assume that if students learn strategies well and then have immediate opportunities to practice these strategies with children while being supervised by a group of teachers and university faculty, the strategies may be remembered and carried into inservice teaching experiences. We take the position that this type of learning

experience may be more valuable in the long run than one in which a pre-service teacher develops a relationship with a cooperating teacher, but is unable to apply strategies learned in methods classes to teaching experiences with children. Further research is needed in this area.

The children of Central Elementary were very appreciative and positive about their experiences with university students in the site-based group. They recognized that they had been provided opportunities they would not otherwise have had; they enjoyed their relationships with the university students, and they remembered learning specific information which they found interesting. Further, they recognized that it was important for the university students to have opportunities "to practice what they are learning with real kids."

For the Literacy Discussion Group, the experience of designing the course and implementing it over a semester was very fulfilling. The goals were to assure that undergraduate reading and language arts students: (1) learned theories of literacy acquisition and literacy processes; (2) learned methods of applying literacy theory to practice; and (3) demonstrated competence in the application of specific methods to literacy lessons with children. At the close of the semester, the group felt these goals had been successfully met. They felt that they had effectively tied theory to practice for one group of undergraduates in one methods course. There was recognition that the semester wasn't perfect and more work was needed; yet, all had gained confidence and knowledge.

The enthusiasm for the site-based reading/language arts methods course across all four participant groups leads us to believe that this model can lead to valuable, meaningful, and memorable experiences not just for preservice teachers, but for teachers and university faculty involved in designing and teaching site-based courses, and the children who benefit from intensive literacy lessons in small groups. This type of collaborative approach to methods courses holds promise for improving literacy learning for teachers, preservice teachers, children, and teacher educators by creating direct ties between theory and practice.

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Peter H. Johnston in his book *Knowing Literacy: Constructive Literacy Assessment*, uses the phrase "logic of errors" as a point of departure for teachers planning and focusing instruction. Rather than focusing upon what children do not know, we can focus instruction based on what they have said, or in this case written. Take a look at these statements of what children do know and have written in their journals or on response sheets to tests. They do know something and we might do well to "listen" to know those "teachable" moments, or just let the moment be.

Here are some funny one liners:

- *The future of "I give" is "I take."*
- *The parts of speech are lungs and air.*
- *The inhabitants of Moscow are called Mosquitoes.*
- *A census taker is a man who goes from house to house increasing the population.*
- *Water is composed of two gins. Oxygen and hydrogen. Oxygen is pure gin. Hydrogen is gin and water.*
- *(Define H₂O and CO₂) H₂O is hot water and CO₂ is cold water.*
- *A virgin forest is a forest where the hand of man has never set foot.*
- *The general direction of the Alps is straight up.*
- *A city purifies its water supply by filtering the water then forcing it through an aviator.*
- *Most of the houses in France are made of plaster of Paris.*
- *The people who followed the Lord were called the 12 opossums.*
- *The spinal column is a long bunch of bones. The head sits on the top and you sit on the bottom.*
- *We do not raise silk worms in the United States, because we get our silk from rayon. He is a larger worm and gives more silk.*
- *One of the main causes of dust is janitors.*



A Journey Within a Journey: The Journey of Three Computer Learners on a Journey Down Under

**Valerie G. Hall
Brenda P. Dixey
Susan L. Nierstheimer
David G. O'Brien**

Fears and Lack of Confidence

*"Nothing great was ever accomplished without enthusiasm."
Ralph Waldo Emerson*

This is the story of the journey of three literacy teachers learning about classroom use of computers and developing a computer-driven unit on Australian animals. As frightened as we were of technology, we wanted our students to have positive experiences with computers. We also wanted the computer to be a useful tool for our students rather than a meaningless rote activity. We wanted our students to use a variety of literacy materials, participate in many reading and writing responses, and interact in groups as they used the computer as one medium for learning. In this article we describe our learning process, along with the struggles as well as the benefits. As a result of our personal learning journey, an interactive unit was developed that transported students on a journey to Australia.

We were hoping Emerson was right! More specifically, we were praying enthusiasm and good attitudes would carry us where self-confidence and knowledge were lacking. After a combined 30 years teaching, and a lapse of 30 years since we had been students, we entered our first technology class as graduate students with fear and trepidation. When we completed our undergraduate work, the modern essential equipment was an electric typewriter. As three experienced, but computer-shy teachers,

we registered for a summer computer course because we felt we were far behind the technology curve in relationship to our instruction.

As literacy teachers, we had little experience with computers except as word processors. Growing up before the age of technology, we lacked confidence in our abilities to merge onto the information superhighway. Negative experiences such as "losing" data, struggling to create charts and graphics, and trying to understand complicated instructions in the "easy-to-read" software manuals undermined our confidence as well as instilled fear that made us reluctant to begin the graduate level computer course.

There we sat in a class with a professor younger than we were and students who could have been our own children. At the first class meeting, we quickly identified those students who were far above us in computer knowledge. This only reinforced our insecurities about our success with technology. However, we were comforted to discover that an assigned culminating project as well as preliminary software experimentation and evaluation would be accomplished in self-selected, collaborative groups. Because the three of us were already acquainted and were interested in similar literacy issues, we chose to work together as a group and felt less intimidated about the technological journey we were undertaking.

Moreover, we knew of the benefits of technology integration in the classroom. The application of technology in the classroom has advanced rapidly since the late 1970s. Many schools now provide computers and software to augment literacy instruction (Butler and Cox, 1992; Daiute, 1992; Reinking, 1994; Reinking and Bridwell-Bowles, 1991; Wepner, 1991; Wepner, 1992). A range of computer applications in literacy lessons have been documented (Balajthy, 1989; Blanchard, Mason, and Daniel, 1987; Blanchard and Rottenberg, 1990; DeGroff, 1990; Moore, 1991). Literacy educators have used computers to teach literacy in the content areas (Blanchard and Rottenberg, 1990), adult education, and teacher education.

Struggles and Frustrations

As we began our group analysis of software and other related assignments, we developed strategies for coping with unfamiliar language of computer manuals as well as basic operational difficulties. For instance, we supported each other as a team and sought expert advice. In the computer labs, we huddled together in front of one screen conferring about what to do next. The computer students who sat at their individual screens, seemingly working with no difficulty, occasionally turned to look at us with disdain. We became familiar with each of the university-employed technicians and depended upon their expertise to aid us in solving many of the problems we encountered. Additionally, we had a colleague minoring in computer education who became our unpaid consultant.

As we worked together at the computer, our greatest frustration continued to be attempting to understand the technical jargon in the instructional manuals that accompanied programs intended for use in the elementary classroom. Together the three of us discussed the possible meanings and steps to access the software. With some pieces of software, we had many failed attempts on the computer before we were successful. On some occasions, we asked the professor and other students in the class to interpret the instructions for us.

In addition to our struggle with instructions, time became another critical factor. Because this was a summer course, we had no teaching responsibilities and were only registered for one class. Fortunately, we had time available to us that we normally would not have had. Our lack of schema for the language of the computer manuals necessitated spending many hours understanding the instructions before we could use the software and critique its value for classroom use.

A major assignment in this class involved completing a one-page review form for ten pieces of educational software. Because we were determined to learn about the available software and were concerned about our progress in the form of the final grade for the course, we willingly devoted the essential 8 to 10 hours per week for the four weeks of the

course. Struggling together for hours at the keyboard with books in hand, we validated our belief in the Vygotskian philosophy that meaning is socially constructed through interactions with others (1978). Additionally, we worked independently seeking advice from friends with computer expertise and considering the form for our final project.

Positive Outcomes for Us

After struggling through the frustrations of often incomprehensible language and extensive time demands, we gained new computer knowledge that exceeded our expectations. We learned basic computer language and skills from the various materials we examined. We collected a bibliography of software beneficial in the elementary classroom. After doing various types of activities on the computer, we gained confidence in our abilities to expand upon our new knowledge to build a computer-assisted unit. As teachers, the three of us had frequently borrowed ideas from numerous sources and adapted them to our students and the goals we had for them. Now we were convinced we could transfer the ideas and knowledge we had recently acquired into a useful computer unit for the classroom.

An amusing rhyme from the book *Wombat Stew* by Marcia K. Vaughn (1984) and illustrated by Pamela Lofts sparked our imaginations.

*Wombat stew
Wombat stew
Goosey, brewy,
Yummy, chewy,
Wombat stew!*

We decided to create a thematic unit on Australia by integrating technology into a literature-based unit for upper elementary students based on our educational philosophy of holistic learning. As DeGroff (1990) indicated, the teacher's beliefs about curriculum and instruction rather than technology determine the role of computers in the classroom. The thematic unit we created supports our instructional philosophy and gives children opportunities to engage in reading and writing activities which embody our philosophy and goals of instruction (Wepner, 1990).

Wombat Stew captured our attention because of the clever dialogue and Loft's fascinating and humorous illustrations. The wombat, platypus, emu, blue-tongued lizard, echidna, koala, and dingo romp across the pages, tempting the reader to learn more about these unique, exotic animals of Australia. Our curiosity led us on a journey to discover more about the animals of Australia and to explore how we could use technology to enhance students' learning on an imaginary journey "down under."

Access to technology is not enough, however. We wanted to integrate technology based on sound instructional philosophy rather than attach it to the curriculum (Balajthy, 1989). Attaching technology, often based on the limited range of skills-based software, leads to isolated instruction. Although computers and related technology can be effectively used for literacy instruction, they do not foster integration without a broader philosophical framework (Balajthy, 1989; Wepner, 1990).

As we developed our unit, we integrated technology by stressing a holistic perspective to literacy learning and teaching (Wepner, 1990). With a holistic framework we valued the potential of each learner and emphasized social interaction (Watson, 1994). Reinking (1986, 1994), DeGroff (1990), and Wepner (1990) present four fundamental advantages of computer-mediated literacy instruction that are compatible with holistic literacy learning. These advantages are: (a) enhanced level of engagement; (b) increased opportunities to read and write; (c) improved social interaction and collaboration; and (d) simplified revising, editing, and publishing.

We capitalized on these four advantages as we developed our unit. For example, we saw the value of computers enhancing the level of engagement of readers and writers as they interact with text. In our thematic unit on Australian animals, students were actively engaged as they searched for information about the different animals, organized information in logical ways, identified details and concepts in their reading, and used new vocabulary found in the texts.

The fifth advantage was that computers can provide opportunities to read and write for a variety of authentic purposes. Children's literature was the core of the Australian unit. A variety of narrative and expository texts provided reading and writing opportunities. Literature provided the foundation for the computer-based activities enhancing comprehension. Activities for the interesting Australian animals were created in the HyperCard program. It took time for us to learn and understand HyperCard, but it proved to be very appropriate and exciting for this unit. We learned to scan in pictures and maps to create engaging visuals to accompany the text. Cards were created that provided information about each animal as well as directions for activities inviting meaningful reading and writing opportunities for the students. To motivate students through self-selections, we encouraged to choice from the list of animals on the menu screen. By simply clicking on the animal name, students were directed through a series of cards related to the selected animal. For example, if the children selected the koala, a card gave basic information about the koala directing the children to find other marsupials that live in Australia.

A sixth advantage capitalized upon computers fostering social interaction and collaboration. Collins (1991) has identified eight trends in classrooms which use technology reflecting the constructivist view of education. They include a shift from whole-class to small-group instruction, the change of the teacher's role from a lecture to a coaching approach, the replacement of the competitive environment by cooperative and collaborative efforts, and a shift primarily to include visual as well as verbal thinking. All of these trends were present in our Australian animal unit. In preparation for the "flight" to Australia, via the computer, each student chose a traveling companion. Throughout the unit, students worked in pairs at the computer.

Finally, computers facilitate revising, editing, and publishing of children's work to support the writing process. Students are less resistant to making writing improvements when using the computers. One of the HyperCards directed students to prepare a platypus article for the class

newspaper. Together they worked through the writing process to create a published piece.

Problems of Implementation

Beyond the development of a variety of interesting computer-based literacy activities, problems are associated with the management of the classroom while students enjoy each component of the unit. Literacy educators continue to be challenged concerning the successful integration of computers in our existing holistic curricula. Much of the available software fosters isolated skill and drill instruction and encourages "tack on" activities rather than integrated, realistic ways of engaging children. As we created our unit, we were constantly aware of the struggles of implementing a meaningful program in an organized, practical way.

In addition to concerns about providing appropriate computer and literacy instruction based on a thematic unit, teachers grapple with the difficulty of finding the time to study computer programs. Teachers are extremely busy with the load of planning, teaching, grading, and managing without having additional time to learn about computers. They wonder if acquiring new computer knowledge will be efficient use of time.

Solutions

While children's literature and exciting computer-generated activities provide a useful basis for instruction, establishing a unit for the classroom requires more. Every teacher knows that proper organization and management of materials and students' learning are essential to effective classrooms. One way of managing a unit like ours in the classroom is to begin with whole-class instruction developing a KWL chart (Ogle, 1986). The KWL chart is a graphic organizer for recording information the students know before the study, what they want to discover through the unit, and what they learned after the research. By constructing a KWL chart with the whole group, the teacher was able to determine what the children already knew about Australia and the animals who inhabit it, what they wanted to learn, and later, what they had learned.

The next component of the introduction to the Australian unit involved a read-aloud of *Wombat Stew*. Unique animals native to Australia were introduced in this trickster tale that centers around a dingo concocting a stew in which he plans to use the wombat as the main ingredient. The dingo ends up being outsmarted by the unusual animals who made children wonder if they were real or imaginary.

After introducing the unit through these whole class activities, students worked collaboratively in centers to accomplish the projects. The following centers are suggested by the imaginary journey theme and are engaging, motivating, interactive centers for children.

1. **Passport Center:** Children were required to fill out passport information, modeled after a real passport, and have their pictures taken. Then their passports were stamped at the completion of various activities for record-keeping.

2. **Board of Tourism:** Students visited here to get information on Australia, purchase airline tickets, decide what to pack, and select a traveling companion. Videos of Australia were accessible here, too, for small group viewing.

3. **Crocodile Center:** A cozy center for books, magazines, and other reading materials was provided for students to do their research or simply relax with a good book.

4. **Writing Righto:** The writing center afforded children a variety of writing tools including paper, dictionaries, typewriters, and computer. These were available for use as students completed their writing activities.

5. **Computer:** The computer or computers were the terminals where partners worked together on the HyperCard program written for this unit. Children were able to make their own cards about animals they researched. Gradually, the HyperCard stack grew with more activities to engage and educate the students.

6. **The Outback Cafe:** On special days during the course of the unit, snacks like Tasmanian Devil's Food Cake and Kangaroo Punch were served at the cafe. Children made their own menus after researching the foods of Australia. Then they created and maintained this mini-restaurant.

Discussion

Assessing our progress three years later, it's hard to believe we had grave misgivings about technology. As teacher educators we now shutter at the thoughts of functioning without computers. Our overhead transparencies have been replaced with Powerpoint presentations; our university issued "green grade books" have been replaced with an electronic one, complete with attendance and calculating capabilities; our communication via telephone and letters have been replaced with electronic mail. We regularly "surf" the internet for the latest information in education. Our students are given assignments requiring the use of computers. Our latest conference presentation was completed with color graphics.

As we recorded our story, it occurred to us that our journey was/is not unique. Our current work in schools with elementary school teachers has shown us that many inservice teachers in the field are grappling with the same issues that we struggled with as graduate students and continue to struggle with as university faculty members. Our journey within a journey is illustrative of and parallel to the journey into technology that classroom teachers are taking. We work to keep up with latest developments but would not consider ourselves experts. However, our journey has given us insights along the way that might prove helpful we offer the following:

1. Jump in — the water's cold but you get used to it. You have to be willing to take risks in order to learn.

2. Social interaction and support are essential. Find a colleague who is willing to journey into technology with you. It is so much more rewarding and helpful to have someone else to work and commiserate with you.

3. "More knowledgeable others" who are available in your building can obviously provide technological assistance. In addition, they can share ways that they have used technology in their classrooms and have implemented effective management strategies.

4. Many districts seem willing to provide schools with software and hardware but neglect supporting teachers in using these resources. This support needs to be readily available and ongoing. Ask for technology support from your school district.

5. Written materials and tutorials for software programs need to be more user-friendly and accessible to teachers.

6. Teachers need release time to learn about relevant use of technology in their classrooms.

7. Consider ways that technology can make your life as a teacher easier while enriching the learning in your classroom.

With the above recommendations in mind, we would make one final disclaimer, however. While we have come a long way in understanding and using technology to enhance student learning, we still hold fast to the belief that technology should support the curriculum, not become the curriculum. Further, we believe that it is the teacher who makes the decisions and the difference in the classroom, creating contexts for optimal learning.

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MINDPLAY RELEASES 1997-1998
Software Catalog for Special Needs Learners

Mindplay announced the release of their new 1997-1998 Special Needs catalog entitled *Special Software for Special People*. This new catalog features over 60 different software programs that are designed to accommodate different skill levels and learning styles.

Special Software for Special People contains 32 pages of curriculum-based reading, math, science and cross-curriculum software for Pre-K through Grade 12. Software programs are highlighted throughout the catalog with program descriptions, screen shots, recommended system requirements and pricing information.

This year's catalog introduces several new multimedia products. Sprinkled throughout the software offerings in the catalog are several pages of helpful information for special needs teachers and parents — information on using technology as a teaching tool and integrating technology in the curriculum.

The 1997-1998 catalog contains a Product Selection Guide to assist special needs educators and parents in identifying and selecting child-centered software that encourages students to be independent and self-directed. The programs offer written goals and objectives for development of Individual Education Plans (IEP's). Lesson plans written by teachers for teachers are also included.

Special Software for Special People offers software programs for Macintosh and Windows 3.5" disks or Hybrid CD-ROMS, as well as for the DOS and Apple II platforms. *Special Software for Special People* is available now — call for a free copy (800) 221-7911 or email mindplay@rtd.com



Making the Connection for Reading Teachers Between Authentic Assessment Practices and Qualitative Research Techniques

**Beth Hurst
Cindy Wilson**

In the manuscript an attempt has been made to show a connection between many authentic assessment practices and qualitative research techniques in the hope that as reading teachers understand these connections, it may help them in their authentic assessment endeavors. Teachers may expand their usage of authentic assessment after discovering the similarities, or seek opportunities to learn more about qualitative research, thus capitalizing on the strengths of both. While we want to be careful not to betray the analytic complexity of qualitative research and confuse it with the practical complexity of teaching and authentic assessment, we believe that sometimes an awareness of an issue can change our paradigms thereby opening our minds to new ways of thinking. These new ways of thinking can then provide us with further explorations.

Many reading teachers today are making major attempts to incorporate authentic assessment measures in their classrooms. Perhaps these efforts might become somewhat easier for teachers to apply when they see a connection between their authentic assessment practices and the methodology of qualitative research. A consideration of these connections may provide teachers with specific techniques used in qualitative research to enhance their authentic assessment endeavors. They may expand their usage of authentic assessment after discovering the similarities, or seek opportunities to learn more about qualitative research, thus capitalizing on the strengths of both.

The connection between the two emerged for us as we began to see that many of the techniques we were using in qualitative research were somewhat similar in nature to our authentic assessment practices in our classrooms. While we want to be careful not to betray the analytic complexity of qualitative research and confuse it with the practical complexity of teaching and authentic assessment, we believe that sometimes an awareness of an issue can change our paradigms thereby opening our minds to new ways of thinking. These new ways of thinking can then provide us with further explorations. By making the analogy between authentic assessment and qualitative research, we hope teachers find this awareness as eye-opening and useful as it has been for us.

The first similarity we discovered was that both authentic assessment and qualitative research are based on the theory that more accurate and complete pictures of students or situations are obtained when multiple methods are used to collect information. Vacca and Vacca (1993) confirm that authentic assessment is "a continuous process that makes use of multiple methods of gathering relevant data for instructional purposes" (p. 337). The phrase "use of multiple methods of gathering relevant data" is the counterpart of qualitative researchers' data triangulation which Patton (1990) described as "the use of a variety of data sources in a study" (p. 187).

Data Triangulation

Techniques such as data triangulation which includes observation, interviewing and document collection are recognizable in literature about both authentic assessment and qualitative research. Data triangulation is an essential element of qualitative research. According to Glesne and Peshkin (1992), "three data gathering techniques dominate in qualitative inquiry: participant observation, interviewing, and document collection" (p. 24). Data triangulation offers a holistic accounting of a qualitative study. Observation in qualitative research centers around the actual witnessing of events taking place in the target environment. The second technique, interviewing, broadens the depth of the observation as well as provides additional information and verifies previously acquired data. Documentation,

the third component, involves securing additional sources, often providing new perspectives, continues clarification of data, and ultimately provides a written record of the research.

Authentic assessment resembles the data triangulation techniques of qualitative research in that teachers use a variety of methods to more thoroughly assess students. Paris, Lawton, Turner, and Roth (1991) state that "assessment should be multidimensional" (p. 18). Teachers who incorporate authentic assessment use the same three techniques of observation, interviewing, and document collecting that qualitative researchers use when collecting data. While a qualitative researcher might use the term "observation," a teacher might label the same process "kidwatching," a term popularized by Goodman (1986). The qualitative researcher talks about interviewing while a teacher might discuss conferencing. The qualitative researcher's data collecting is analogous to teachers accumulating samples of student work such as notes, anecdotal records, or portfolios.

Table 1

Data Triangulation Techniques Matched to Authentic Assessment Measures

Interviewing	Document Collecting	Observation
Student-Teacher Conferences	Anecdotal Records	Teacher Observation
Parent-Teacher Conferences	Portfolios (all kinds)	Kidwatching
Student-Student Conferences	Student Work	Class activities
Writing Conferences	Tests	Individuals
Dialogue Journals	Projects	Groups
Learning Logs	Inventories	Anecdotal Records
Any form of journaling	Experiments	Plays
in which dialogue occurs	Audio/Visuals	Oral Readings
Class Discussions	Any written work	Class Presentations
Collaboration	Checklists	Interaction with others
Cooperative Learning	Notes	
Situations	Profiles	

Note. This illustration of the similarities between authentic assessment and qualitative research categorizes the various techniques used in authentic assessment for gathering data under headings for data triangulation techniques of observation, interviewing, and document collecting.

While teachers are already using observation, interviewing, and document collection as mentioned above, the comparison of their assessment strategies to the techniques in qualitative research might help teachers see the significance of each process more clearly in their minds. Table 1 presents the data triangulation techniques of interviewing, document collecting and observation which have been used as descriptors for common authentic assessment procedures.

Peer Debriefing

In qualitative research, peer debriefing is a "process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (Lincoln and Guba, 1985, p. 308). A "disinterested peer" is one who is knowledgeable about your subject matter, but who is not a stakeholder in your research study. The technique is used to help the researcher obtain a more definite understanding of personal interpretation through discussions with an outside party.

Within the realm of authentic assessment in the field of education, teachers use peer debriefing in the form of collaboration. Teachers make valuable use of "languaging" (Routman, 1991, p. 20) which is the sharing of information, ideas, plans, and additional classroom insights with a colleague, resource teacher, principal, parent, or even students. When collaborating "we expect to go out changed in the end, to become a different person" (Watson, Burke, and Harste, 1989, p. 65). This collaboration can result in either confirming the beliefs of the teacher or perhaps developing new awarenesses. Without this process of peer debriefing, teachers may lose "the benefit of the deeper understanding people gain when they share collective knowledge" (Allen, 1995, p. 89).

Peer debriefing among colleagues is often one of the greatest sources of information and support for teachers. By talking with each other about issues or concerns in their classrooms, teachers can be strengthened in their authentic assessment endeavors.

Member Checks

Member checks are used in qualitative research when "data, analytic categories, interpretations, and conclusions are tested with members of those stakeholding groups from whom the data were originally collected" (Lincoln and Guba, 1985, p. 314). Member checks occur continuously throughout qualitative research studies. For example, a researcher doing a case study of a teacher who is incorporating new teaching techniques might ask questions of the teacher throughout the observing, interviewing, and analyzing stages. Member checks help researchers either confirm or redefine their findings.

Conferencing techniques used in and out of the classroom setting are counterparts of member checks used in the authentic assessment process. According to Calkins (1994), "the important thing to realize is that our job, as teachers, is to listen to everything we see and know and hear about a child" (p. 225). Conferences with students clarify teacher understanding. This method of checking students' progress may come in the form of teacher-student conferences, teacher-parent conferences, and student-student conferences with the findings of these being reported to the teacher. Conferencing may also take a written shape in the form of interactive journal writing. Calkins wrote that "writing becomes a tool for thought" (p. 221) which allows the reader, whether the writer or others, to interpret the thoughts expressed on paper. Interactive writing offers another opportunity to analyze the written data provided by the student and offers insights into the progress being made. Additionally, writing is a way for us to relive our thinking and "outgrow ourselves" (p. 222).

While teachers are often comfortable talking to colleagues about issues in their classrooms, the idea of asking students how they perceive situations or classroom experiences is somewhat less familiar. Students need to be active participants in their own assessment; one of the ways teachers can encourage this is through frequent member checks.

Audit Trails

In qualitative research, an audit trail is used to provide an account of the data that has been collected and the inferences made as a result of the data, so that someone else could follow the research (Lincoln and Guba, 1985). This trail is explicit and well organized. It offers a systematic review of work and findings employed by the researchers which can be understood and followed by other researchers.

Authentic assessment demands the use of effective data collection systems and careful documentation of assessment events. Authentic assessment, as defined by Jasmine (1993), is "the observation and scoring of the performance of a task in real life or, if that is impossible, in a situation that most closely matches the standards and challenges of real life" (p. F1). Teachers document students' activities and learnings through anecdotal records, portfolios, observations, and students' work. Accurate and complete records facilitate the teacher in assessing the gains made by individual learners. A broad range of assessment tools aid teachers in developing comprehensive pictures of students. In conferencing or making recommendations, an accurate recounting of the student's work through an audit trail similar to that in qualitative research aids teachers and others in making more appropriate decisions regarding students.

If teachers are aware of the benefits of an audit trail, they may be more careful to keep documentation to provide evidence of their teaching strategies and student outcomes. This record of events might also enhance the efforts of the teachers who begin to work with their students the following year. Audit trails, as such, are already in place as an important element in special education situations.

Types of Participation

In qualitative research, the researcher may be a passive participant or an active participant in the research study. A passive participant "is present at the scene of action but does not participate or interact with other people to any great extent" (p. 60) while the active participant "seeks to do what other people are doing" (Spradley, 1980, p. 59). According to Borg and

Gall (1989), "the researcher and the research subject interact to influence one another and are inseparably interconnected" (p. 384).

Because of the active involvement in the learning and assessing process in classrooms, teachers would normally be considered active participants. It would be helpful if they could occasionally become passive participants in order to step back and view their classroom situations and students in a different light, but this is a rare opportunity because of the nature of teaching.

Routman (1991) believes teachers who are more like directors in the classroom are passive teachers while those who are facilitators are active. She describes her change from passive to active teaching as moving "from teacher-as-director to teacher-as-facilitator ... As a co-learner I do more listening and less talking. I am an observer, encourager, participator, and respondent. I am a coach" (p. 18). Teachers become co-learners in the classroom when they actively participate in reading, writing, thinking, listening, and speaking activities with their students. Active teachers formatively assess students continuously in the learning environment. These teachers may employ methods such as dialogue journals, conferences, and class discussions to interact with their students.

Students who are actively involved in the learning process learn more and remember more. These students become engaged in learning when they are interested and motivated. Although at times students as well as teachers may be passive in the learning situation, providing opportunities for teachers and learners to be actively engaged will be beneficial to both parties as they interconnect and mutually influence each other.

Constant-Comparative Method

The constant-comparative method used in qualitative research, developed by Glaser and Strauss, "provides for alternate phases of data collection and analysis" (Parker and McDaniel, p. 101). This process occurs when "newly collected data are constantly compared to categories and hypotheses that emerged in earlier rounds of analysis, and those categories

and hypotheses are refined and elaborated or abandoned in light of the new data" (Parker and McDaniel, p. 101).

Teachers continuously collect and analyze data similar in nature to the constant-comparative method of qualitative research. Analyzing of data helps teachers make decisions about instruction. Using this method, teachers assess students on a moment-by-moment basis and alter instruction accordingly.

Reading teachers engaged in authentic assessment constantly collect and evaluate data received in the teaching situation from students' responses. This analysis of students' responses shapes teachers' decisions about instruction in the successful classroom. According to Routman (1991), educators need to change to a "process orientation" about instruction (p. 16). She contends "a process orientation refers to noticing and valuing what the student (and the teacher) does" (p. 16). The end product of learning still remains important, but the journey to the destination is also considered an essential component of learning. In valuing accomplishments in the classroom, teachers become ongoing evaluators and make continuous adjustments as the course of study evolves. Routman states that "evaluation is reflective" (p. 17). Teachers and students constantly observe themselves in the learning situation and revise previous ideas, predictions, and behaviors to meet new challenges.

Prolonged Engagement and Persistent Observation

Prolonged engagement, as used in qualitative research studies, refers to the "investment of sufficient time to achieve certain purposes" (Lincoln and Guba, 1985, p. 301). These purposes include "learning the 'culture', testing for misinformation introduced by distortions either of the self or of the respondents, and building trust" (p. 301). Persistent observation, according to Lincoln and Guba (1985), refers to staying in the field long enough to "identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail" (p. 304). They state that while "prolonged engagement

provides scope, persistent observation provides depth" to the study (p. 304).

The facets of prolonged engagement and persistent observation are inherently built into the traditional schedule of the public school classroom. Teachers and students grow, learn, and change individually and together within their community of learners. Most classes spend nine months together providing ample time for teachers and students to build rapport and an atmosphere needed to foster learning. Teachers need to become experts in evaluating who their students are, at what level, and where they need to go. Routman (1991) emphasizes that a holistic approach to evaluation assists teachers in this endeavor. According to Routman, a critical element of becoming expert evaluators is:

become excellent observers, or 'kidwatchers,' as Yetta Goodman calls it. Through kidwatching teachers begin to develop a stronger and more clearly articulated theory base ... We have to be able to recognize an individual student's learning patterns and use them to take the child further. We also have to know how to set up the learnings environment to maximize student development (p. 303)

Persistent observation leads to holistic evaluation of the learner. Prolonged engagement provides the teacher with the scope and depth of understanding of the learning environment.

Theoretical Sensitivity

Theoretical sensitivity in qualitative research refers to "the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't" (Strauss and Corbin, 1990, p. 42). Three sources of theoretical sensitivity are literature, professional expertise, and personal experience. Strauss and Corbin believe that "the more professional experience, the richer the knowledge base and insight available to draw upon" (p. 42).

Theoretical sensitivity plays an important role in the growth and changing methodology and philosophy of classroom teachers. Teachers

use the knowledge gained through the three sources of theoretical sensitivity to make decisions in the classroom. In Harste's (1989) discussion about theory-to-practice to practical theory, he states:

Unlike the old model of educational research — in which the researcher gathers a great deal of data but the classroom stays the same — in these projects everyone grows. Often researcher and teacher exchange roles, each contributing what they know. Curriculum is collaboratively constructed by the researcher, teacher, and students involved. New policy guidelines must actively support the process of educators helping themselves ... as decision makers, and in that of their teachers as professionals. (p. 8)

As teachers grow in their knowledge base of both theory and practical experience and share in collaborative professional arenas, they begin to refine their own theoretical sensitivity. Educators build the depth of their knowledge by drawing from professional literature, conferences and seminars, teacher study groups, inservice and staff development, collaboration with peers, and classroom experience. This continuous process for individual growth will lead to better decision making in the classroom.

Final Thoughts

In the discussion of the similarities between authentic assessment and qualitative research, another comparison can be made. That relationship lies between standardized assessment and authentic assessment and between quantitative research and qualitative research. According to Vacca and Vacca (1993), "in a standardized approach to assessment, the test is the major tool; in a naturalistic approach, the teacher is the major tool" (p. 343). By the same comparison, with a quantitative research approach, the test is the major tool; while in a qualitative research approach, the researcher is the major tool. A conclusion could seem to be drawn that authentic assessment and qualitative research are somewhat similar in that the teacher and the researcher are extremely important components in the process of collecting and interpreting the data.

Perhaps if reading teachers understand some of the techniques used in qualitative research, they will more easily conceptualize some of the

steps for using authentic assessment in their classrooms. Or perhaps those teachers who incorporate authentic assessment in their classrooms already know a little bit more about qualitative research than they think they do.

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Children's Literature: What's on the Horizons

**Lauren Freedman
Western Michigan University**

Fleischman, Sid. 1997. *The Ghost on Saturday Night*. Illustrated by Laura Cornell. NY: Greenwillow Books, \$15.00. ISBN: 0-688-14919-7. 64 pp.

This is one of several Sid Fleischman books to be rereleased after its original publication in 1974. It is the humorous and fast-paced story of Opie a young boy who has the knack to direct people through town in the California tule fog. It is because of this ability that he is able to save the town from Professor, the famous ghost raiser, and get the horse and saddle he has been wanting. The illustrations are black and white cartoon like drawings which enhance the humor delightfully.

Stanley, Diane. 1997. *Rumpelstiltskin's Daughter*. NY: Morrow Junior Books, \$15.00. ISBN: 0-688-14327-X. 32 pp.

In this continuation of the Rumpelstiltskin story, Diane Stanley weaves in both words and gouache, colored pencil and collage artwork the wonderful story of a rich and powerful king and a seemingly helpless young woman, Rumpelstiltskin's daughter. However, she is not helpless at all, but rather incredibly resourceful though unlike her father she has no magic and cannot turn the straw into gold. But, she can and does turn the greedy and loathsome king into a ruler of goodwill and charity. In the bargain, Rumpelstiltskin's daughter becomes Prime Minister of the country.

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