Navigating the Literacy Waters: Research, Praxis, and Advocacy

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# Table of Contents

Acknowledgements \hspace{1cm} x

Introduction \hspace{1cm} xii

**Presidential Address**
The Future of Writing
*Karen Bromley* \hspace{1cm} 2

**Keynote Addresses**
Pedagogies of the Oppressors: Critical Literacies as Counter Narratives
*Patrick Shannon* \hspace{1cm} 12

A Few Words About Sentences
*Allen Berger* \hspace{1cm} 27

**Research Awards**
A Case Study of the Impact of Media Literacy Instruction on At-Risk Young Adolescent Females’ Interpretations of Heterosexuality in Magazine Advertisements
*Doctoral Dissertation Award, Roberta Linder* \hspace{1cm} 33

**Navigating Instructional Design**
Preservice Teachers’ Interactions While Tutoring Primary Grade Children
*Beverly J. Timmons and Denise N. Morgan* \hspace{1cm} 58

Reconnecting the Disconnect: Creating a Service Learning Experimental Program that Links Theory and Practice to Mentored Apprenticeships
*Jennifer L. Bozeka, Susan Z. Turner, Jaclyn Prizant Gordon, and Judith M. Hendershot* \hspace{1cm} 74
Using Graphic Organizers to Facilitate Elementary Students’ Comprehension of Informational Text
Shirley Ermis 87

The We Are Reporters Project: Developing an Appreciation and Purpose for Collecting, Recording and Recalling Data Using a Variety of Reporting Techniques
Karen M. Steuerwalt and Evelyn A. O’Connor 103

Navigating Literacy For Diverse Learners
Helping English Language Learners: Preparing Teachers to Promote Critical Literacy
Mayra C. Daniel 123

Differentiated Instruction: Three Teacher’s Perspectives
Jennifer P. Bailey and Thea Hayes Williams-Black 133

Can You Hear Me Now? Providing Feedback Using Audio Commenting Technology
Allison Swan Dagen, Cheryl Mader, Steven Rinehart, and Philip Ice 152

Navigating Teacher Education
Confronting Teacher Education Issues Head-On: Increasing Our Knowledge and Choosing Our Options for Strengthening Teacher Education Programs
Angela M. Ferree, Francine Falk-Ross, Linda Gambrell, Richard Long, Mary Beth Sampson, Kathleen Mobr and Rona F. Flippo 168

Using Multicultural Literature as a Catalyst: Teaching Preservice Teachers Culturally Responsive Instructional Approaches and Challenging Sociocultural Predispositions
Donna Glenn Wake and Virginia B. Modla 179

Using Drawings by Secondary Preservice Teachers to Study Their Writing Process and Apprehension
Peggy Daisey 201
Navigating Professional Development

Understanding and Applying Reading Instructional Strategies: Implications for Professional Development in the Middle Schools
William Dee Nichols, Robert J. Rickelman, Carl A. Young, and William H. Rupley

Helping Literacy Centers Come Alive for Teachers: Transitions into the use of Interactive Small Group Reading Stations
Francine Falk-Ross
We would like to thank the many colleagues who have provided their generous and specialized support with the preparation of this CRA Yearbook, beginning first and foremost with our contributing authors who shared their research, thoughts, and the stories of their good work to add to the body of knowledge informing all we do as literacy educators. Likewise, we are indebted to our reviewers, who have graciously shared their time and professional judgments to secure the rigor of this publication. This yearbook was also produced with the help of three editorial assistants who meticulously tracked and nudged the progress of the manuscripts through the adjudication journey, and provided the hands and minds to take care of the details that resulted in a high quality publication. Our thanks to editorial assistants Margie Garcia, Karen Larmon Whalen, and Louise Cochran for their commitment and dedication to this large task, and for their collaboration and professionalism in solving problems as dilemmas and issues arose.

For the second year, we were honored to be able to use the design of Carlyn Ross Schlechter for the cover of the CRA Yearbook. The three fluid lines, as well as the icons, on our cover seem to readily depict not only the moving nature of our work but also represent the three rivers in Pittsburgh and the three-pronged emphasis of this yearbook: research, praxis, and advocacy. We indeed thank her for the beautiful and provocative image that beckons the reader to check out what's inside!

In addition, two universities provide support for this Yearbook in various ways. At Texas A&M University-Commerce we wish to thank Dr. Keith McFarland, the tenth President of our university who has announced his retirement and whose support of this publication and of teacher education over these years has been vital. We also want to thank Dr. Mary Hendrix, Interim Provost and Vice President of Academic and Student Affairs for her many efforts in advancing the mission of promoting literacy and education. This yearbook had the support of two Deans of the A&M-Commerce College of Education and Human Services: Dr. James B. Vornberg, Interim Dean of the COEHS in the spring and fall of 2007; and Dr. Brent Mangus, Dean of the COEHS beginning in January 2008. Both of these leaders have recognized the value of the knowledge and scholarship disseminated through this endeavor and earmarked needed resources, such as an office, computer, etc. to make this kind of publication possible. Special thanks also go to Vivian Freeman of the Printing Facility at A&M-Commerce who painstakingly oversees all aspects of printing and the yearbooks. And, we are ever thankful for the many instances of assistance and help from the Department of Curriculum and Instruction’s Administrative Assistants, Maureen Preston, Priscilla Nichols, and Nicole Wilkins. To all of these individuals at A&M-Commerce we are ever grateful.
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INTRODUCTION
NAVIGATING THE LITERACY WATERS:
RESEARCH, PRAXIS, AND ADVOCACY

This book presents a selection of the research and papers presented at the 50th Annual Meeting of the College Reading Association in Pittsburgh, Pennsylvania in October, 2006. Through these manuscripts the reader will gain an impression of the particular philosophical, theoretical, cultural, and political context those most vested in promoting literacy in this country are experiencing in the early years of the 21st century. These myriad contexts, along with the wider social context, are frequently juxtaposed against practical considerations and the professional, pedagogical knowledge of the literacy professional. That conundrum is a common thread with many of the manuscripts in this volume.

The CRA has long been the home of our nation’s most notable literacy experts. At the Pittsburgh annual conference, these literacy professionals once again engaged in dialogue of utmost importance through the presentation of new knowledge gained through research, the sharing of practices based on theoretical models ever evolving from this research (praxis), and inspiring speeches calling for the advocacy needed to influence and navigate our nation’s course for the future. The articles included in this volume are representative of these dialogues that can lead to transformation, possibilities, and also risk.

In Karen Bromley’s presidential address, we are confronted with the possibility of a future without the pen and even the physical act of writing. The ramifications of her four predictions about the future of writing in the electronic age are fascinating to ponder. Through the story of a long car ride, Patrick Shannon makes his point via many metaphors providing compelling argument for the essential need to teach critical literacy to today’s students. Citizens must be able to read and think critically if they are to continue to have a part in negotiating decisions within our democracy. Using sociological imagination, Shannon provides examples of how our own autobiographical story is always involved in meaning making; and, that since pedagogies, texts, and ideologies must rely on language to carry meaning they will never be interpreted quite the same. His is a message of teaching critical literacy as an emancipatory act.

After considering a life without the pen or the physical act of writing as we now know it, Allen Berger’s keynote lifted our understanding of the composing of text process, which is still needed and will be needed even more in tomorrow’s world. His thoughtful specifics about how to compose clearer passages, weave paragraphs together, and involve students in self-
critique of their own writing should be tremendously appreciated by literacy educators.

Our doctoral dissertation award winner, Roberta Linder, found support for the inclusion of media literacy instruction, particularly “deep viewing”; and, for strategies to promote critical analysis. She describes how the effects and skills developed as a result of the literacy instruction were found to crossover to enhance comprehension of non-media texts as well.

The remaining three sections of this volume contain articles which we sorted into four overarching categories: Navigating Instructional Design, Navigating Literacy for Diverse Learners, Navigating Teacher Education, and Navigating Professional Development.

The articles within each of these categories/headings are by no means mutually exclusive to that area. In fact, most all could belong to at least one of the other categories. Thus is the nature of our research, praxis, and advocacy . . . and the literacy professional’s work. Accordingly, it is our hope that the “scholarship of teaching” represented by our authors will provide new insights and possibilities that will support literacy educators in transformations worth any risk that might be involved.

MMF, FFR, SS, & MBS
THE FUTURE OF WRITING

Presidential Address

Karen Bromley

Binghamton University (SUNY)

Karen Bromley is a Distinguished Teaching Professor in the School of Education at Binghamton University (SUNY) where she teaches courses in literacy instruction and assessment, children’s literature and writing. She was a third grade teacher and a K-8 reading specialist in New York and Maryland. She has written several books for teachers, most recently Stretching Students’ Vocabulary and 50 Graphic Organizers for Reading, Writing and More.

This speech explores the future of writing by discussing four predictions: the notion that pens and pencils will be collectors’ items, the idea that writing will be electronic and we will read only digital text, the certainty that writing will be more challenging to learn and teach, and the idea that speech will replace writing. The audience was left with questions: What will be lost if these predictions become reality? What will be gained? How will curriculum, instruction, and assessment in schools, clinics, and higher education change to reflect these changes in writing?

First, thank you all for coming to the 50th annual Legislative Assembly. I thank you loyal members who never fail to attend, and you newer members who want to learn more about CRA.

In preparation for giving this Presidential speech, I did some reading and thinking about the history of writing and the changes I have witnessed in writing during my lifetime. I also did some remembering—I remembered
Jon Shapiro’s presidential speech last year in Savannah and Wayne Linek’s the year before that one. They were both personal and inspiring. My memory fails me beyond those two years except for Tim Rasinski’s hilarious presidential speech several years earlier in which he talked about his dog, Ginger, and it being too dark inside a dog to read. I want to warn you however—today’s speech will be a yawner compared to previous speeches!

I am not an expert on the future of writing. In fact, I probably know less about it than many of you. But I chose to talk about this topic to learn more myself. In a chapter I wrote recently called “Technology and Writing” for The International Handbook of Literacy and Technology (Bromley, 2006), I stopped short of predicting the future. I wrote about how technology has changed our ways of writing and communicating. I wrote about the benefits of combining paper and pencil with technology. I wrote about electronic journals augmenting paper journals and texts. I wrote about how conventions have been affected by technology, but I did not look into the future. So, today I will go beyond that work and offer you four ideas that may make you think differently about writing—an addiction many of us have or should have as academics.

What initially piqued my interest in the future of writing was a visit to my local Barnes and Noble bookstore last summer. As I browsed the children’s book section, sipping a cup of Starbucks Hazelnut decaf, words Patrick Shannon would categorize as “pedagogy of consumption,” two titles caught my eye. The first was “ttyl” (Myracle, 2004) and the second was “ttfn” (Myracle, 2006). I know “ttyl” in IM (instant messaging) language stands for “talk to you later.” But I didn’t know what “ttfn” stands for. Do you know? When a quick scan of the book didn’t uncover the meaning, and feeling foolish, I asked a young girl who stood nearby reading. She said “ttfn” means “ta ta for now.” Both books by Lauren Myracle are about the friendship of three teenage girls and are written entirely in IM.

The titles reminded me of what a middle-school teacher friend told me recently. She is frustrated because her students use IM in their writing, and she can’t tell what they are saying. As well, they defend it when she tells them it is not standard English. This also made me wonder about the future of writing. How has it changed over time? What will it be like in a decade or two or three? How has technology shaped writing? So, here are my four ideas about the future of writing:

Idea #1: Pens and Pencils Will Be Collectors’ Items

This idea should not surprise us when we think about how writing has changed over the years. Pre-empted by pictures drawn on cave walls, the first written language, cuneiform, was invented 5,000 years ago by the
Sumerians who inscribed it on clay tablets (World Book Encyclopedia, 2006). Later, the Egyptians used a picture alphabet called *hieroglyphics* written on *papyrus*. The Greeks and Romans developed alphabets and used scrolls and wax tablets. The Chinese made paper in 200 B.C. and used carved blocks of wood for printing. Movable clay type was first invented in 1000 A.D. by the Chinese and later movable metal type was invented by the Koreans. In Europe, Gutenberg’s mechanical press was followed 300 years later by steam-powered presses, and monotype and linotype typesetting machines introduced in the late 19th century.

Tools for handwriting have changed, too. Pencils and quill pens led the way to ink pens and ball point pens. (An interesting aside here—in Budapest this summer for IRA’s World Congress, I learned that the ball-point pen was invented in Hungary by Josef Biro in 1938). Felt-tip markers emerged and of course typewriters and computer keyboards. In the 1980s, laser printers and personal computers began to support desktop publishing. Today, our *cyber* writing is digital and includes word processing, e-mail, and text messaging on the Internet, cell phones and PDAs (professional digital assistants) like the Blackberry.

This abbreviated history illustrates dramatic changes in writing in a relatively short time (and, dramatic changes in the vocabulary associated with writing, e.g., *pen, pencil, journal, typewriter, manuscript, cursive* [Does anyone even teach it anymore?], *book, magazine, etc.—word processor, MSWord, IM, pda, email, web, keyboarding, cursor, blog, weblog, blogosphere, hypertext, e-book, e-zine, cyberspace*). Writing has not been a static practice. In a way it is like photography. Some of you, like me, have used a Brownie box camera, a single lens reflex camera, a Polaroid, and now I use a digital camera.

Whether we like it or not, digital text is our future. So, picture a world without pens and pencils where we download our Sudoku and crossword puzzles and use the keypad of a cell phone or PDA to do them. According to the Pew Internet and American Life survey (2006), 73% of adults use the Internet today as compared to about 20% ten years ago (http://www.pewinternet.org/trends/Internet_Adoption_4.26.06.pdf). And, some experts believe, for example Lasica (2005), author of a book about the digital generation “... we are only 2% of the way into what the internet has to offer” (p. 260). I wonder what the remaining 98% has in store for us. Lasica also predicts the coming of super broadband that will be 100 times faster than today’s internet services.

Today computers are replacing pens, pencils, and humans in the newsroom. A U.S. news service, Thomson Financial, uses computers to automatically generate news stories reporting that a company has done better or worse than expected (Van Duyn, 2006). How long do you think it takes to generate these stories? It takes .3 of a second after a company makes results public for
a story to be created. Reuters also does this and Bloomberg is not far behind. This scenario in the news is rather frightening for what it promises for other types of writing. I’d like to see some authors publish more quickly, e.g., Lemony Snicket, Tony Hillerman, and Elizabeth George, but, the Captain Underpants books already come out way too often for my taste.

Picture a world where pens and pencils will soon be collector’s items, and where every K-12 student will have a laptop or wireless device for writing. I suggest we sell our stock in Cross and Bic and buy stock in a broadband company like Comcast or Time Warner. We no longer live with Generation X . . . this generation is Generation Text (Dunnewind, 2003), and who knows about Generation Next?

Idea # 2: Writing Will Be Electronic and We Will Read Only Digital Text

We already read digital maps on our cars’ navigation systems and on our golf carts. In some churches, people read words to the hymns they sing from a screen, not a hymnbook. We already read and write electronically to shop, order food and prescriptions, and pay bills on the Internet. So, picture a world in the not too distant future where our offices and homes are nearly paper-free. We’ll spend more and more time in cyber-networking environments like Craigslist, Angelaslist, or Google-Youtube, and much of our writing may be in the blogosphere. We’ll submit our scholarly manuscripts online and read journals and books online. A trip to the library to leisurely leaf through a paper copy of a journal will no longer happen. We’ll read everything online. We’ll miss the chance to serendipitously discover ideas and information when we browse a paper journal. We’ll be known as mouse-potatoes, as well as the couch-potatoes some of us are already!

Picture a world where the community of readers and writers has expanded dramatically. With a mouse click it will be easier to reply online to authors we know and those we don’t know. One of my colleagues told me recently that she has had more responses to her article published by Educational Leadership in a special online issue, than to any other article she published previously in a paper journal. This makes tremendous possibilities for dialogue, collaboration, and the generation of new knowledge. But, what else will it do? It will also cause us to be even more overloaded and stressed as we are bombarded with even more electronic input.

Picture a world where we read only e-books. Today, Project Gutenberg and World e-Book Library have made hundreds of thousands of scanned books available on the Internet. As well, Google and other Internet providers have plans to digitize more library books. The prediction is that by 2020 there will be 10 million e-books on the Internet (Carpenter, 2006; http://
A recent article in *The Chronicle of Higher Education* reports that scholars are “. . . beginning to question whether the printed book is the best format for advancing scholarship and communicating big ideas,” (Young, 2006, p. A21). Some forward thinkers believe books should be dynamic rather than fixed and they should be sites for conversation. Young describes an example of open review on the Internet by those who read a professor’s scholarly book. The feedback was from colleagues and those who didn’t know his field. One person gave him valuable ideas for revising. Guess what another reader who didn’t know the field said, “This doesn’t have substance. Take some time off, teach a little” (p. A21). So, receiving similar feedback on a book in draft form is in the near future for us as authors.

This process is called *open-source development* and three other quick examples of it point to our future as academic writers. First, *Wikipedia* (http://www.wikipedia.org/) the online public encyclopedia available in several languages that anyone can contribute to, has made us rethink authorship, collaboration, text format, and access. Second, the journal, *Nature*, this summer began making submitted articles available immediately for electronic review by anyone (Young, 2006). The standard review process is also used, but authors can receive online comments from the public as well. Third, this fall, Rice University began the first all-digital university press as a model for other universities faced with increased costs of scholarly publishing. The Rice press will include multimedia features and online discussions of its e-books (Young, 2006).

Picture a world where these types of public collaborations in cyberspace affect all kinds of writing, not just academic writing. Wittenberg (2006) in a recent article in *The Chronicle of Higher Education* suggests that the publishing world is at a “cross-roads.” She says “We know users are becoming used to communicating in sophisticated, interactive, and collaborative online environments, and the traditional forms of publishing are at risk of becoming irrelevant if they do not evolve” (p. B20). If the lines between scholarly and commercial publishing are blurring, then libraries, books, magazines, and newspapers are poised for drastic makeovers.

And, what will happen to all the written text we produce? The digital information we create is fragile. It exists as “. . . magnetic pulses or microscopic pits on a disk” (Carlson, 2004, p. A25). Documents saved in the 1980s on a floppy disk may be unreadable now, but Emily Dickinson’s poetry locked away in a box for decades can be found, read, and reproduced. Future historians will need to know how to use software programs and machines that no longer exist. So, the $100 million digital-archiving program the Library of Congress has undertaken will be critical to us and historians (Carlson, 2004; p. A27).

But, to say unequivocally that writing will be electronic and we will read
only digital text is to forget some past predictions. What happened when we were told the U.S. would “go metric,” that ITA would solve children’s reading problems, and that the Edsel was the car of the future? We can say though that writing as we know it today will certainly change.

**Idea # 3: Writing Will Be More Challenging to Learn and Teach**

As a graduate student at the University of Maryland years ago, I remember what Bob Wilson, my adviser said about how to write for publication. He said “Read other articles written in the style and voice you want to use.” And that won’t change, I hope. We will still read widely before and as we write. Later, at Binghamton, I remember writing my first article for *Language Arts* using a pencil and yellow legal pad. And, for some of us this still works today! I think the department’s secretary, Lucille, who retyped many revisions for me on her trusty Remington typewriter, was happier than I was when it was finally accepted 6 months later in a snail-mail letter. In contrast, last week I finished the tenth revision, at least, of a manuscript using MS Word. Then, I navigated the online submission process at IRA’s website and sent it electronically to *The Reading Teacher*. I’ll get reviews and a decision electronically in less than three months. That contrast between writing 20 years ago and writing today is quite amazing!

There are those who believe that computers and technology have not only caused more writing, but have caused more bad writing (Grow, 2006; Leibowitz, 1999). It does seem though that the changes I have talked about will make writing more challenging to learn and teach in the future. And, issues that plagued us in the past will be even more critical. Picture a world where plagiarism is rampant. A recent article in *The Chronicle of Higher Education* (Wasley, 2006) describes the plagiarism unearthed at Ohio University by a graduate student in mechanical engineering. He discovered 39 plagiarized theses with material copied from textbooks, other theses, journal articles, and the Internet. Sometimes the copied material was as much as 14 identical pages, including flow charts, data tables, and narrative - with typos and misspellings, as well! The 39 theses were removed from the library and the degrees confirmed are in question. All but a few cases involved international students who may not understand standard citation practices. This plagiarism has prompted discussions at many institutions and it should alert us all to the need for teaching better writing skills, and also to Internet sites like Turnitin, *www.turnitin.com*, the service that helps identify plagiarized work.

Picture a world where researchers, teachers, and students routinely collaborate, discuss, and create multimedia projects with hypertext. While the images and sounds of hypertext are sometimes easier and more interesting
to read, they also require special skills. We will need to teach these special skills which include how to select and evaluate Internet sources. As Monaghan (2006) says, “. . . students must be able to interpret not just words, but still and moving images, understanding how they are constructed, how they create meaning and how they can deceive” (A33). Critical literacy and visual literacy will be paramount in all walks of life.

Picture a world where courses like “Writing With Video” take the place of “Freshman Composition 101” which has happened at the University of California (Monaghan, 2006). Teaching multimedia literacy will undoubtedly be a routine part of the general education requirement at all colleges and universities in the future.

In thinking about the difficulty of teaching writing, Sonn (2006) observes in his book Paradigms Lost: The Life and Deaths of the Printed Word, that “people have spontaneously and accidentally created what amounts to a new printed medium” (p. 343). It has no real usage rules, and as “great megabyte mountains of information” are created by more people, there is a collapse occurring in grammar and language” (p. 343). This is the relevance problem my middle-school teacher friend faces that I mentioned earlier. It is something we, as teacher educators and researchers, face now and will face in teaching writing in the future.

I’ve just talked about three ideas that relate to the near future of writing. Fourth and last, please consider a revolutionary idea for the far-distant future.

**Idea #4: Speech Will Replace Writing**

We will use speech-to-text conversion programs with our laptops, PDAs, and other newly invented writing devices. The act of writing on a keyboard will disappear. Picture a world where your fingers no longer touch keys on a keyboard, but your voice activates and produces digital print. Picture a world where high stakes tests are taken electronically, and students use speech-to-print programs to respond. The need for thinking skills will outweigh the need for keyboarding skills. The art and craft of thinking with speech-to-text writing as an outcome is difficult, and we will need to teach it well.

In his essay “The Future of Writing,” Sperber (2002) says “. . . the revolution in information and communication technology may soon turn writing into a relic of the past” (p. 2). He predicts that with the speech-to-print capability of computers, speech may well displace the activity of writing. “Once it will be possible to by-pass writing, many people may come to realize what a source of discomfort it always was to them” (p. 20). It will be much quicker than handwriting or keyboarding because we speak more quickly than we write. It will free us from the muscular tension of writing, and once we are
over the awkwardness of speaking into a machine, it will be freeing. But, reading computer encoded print will still be necessary, and we will need to be competent, creative, cyber-savvy users.

The last stock tip I have is to buy shares in a speech-recognition software company. I should tell you though, my husband is wary of my investment ideas. I wanted to buy Martha Stewart stock a few years ago, just before she was sent to the “gray-bar hotel” in West Virginia. Today though, you can bet I remind him of where her stock is now!

The beauty of giving a speech and having a time limit is that a speaker can omit topics, ignore issues, and leave out expert opinions. I admit I have done that. But, certainly we can agree that writing will not remain a static practice—pens and pencils will slowly disappear, more writing will be electronic, writing will be challenging to learn and teach, and writing will be accomplished more often through speech.

In conclusion, here are some questions to consider. What will be lost if these four predictions become reality? What will be gained? And, how will curriculum, instruction, and assessment in schools, clinics, and higher education need to change to reflect changes in writing? i lv u with ?s 2 pdnr

Last, here is a peek at a new book on writing that we literacy educators will want to read, *Beating the Odds: Getting Published in the Field of Literacy* (Wepner & Gambrell, 2006).

References


KEYNOTE

ADDRESSES
Pedagogies of the Oppressors: Critical Literacies as Counter Narratives

Keynote Address

Patrick Shannon

Penn State University

Patrick Shannon is a professor of education at Penn State University. His most recent book is Reading Against Democracy (Heinemann, 2007). This talk will be the opening chapter of Pedagogies of the Oppressors.

All institutions present lessons concerning what we should know, who we should be, and what we should value in order to position us. They use specific pedagogical strategies that always involve text, broadly defined, that are supposed to be read in a particular way and that are always political. Regardless of their form, each text is organized through language conventions—they have a code to crack, a grammar to follow, meanings to construct, and intentions to discover. Through a story of a long car ride, I develop an argument for critical literacies to read such texts against their intended meanings.

My summers are spent driving our kids to one place or another. It used to be short trips to lessons, sporting events or friends’ houses. Now it’s to and from college campuses with all their stuff in tow or to and from internships in order to study the evolutionary genomics of corn or the con-
tamination transport within differing ground systems. None of these activi-
ties can take place within 10 driving hours of home. Each must be negoti-
ated singly because they occur in opposite directions from one another. If
one goes to the Midwest, the other travels South or to the Northeast. As an
aside, Kathleen and I (I’m married to Kathleen) can’t quite understand how
two tragically hip literacy teachers could raise a couple of nerds with com-
plete pocket protection. When the kids speak to one another in codes that
they pretend to be scientific, Kathleen and I know that they are just talking
about sex, drugs and rock and roll. After all, they are college students.

At the end of this summer, I drove to Grinnell, Iowa, to deposit our daugh-
ter for her senior year. Pointed west, we talked about her plans for this year
and next, the curious fact that Indiana has outsourced its part of I 80 to a foreign
company, and the inevitable truth that Chicago will never complete its can-
of-worms road system in order to permit drivers to get where they want to
go without swearing. On the way back, I attended to the public pedagogy of
the free radio airwaves. I use the word free loosely to mean that I did not have
a subscription to private stations. Between belting out oldies lyrics along with
the station disc jockeys who populate the dial, I listened to National Public
Radio (NPR) in its various forms across two time zones. Within one 13-hour
jaunt, I learned four lessons that make me a modern American:

Lesson One: Consume above all else, consume,
Lesson Two: Believe experts,
Lesson Three: Romanticize the past, and
Lesson Four: Civic life is boring.

Let me stop for a moment to declare my intentions for this talk. I hope to
develop the argument for critical literacies as essential elements of reading
education at all levels of schooling. They are necessary for citizens to partici-
pate in the governing of their lives—be they limited to what the Golden Arches
mean, whether to vote for building that new school in your town, or how to
understand such terms as regime change. My route to that hope has three
stops along the way.

The first stop is the notion of public pedagogy—all institutions present
lessons to us concerning what we should know, who we should be, and
what we should value. They use specific pedagogical strategies that are not
always readily apparent, but they are nonetheless there. Sports cars are painted
red for a reason, eh? Ministers give sermons. And Bill Gates talks endlessly
about innovation.

Second, I’ll stop at the notion that the pedagogical strategies always in-
volve texts, broadly defined, that are supposed to be read in a particular
way. For example, the texts during my drive were aural, visual, tactile, and
even gustatory. That is, I listened to chatter, songs, and reports. I looked at
the bumper stickers, lane dividers, and signs. I felt the ripple bumps before the ticket booths, the cold steel of the gas nozzle, and the hot tea (because my dad told me that coffee would stunt my growth). I tasted the sugar-laced foods in Iowa, Illinois, Indiana, and Pennsylvania, but stopped twice for salads in Ohio. I am happy to report that I did not smell Gary, Indiana, as I used to when Kathleen and I worked at Purdue, and we would drive to see the Cubs play at Wrigley Field, although the steel plants are running to some capacity. Regardless of their form, each of the texts was organized through language forms and conventions—they had a code to crack, a grammar to follow, meanings to construct, and intentions to discover.

The third stop will be to acknowledge that pedagogies and texts always represent the ideological struggles to position me and to capture my allegiance. The texts are designed for more than me, but I'll admit that I take them personally. I used to think that taking it personally was a problem, until I recognized that others took it personally too. Our individual issues were really social problems. Now I used what C. Wright Mills (1959) called a sociological imagination.

Think about my choice of radio network—NPR has been on the Bush administration’s hit list for 5 years because it is assumed to project a liberal bias. As we all know, only Fox News is fair and balanced. We can examine the slants between the *New York Times* and the *Wall Street Journal* in newspapers. It seems easy to locate political ideologies within media news. It is more difficult perhaps to identify ideologies within other institutions however. Do you think of churches as ideological? Sports? Corporations? Schools? And of course, not all examples within a category fit neatly under an ideological label.

Because of this variation and the fact that these pedagogies, texts and ideologies must rely on language to carry their meanings, they are never complete or unitary. They don't convey a uniform message. Rather, they contain holes and contradictions that permit readers to insert themselves as active participants within the continuous construction of their identities and negotiations of social spaces. That is what makes critical literacies possible. These acts of identifying contradictions, stepping into those gaps, and bending those oppressive intentions are what I mean by critical literacies. I use the plural of literacy here because I recognize that reading and creating different types of texts require different sets of practices that vary across time and place.

Using the texts of my journey home, I hope to demonstrate how the government, courts, media, think tanks, businesses big and small, sports, and even churches use pedagogical strategies in order to re-present the world for me and to teach me my place within it. For example, throughout the day, I passed government texts composed to regulate my driving, positioning me and suggesting to me that I live in a society of laws. The standardization of the signs and the articulation system among signs (shapes, colors, symbol,
alphabet) is a pedagogical strategy meant to teach me that I am a subject of the state, equal to all others. If this were not the intent of the authorities behind the signs, then there would be qualifications. And of course, there are some official qualifications marked on signs that split speeds for trucks and cars, assign lanes only to car pools, and divert only certain drivers to be weighed.

Do you see the pedagogy here? Standardization of symbols and grammar is the pedagogical strategy selected to represent equality and uniform expectations. If we teach reading only as breaking codes and following authors’ intentions to their ends, then we obscure what’s really going on here. These laws (all laws?) are negotiated continuously. By that I mean, no one drove the speed limit, some never left the passing lane, and some cars followed the trucks at the easy on/easy off rest stops instead of complying with the signs segregating vehicles by size. The negotiations of these law/sign/texts were mediated by patrol cars, horns, hand signals, and wrecks. Officials intended all signs to be read by all drivers, but each sign conveyed more than it stated. For example, what can be made of the 70 miles an hour speed limit in Indiana and Iowa and the 65 law in Pennsylvania, Ohio and Illinois? Is it that life is cheaper near corn?

But there are seamier sides to these negotiations as well. Although the pedagogy of the standardization of symbols is meant to convey uniformity and equality, it actually hides important realities. Minorities and the poor are more likely to be pulled over by the police, they are more likely to be ticketed and more likely to receive punishment—even more severe punishment than other groups. These realities are the social life of the texts/signs—how the signs work in society and for whom. Unless we include pragmatic practices, how the signs position me and others, and critical practices, what the signs hide, within our reading instruction, then the pedagogy of standardization inhibits our recognition and evaluation of that social life. The signs oppress us, some more than others. Does that mean that I am advocating driving on the wrong side of the road? No, it means that we should advocate and engage in teaching reading to others in order that they can identify the contradictions between standardization in signs and preferential treatment in reality.

Let me try to make these points about pedagogy, texts and ideologies clearer with another example. One of the main NPR stories of that day was U. S. District Judge Anna Diggs Taylor’s order to halt the National Security Agency’s warrantless wiretapping program that had been secretly authorized by President Bush in 2001. According to Judge Taylor, the President’s program violates privacy and free speech rights and the Constitutional separation of powers among the three branches of government. She was quoted as writing: (This is difficult to take down when you are driving).

It was never the intent of the framers to give the President such unfettered control, particularly where his actions blatantly disregard the pa-
rameters clearly enumerated in the Bill of Rights. . . . There are no hereditary kings in America and no powers not created by the Constitution.

Judge Taylor employed the pedagogical strategy of displacement in which she associates President Bush’s actions with those of a king – someone above the law. Clearly her text is meant to teach us that the President has overstepped his bounds as the story of the Constitution taught in all U.S. schools is that it is a document intended to balance powers among branches of government in order to prevent the rise of a monarchy. The immediate response from the White House was to say the words “national security during the War on Terror” and to repeat that phrase several times within three short sentences. This is the pedagogical strategy of euphemization in which the War on Terror is to stand for the warrantless wiretapping, and therefore, to legitimize it by the association. This is a popular pedagogy of the White House as President Bush often uses the phrase “in other words.” The oral statement/text was meant to teach listeners that we are at war, that it’s a war against terror; and therefore, the experts must take actions that are new and bold.

NPR, for its part, employed the pedagogical strategy of expert commentary to provide what it considers rational grounds for its legitimacy as a source of knowledge, not just of information. Some experts interviewed were elected officials. Democrats applauded the ruling for the most part. Republicans spoke from a news release entitled “Liberal Judge Backs Dem Agenda to Weaken National Security.” Other experts were from institutions outside of government: think tanks, advocacy agencies, and universities. For example, Anthony Romero, Executive Director of the ACLU, used the pedagogical strategy of trope to suggest that Diggs’ ruling was “another nail in the coffin” of the Bush Administration’s anti-terrorism programs. Bobby Chesney, a national security law specialist from Wake Forest University stated, “No question that the ruling is a poorly reasoned decision.”

Perhaps the political ideological struggle is apparent within these texts and the pedagogies of the institutions of courts, government, and radio are too. Conservatives might suggest that simply airing Diggs’ ruling as news demonstrates NPR’s liberal bias because it undermines the war efforts. Perhaps, liberals will frost because the White House was able to present its smoke-and-mirrors justification one more time publicly. But I want to draw your attention to NPR’s pedagogy in parading “experts” before the public, as if their statements were the ends of all considerations. What is a national security law specialist? What does the category of national security entail? Why is a specialist needed? How does NPR pick specialists? Who gets to pick them? What is the market for specialists? How might that market have an effect on what can be said? These are critical questions left unspoken on NPR that day.
I’ve mentioned some pedagogies, texts and ideologies in order to whet your appetite for critical literacies. Standardization, displacement, euphemization, expert commentary, rational grounds, and trope are not the usual names reading educators use when talking about pedagogical strategies. As Roger Simon (2001) explained, the term pedagogy extends the concept of teaching beyond the details of what information is worth knowing, what it means to know something, and what students and others might do together in order to also include the cultural politics that such decisions support. To propose a pedagogy is to propose a political vision. To talk about pedagogical practices is to talk about politics. The strategies I’ve mentioned so far and the textual means by which advocates within institutions express their visions are pedagogies of the oppressors. All seek to position us in ways that bring both opportunities and limits for our agency. Rarely do institutions announce their intentions directly and the pedagogical strategies they employ help them to legitimize their visions without full disclosure. Public pedagogical strategies put the onus on the learner because school is out, eh? That’s what critical literacies can do. They can help us with that burden.

On the road again. Billboards act as the Sirens did for Odysseus on nearly every mile of the highway. “Stop to fill up” they inveigle. Fill up in every way imaginable. The signs compete with each other near (with several alternatives listed on one sign) and far (as some invite you to drive past the close businesses in order to stop at ones distant and more exotic). The signs don’t just inform; they create as well. As I drove I felt—not just thought, but felt—that I could use a discount pair of pants or shoes, a Krispy Krème donut, or fireworks! Some signs/texts worked simply from branding. Their logo alone evoked the vision in readers’ heads that companies worked so hard to create over time. The green circle with the white queen of beans invited me for a venti chocolate macchiato half decaf, low fat with whip for way too much money. But the pink double D was not enticing enough to stop for a sugar ring. Sometimes logos work strangely over time. In our family’s early driving trips, the golden arches meant clean, or at least cleaner, restrooms with changing tables. That story remains clearly in my head. When I see the arches now, I always steer clear. Those days are over—I’m only somewhat happy to say.

Branding and logos are a form of displacement, but they involve a different type of association. Instead of displacing one element for another in order to instantiate a single association, branding seeks to position the reader as the lead in a story of ownership and consumption. In that order, thank you. Buy, then consume, and then buy again. Just like Aldous Huxley envisioned in *Brave New World*—“End not mend” was the official slogan delivered through hypnopedia—one of my favorite terms.

The pedagogical strategy of storying is not the same thing as displacement nor is it the same as George Lakoff’s framing. Rather another psychologist is
responsible for storying—the randy behaviorist John B. Watson after he left academia for Madison Avenue. Thank Watson for the piles of goodies next to the cash registers in grocery stores because “like rats in the maze, consumers reach for the items within proximity.” In 1923, Watson invented program lead-ins when he delivered a 10-minute national radio lecture on the glands that he ended at the mouth, just before his sponsor’s commercial for toothpaste. After empirical tests demonstrated that consumers could not choose their brand by senses alone, Watson proposed that Americans “walk a mile for a Camel,” “take a coffee break with Maxwell House,” and follow the advise of the Queens of Spain and Romania to use Ponds Cold and Vanishing Cream. In each of these “stories” the reader/customer was to see him or her self with the hip, new ways of living, and of course, buy the product. We have not come a long way baby from Watson’s invention of market research.

Storying is a powerful pedagogical strategy, and I am using it for this talk, as I channel Charles Kuralt in order to put you in the driver’s seat for this trip across America. It’s kind of a buddy talk and drive. I’m Thelma, and you can be Louise. We’re in this together!

Logos and slogans are supposed to evoke the storying with the least amount of institutional exposure. That happens just as Watson planned with the logo, phrase, brand becoming the stimuli and the pleasant story association resulting as the conditioned response. The S-R chain continues with the story leading directly to purchases. The pedagogical strategy of repetition of the stimulus and response connections works dramatically as we open our wallets to satisfy immediately our desires created and fulfilled by business. This is language that educators understand, but we are never as successful with the stimulus and response strategy as the advertisers who can part a fool and his money—sometimes lots of money—in 30 seconds or less. Buyer beware!

Another NPR story during my trip demonstrated just how wary a buyer must be. U. S. District Judge Gladys Kessler ended a seven-year case against tobacco companies by agreeing with the federal government that the tobacco CEOs had conspired to deceive the public about the health risks of smoking for 50 years. The judge ordered the companies to apologize publicly, admitting their conspiracy to deceive, and to stop using euphemization in order to teach the public that problems with smoking can be abated by smoking “light, low tar, mild, or natural cigarettes.” These terms were used to fool the public about what the companies had known since 1954 when CEOs met at a New York hotel to agree to the cover up. The judge described tobacco as, “The highly addictive product that leads to a staggering number of deaths per year, an immeasurable amount of human suffering and economic loss and a profound burden on our national health care system.” The Judge stated that new federal law prevented her from fining the companies the $14 billion that the feds sought.
Again NPR trotted out experts to demonstrate their legitimacy. The experts presented a couple of sides to the story. William Corr, the Executive Director of the Campaign for Tobacco Free Kids applauded. Mark Smith, an R. J. Reynolds spokesman, stated, “We’re gratified that the court did not award unjustified and extraordinary expensive monetary penalties, but we’re disappointed that Kessler found the firms had engaged in conspiracy.” Again the expert opinion is a wash, and dare I say uselessly predictable. No expert on NPR mentioned anything about the fact that the government subsidizes tobacco production through the Department of Agriculture, that antismoking education has been effective only with certain segments of the population, and that the required public apologies would bring smoking to the public’s attention, and therefore, promote it. Since most people in the United States already know that smoking is hazardous to your health because it kills many, the apology ads will simply sell cigarettes. Although none of these opinions were heard on NPR, each was voiced within the a two minute segment on a CBC broadcast from Windsor Ontario that I caught while rolling past Toledo.

In this example, we encounter the market ideology that brings much of the American right and left political ideologies together in the celebration of capitalism and its right to direct modern, and even, postmodern life. The free market worked for 50 years to the misery of millions of people and the cost of billions (estimated $280 billion in company profits and medical costs of 100s of millions). Without government regulation, even with government support, captains of industry and those who work for them put profit above people’s well being. The tobacco companies did not and do not police themselves. Decoding company statements or even the NPR banter would not reveal the deadly consequences of this market ideology; comprehension of companies’ and government’s purposeful deception makes us dupes. Only reading that would enable us to identify the pedagogical strategies the companies used would prepare us to be agents within the construction of our identities within a living democracy. And those critical reading practices are necessary for kids as well as adults because as we’ve learned recently—things don’t go better with Coca Cola or Count Chocula—even in the school lunch lines.

Without a subscription channel to carry you across the country, a driver must punch the scan button to continue constant aural stimulation. That act brings two distinct, but somewhat overlapping, voices to the driver’s ears. Oldies but goodies songs and DJs and Christian preachers seem to rule the airwaves between central Iowa and central Pennsylvania. They are particularly crowded around the 80s and 90s numbers on the dial. I don’t want to get in too much trouble here—so I will tread softly.

First, let me say that oldies aren’t as old as they used to be. Kurt Cobain and Nirvana do not play oldies—despite what some disc jockeys tell you. Dion and the Belmonts performed oldies. “Well I’m the type of guy, who
“likes to roam around” is the perfect song for driving home. As I listened to oldies, my rented Hyundai became my parents’ Ford 300, and I forgot my present in order to invoke the past. Each song invited me to forget the day’s events—29 killed in Baghdad, France balked at leading the peace-keeping force in Lebanon—in order to remember the glories of my youth. Then, life was simple. Shoo doop be do be do, shoo doop be do be do.

The pedagogy of nostalgia is potent. Conservatives hold it as a core value. If the present were like the past, then things would be better, they say without much evidence. Well, my 1950s had American enforced regime changes as well—perhaps you remember Iran in 1953 and Guatemala—one for oil and the other for food. My 60s had American enforced regime changes in Vietnam (South not North) and my 70s had Chile. You get the picture, and remember that those pictures of nostalgia are always air brushed. The pedagogy of nostalgia has the same intention as the magician who points in one direction to hide what she’s doing with the other hand. The pedagogy of nostalgia is powerful politically. Think Morning in America (which was President Reagan’s campaign theme and is still the title of William Bennett’s non-NPR talk radio show). The pedagogy of nostalgia works economically as well because it delivers a certain demographic. Perhaps that’s why station disc jockeys now date their oldies period for their stations, and my era only gets played before dawn, when men my age have to get up to pee.

Radio ministers evoke nostalgia as well—Gimme that Old Time Religion. They teach reading directly. That is, they name, read, and explain scripture to an audience. They promote reading because Christians must learn to read in order to be saved from a horrid afterlife. Reading reveals God’s words, and those words solve the teleological puzzle of human life by giving it purpose. We are here, they say, in order to prepare to live eternally with God’s grace. But life on earth is tempting and confusing. So radio ministers help listeners address those temptations and confusions by naming them and locating scripture that provides answers. Because those answers are not transparent, ministers mediate them. The mediations I listened to on my trip were not offered as interpretations, rather the ministers spoke with and from authority. This is the pedagogical strategy of certainty, in which text is treated as if it were closed with a single meaning. Not a meaning reached by negotiation and consensus, mind you, but one that identified truth. We ignore this revealed truth at our peril.

This, I’m sure you will agree, is a bad reading lesson. Our questioning the authority within and behind text should cut deeper than the decades old debate over readers’ roles in the construction of meaning from/with text. The new debate should center on the positioning work of texts and the political and economic forces that enable that work to be accomplished. The radio ministers spoke for God. That’s a pretty strong authority—even for a lapsed
Patrick Shannon

Catholic like me. As a first generation American of Irish decent, however, I know that there are disputes over God’s truth, even among different sects of faithful Christians. The ministers of each denomination differ on the meaning of scripture—the word of God. So we have multiple Gods with multiple truths depending on which point on the dial we select. Of course, each God has a differing amount of force behind its authority. Trying to understand how multiple Gods and multiple truths are possible is overwhelming and often sorrowful. But even among the radio stations the problem is clearly before us. And beyond the radio airwaves, Lebanon and Israel had just agreed to a ceasefire and Baghdad was still burning. The problems posed by multiple god authorities and multiple truths are clearly literacy issues with multiple texts, many pedagogical strategies, and several ideologies. Dig in at your own risk.

Truth in our field is set by science. The force behind education science, at the moment, is the federal government’s No Child Left Behind and the Education Science Reform Act of 2002, both of which state that scientifically based work is all that matters. I found it interesting, then when NPR reported that day that after seven decades of measurement and testing, scientists were preparing to vote in order to determine if Pluto were to remain a planet. What a great lesson in how language works to change truth and reality to whatever we want it to be. Clarify the definition, vote on truth, and poof Pluto’s gone. How do we explain this to children who have been taught only to struggle with the code and meanings of text and not the claims of authority, the effects of genre, and the intentions to maintain order and hierarchies? Can we tell them that science changed its mind?

The entire story revealed science for what it is—BOGSAT—a bunch of guys sitting around a table making decisions based on criteria that they deem to be important. In this instance the question might seem silly because it doesn’t appear to harm anyone except the poor shmuck stuck with a warehouse full of nine planet mobiles. But when we think about the practice—BOGSAT—to determine definitions and goals, and then, measure truth accordingly, we might identify problems. Think about the science behind the multiple definitions of reading proficiency across the 50 states. Students can become proficient simply by moving across state lines. Consider whether the NAEP test should be the ultimate truth? We cannot look at the pedagogy of certainty with the same eyes after the Pluto closed plebiscite. Who got to vote is only the tip of the iceberg. Who put the item on the agenda? What was their authority? What were the criteria? What does a split vote mean? Does Pluto become a half planet or a planet only certain days of the week? All that is solid melts into air.

Two stories occupied most of the air-time on NPR and other news networks during my drive. The first story announced the arrest of a suspect in the JonBenet Ramsey case. The second speculated that Tiger Woods was well
on his way to winning a twelfth major golf tournament. As you might remember, JonBenet Ramsey was a 6-year-old child beauty queen who was murdered on the day after Christmas in 1996. Perhaps you recall the case and the years of tabloid reporting that followed. The new suspect was arrested while teaching second grade at a private school in Bangkok, and he was to be extradited to Colorado within a week. Sound bites from Mr. Ramsey, two other relatives, the Colorado district attorney, three FBI officials, and a homeland security officer were aired throughout the day as the story grew in size, if not, importance. In effect, the story became inescapable. When scanning, I found that even an evangelical station mentioned the arrest and finished the report with a prayer. This event grew to extreme proportions in the weeks that followed, only in the end to be exposed as a hoax through genetic forensics.

This is a textbook example of the pedagogy of spectacle. It works in two ways. First, it creates desire around the way in which the well-to-do and famous live. They have multiple homes, expensive tastes, and interesting lives, and we do not. They have it easy or appear to have it easy, and we don’t. We should envy them for what they have. When something happens to them, their lives become open for inspection and problems seem all the more tragic. We worry for their families as if they are the only ones to suffer such blows. Second, the pedagogy of spectacle is often to be read as a morality play in which the ways that these others live are scrutinized and judged. Here, the simple life becomes valorized because it does not lead to the moral decadence that swirls around and within the famous. The tension between these two parts of spectacle can be consuming, because we feel bad for the murder of the child, but appalled by the revelations of her exploitation as a sexual object at 6. With each new element the twists and turns become overwhelming as more and more outlets move into the market to create, maintain, and feed our voyeuristic needs.

Tiger Woods is the Mozart of our times—a child prodigy whose father paraded him on the Mike Douglas Show at 3 to show off his swing and to perform tricks. Now 30, Woods is arguably the best golfer ever. On the first day of the PGA Championship, the news was full of the possibility that he could win that tournament. Excuse me, but on the first day isn’t it possible for any participant to win—at least theoretically? It’s premature for the story on victory before the event happens, but there are entire sections of newspapers, journals and even television networks devoted to such speculation on sports.

Two pedagogies are at work here. The first is the pedagogy of sports metaphors. This is a broad category with probably too many sub-pedagogies possible. The text is the scoreboard that shows who won and who lost. Winners get attention and applause because the competition of sports is a metaphor for the competitions of life and survival. In this pedagogy, practice always pays off. Poise is required. Any barriers are overcome. Work hard, they
teach, and you'll be a winner. But many of the other participants practiced often as well. Many people who do not make it to the tournament practice hard. The rest of the pack, however, just doesn't have it—even though they make terrific livings hitting balls and walking over hills and dales. Poor Sergio Garcia has never won a major tournament and has to make do with 1.5 million. And what about the American Ryder Cup team? Just forget about it—those individualist U.S. golfers can't pull together as a team like their European peers, eh? You see how easy it is to get sucked into this—at least if you're male.

A second pedagogy in the Tiger Woods story is one of celebrity in which the famous are just damn fun to watch and read about. Tiger Woods is a celebrity to be sure, allowing cameras into his house to sell Buicks and watches and whatever. He travels to Dubai just to hit golf balls into the ocean off the world's most expensive hotel island. Behind his celebrity is his golf, and he stays a bright celebrity because he wins. Other celebrities are famous for being famous. All the stories and infotainment that surround them teach us what can happen in America. If you become a celebrity, you can become rich and party like it's 1999. Play golf, confess murder or become the American Idol, it's all the same. Once you get the public eye, you have it made.

The JonBenet and Tiger stories occupied the news like a siege. During the early hours of the day, these stories were small, but as the day wore on (13 hours remember) these stories overtook the rest of the news. The only way out was the unthinkable—turn the radio off—something that a driver can only do on a short trip or in order to listen to a book or A Teaching Company course on CD. I have taken these private routes on occasion, but to stay public on that day was to submit to endless angles on the JonBenet Ramsey case and the possibilities of Tiger's weekend. Their ubiquity set the day's agenda for drivers. We were going to relive spectacle and celebrity through true crime and sports. Try as NPR might, the two verdicts—can you remember them at all after our 15 minutes of fame with JonBenet and Tiger?—pale in comparison. You don't have to be a fan of Paddy Cheyefsky and Sidney Lumet's vision of news in the film “Network” in order to understand the direction of this agenda. Civic life is boring in comparison to crime, celebrity and sports. The daily repetition of this agenda develops expectations and habits of mind and action that severely diminish the roles that literacy could play in our lives, leaving us less powerful in the construction of our identities and in the negotiation of public life.

As I crossed the Ohio/Pennsylvania border between Youngstown and Sharon, I recognized the overall lessons of my day in the one-sided public sphere. I had been taught to consume products, services, and most of all ideologies, through a variety of pedagogical strategies and types of texts. Except for the market for gas which was $3.20 a gallon because of a war, suppressed production, pension fund speculation, and a government that
will not challenge the oil industry, no other text asked me what the hell I was doing driving past countless excellent colleges and universities to drop our daughter off in Iowa. Consume, I have been taught that lesson since birth. But should this be the signature American lesson?

Believe experts was the second lesson. If not particular experts, then believe in the idea of expertise. This is the lesson of modernity, eh? We are happy benefactors of this lesson. That is, we are experts on literacy education who believe that we should be consulted when the public considers... well... literacy education. We are puzzled when business or government bypasses our expertise. But remember, expertise is not neutral or innocent or natural as should be apparent from my examples from my day in the car. Expertise is always embedded in ideology, has a political agenda in the questions raised and forgotten, and presents itself as a closed narrative. A consequence of believing experts is a diminished confidence in our abilities to understand complexities.

All day, I was taught to romanticize the past—to long for a simpler life when everything was easier. Tell me, when was that simpler life? How was it simpler? For whom was it simpler? At whose expense? Who made the present what it is? These questions were never posed during my drive.

The most damaging lesson perhaps was the lesson that civic life is boring. My drive taught me to leave making sense of the local and its connections to the regional, national, and global to the experts, while I consume objects and ideas that make me what Nietzsche labeled “the last man,” who has no great passion or commitment to anything on earth, who is unable to hope for the future, who merely earns a living and keeps warm. To turn away from civic life in order to crave private comforts is to abandon democracy.

Let me tell you that it’s a long way from the border to the exact center of Pennsylvania with those four lessons spinning your thoughts. It’s particularly problematic when you believe that you are personally culpable in the teaching surrounding those lessons. I don’t mean that I have anything directly to do with the lessons I’ve used as examples or the composition of the texts that delivered those lessons. While I’ll admit that I engage in school and public pedagogies constantly and that my efforts are pregnant with ideologies, I have not sold my services to the airway or roadways. Rather I’m culpable for not preparing people to live in a democracy. That is, I have not worked successfully to expand literacy education beyond decoding and comprehension in order to include the families of practices that enable readers to see how text positions them and how that positioning enables and disables them as citizens charged with responsibilities to negotiate the past, present and future around the fundamental values of freedom and equality. By not articulating ways in which these families of literacy practices are necessary elements of literacy, and not just add-ons required only for the more
sophisticated literacies of the intellectual and economic elites, I perpetuate a
dismissal of civic responsibilities as boring, too complex, and better left for
the experts.

Fortunately, there are others who are several steps ahead of me. George
Lakoff struggles with this issue from a cognitivist perspective. *Don’t Think
About An Elephant* (2004) and more recently *Whose Freedom?* (2006) dis-
cuss the instantiation of ideological frames through public pedagogies. Frances
Moore Lappe (2006) takes up this topic from a sociological perspective in
*Democracy’s Edge*, which describes the social practices of living democracy
as opposed to the thin democracy that I described today. Kevin Phillips (2006)
looks at the subject through political lens in *American Theocracy*. These are
not wild-eyed radicals who pose utopian solutions. Rather they are Ameri-
can intellectuals from varying ideological camps who see the need for citi-
zens to navigate institutional pedagogies more astutely or democracy will
end. They encourage us to teach reading through coding and meaning re-
sources, but also as pragmatic and critical practices. What they mean by this
is that unless citizens recognize how differing types of texts work and for
whom they work, the lessons I was taught during my drive will expand to
occupy more and more of public space until there is little room for citizens
to participate in the decisions that affect their lives.

These writers do not provide a blue print concerning how this expansion
of literacy education might happen. They leave that work to us. Allan Luke
and Peter Freebody (1997) present a theoretical treatment of a four resources
model that connects coding and meaning with pragmatic and critical practices.
Others employ various versions of that model in classrooms from preschool
to postsecondary. Consider Vivian Vasquez’s (2004) work with 4 and 5-year-
olds in *Negotiating Critical Literacies With Young Children*. Randy and
Katherine Bomer’s (2001) work across elementary and secondary grades in
*For A Better World: Reading and Writing for Social Action*. The classic work
with college students is still Ira Shor’s *Critical Teaching and Everyday Life*
(1980). Cheryl Dozier, Peter Johnston, and Rebecca Rogers (2005) discuss the
education of critical reading teachers in *Critical Literacy/Critical Teaching.*
Read the 20th Anniversary Issue of *Rethinking Schools* (2006) for a collection
of educators working to expand literacy. Each of these authors remains
optimistic about possibilities of literacy within a democracy even within the
darkening spaces of public pedagogy. All critique and analyze the institutional
intentions to close discussion and to protect and extend the present advan-
tages for the few through thin democracy. They and I invite you to take up
critical literacies as counter narratives to our present circumstances. To do so
will help citizens participate more actively in the construction of their civic
identities and the negotiations of free, just, and equitable social life.

My title is a play on Paulo Freire’s *Pedagogies of the Oppressed* (1970). His
argument was that society’s have-nots have been taught that they are beneath the capabilities to make culture and to shape history. Freire thought that literacy could counteract those lessons in order for individuals to reinvent themselves as agents of culture and history. This he labeled the pedagogy of the oppressed. In this talk, I have attempted to reveal more about the oppressors behind what Freire called the banking theory of learning—in which ideas, values, and interpretations are deposited in readers’ minds as facts and truth.

Am I an oppressor? And are you oppressed? I am, only if you accept my words through codes and single meaning without recognizing and evaluating the pedagogical strategies I have employed, the texts I’ve used to state my case as facts, and the ideology behind my work. We all have the intentions to teach others what knowledge is worth knowing, what’s of value, and how to be. We all have a vision of the future and what it should be. I hope that I have left my pedagogy open enough, however, for you to engage my intentions pragmatically and critically. I am only an oppressor if you have limited your literacy practices to codes and meaning, and allowed my positioning and intentions to oppress you. If we hope to end oppression, then we must engage in a social movement to promote critical literacies for all.

References
A Few Words About Sentences

J. Estill Alexander
Leaders in Literacy Forum

Allen Berger

Allen Berger is Heckert Professor Emeritus of Reading and Writing at Miami University, Ohio. Prior to that tenured position he was tenured at the Universities of Pittsburgh and Alberta as well as Southern Illinois. He began his career teaching high school in Utica and Rochester, New York.

Allen has written about 400 articles on reading and writing education. In 1982, he and H. Alan Robinson (Past President of IRA) co-edited a new version of previously published (1950s and 1960s) books about what research reveals for teaching reading in high school. An updated, expanded version, titled Secondary School Literacy: What Research Reveals for Classroom Practice, has been published by NCTE with the endorsement of The National Conference on Research in Language and Literacy. Co-editors with Allen on that publication are A. Jonathan Eakle and Leslie Susan Rush.

Allen has been active in both NCTE and IRA, chairing committees for both, and serving on the team that developed the national standards for reading professionals. He has won many awards, most recently the CRA Laureate Award (2005); he was named as the Outstanding Literacy Educator by both the Ohio Reading Council and the Ohio English Language Arts Council. He has received the Distinguished Achievement Award for Editorial Writing from the Educational Press Association of America.

Allen studied with and was mentored by William D. Sheldon (Past President of IRA), Margaret J. Early (Past President of NCTE), and Leonard Braam (Past President of CRA) of Savannah, Georgia. He lives in Savannah, Georgia.
Abstract

In his address, Allen Berger discusses ways to write clear, simple sentences, how to choose words for those sentences, how to weave sentences into paragraphs, and how to put paragraphs together, without jargon, into opinion/editorials for different audiences. He encourages the involvement of students in critiquing a best draft before sending out a final version to the public or profession.

Some of you may recall Eric Hoffer, the bricklayer who in between laying bricks wrote books. Reflecting on his writing life, he stated: “I could hang onto an idea for years. I could chew on a sentence for months. All that I have accomplished is that I have written a few good sentences. The sentences that I have written are going to stay. They have staying power. I love a good sentence.” (Eric Hoffer in the 90-minute documentary, Eric Hoffer: The Crowded Life, PBS, January 17, 1978)

Why is it so difficult to write a few good sentences? I’m not sure I know the answer to that question. But let me be presumptuous enough to share a few reminders in writing sentences for publication.

Let me interject here, before I continue, a way to focus students’ attention on sentences. Ask, how many sentences are in a newspaper paragraph. Few will come up with the answer: one. Explain why the first sentence tells the whole story, the next has a few more details, and so on. You might then provide a few “facts” for a make-believe news story: a car accident, hit a power pole, two people injured, brought to the hospital, etc. Ask students to be reporters and write a news story of one-sentence paragraphs. Remind students that just as the first sentence is the most important, so too is what’s at the beginning of each sentence. For instance, some students will begin: Yesterday there was a car crash that injured two people, etc. Ask: which is more important, that it happened yesterday? That there was a car crash? Or that two people were injured? So they will revise their sentence to begin: Two people were injured yesterday when their car crashed into a power pole. The next sentence will give more details, perhaps names, etc.

Back to my main point about reminders. First, it is crucial for writers to remember the audience. Writing for teachers is not the same as writing for researchers. You use different sentences. It’s not about talking or writing up or down; it’s about communicating.

When I edited NCTE’s (National Council of Teachers of English) quarterly English Education for seven years, I received many fine articles, but they were for the wrong audience: they were appropriate for English Journal or for the Journal of Reading (now titled Journal of Adolescent & Adult...
Literacy), both of which were for high school teachers mainly. The journal I edited, *English Education*, was for teachers of teachers; that is, mostly professors (a step away from reality). When I returned such articles I wrote a note suggesting one of the other journals, and often I received a reply letting me know that the articles were accepted.

One of the crucial audiences to write for nowadays is the public. When seminal thinker Louise Rosenblatt addressed researchers when she was 97 or 98 years old at the annual meeting of the National Reading Conference, she told the audience: “Be a good citizen. Write for the public.” Yet relatively few researchers know how to write for the public.

Earlier this month, I was at the 50th anniversary of the Reading and Language Arts Center at Syracuse University. The conference concluded with alumni telling what they would like to see in the future. One prominent individual said that he would like students who graduate with a doctoral degree to know how to write for the public. “I have no idea how to write an op/ed,” he said.

Writing an opinion/editorial is extremely difficult and, for me, to write the approximate 500 or 600 words takes between 15 and 20 hours.

If you want to improve your sentences, share your writing with your students and others before publication. Here’s what I normally do. I run off copies of my next-to-final draft for students and ask them to read and make comments in the margins, with particular attention to clarity. When they finish, we discuss their comments. Then I collect all the drafts. The next morning, when refreshed, I throw away all the pages with no comments on them. Then I concentrate on comments they wrote on page one and maybe incorporate some of their suggestions. Then I do the same with page two until the end. What may appear clear to me may not be clear to readers.

Sometimes students are lifesavers. Once I wrote a piece for *Reading Today*, a publication of the International Reading Association. I titled it “Dead People Who Should be Remembered.” I wrote five vignettes (about John Downing, R. Buckminster Fuller, Marion Jenkinson, Eileen Tway, and William D. Sheldon) and shared what I had written with my students. The next day, as I read the student comments, one student—and only one—wrote in the margin at the end of one of the vignettes: Is this person really dead? The person in question and I had been colleagues at the University of Alberta.

I picked up the phone and dialed the number of a former student and colleague who was living in Newfoundland. After a brief conversation I hung up and phoned IRA headquarters and told the editor that one of the people was not dead in the piece I had just faxed. I suggested that he might call the piece “Dear People Who Should be Remembered,” or “People Who Should be Remembered,” or just get rid of that vignette about Marion Jenkinson, which is what happened. The four vignettes appear under the title “People Who Should be Remembered” in *Reading Today*, June/July 1996.
There are many other values in sharing writing with students prior to publication. They learn valuable lessons through your modeling part of the writing process, which they may emulate in their own classrooms. They also learn the value of ethical behavior in submitting something that is the very best they can do; so that the editors or readers won’t have to waste time trying to figure out what you intended.

If you want to shorten a sentence, eliminate unnecessary words. I learned that in grammar school. My teacher used to tell all us little kids to make believe we were sending a telegram and that we had to pay for every word.

To digress again, it’s not only important to write good sentences but also to choose right words. You can do this with your students through a cloze technique with poetry. Just have a line or stanza from a poem with a word missing, and ask students to put in a word that continues the flow of rhythm and meaning, and then compare their words with the word the poet chose. When I was a college student, I had the good fortune to study with Norman Nathan, who introduced me to this concept (before cloze emerged in reading research and pedagogy). He and I co-wrote an article that provides more details. Titled “The Building Blocks of Poetry,” it appears in the January, 1971, issue of English Journal.

Try also eliminating jargon. I once wrote an article titled “Words That Have No Meaning” (Berger, 1994) in which I questioned the sweeping misuse of newer maladies which often shift the blame for poor reading and writing to a mysterious flaw in the brain, when many students so afflicted might profit from a better diet and a good night’s sleep. In that article, I poked fun at a commonly used expression: prior knowledge. I naïvely thought that a person either knew something or didn’t know something and, if there is such a thing as prior knowledge, then what’s prior to the prior knowledge? A friend told me to knock it off because, even though it’s jargon, it’s one of the few things we can agree on.

Let’s conclude with whether a sentence should be passive or active. When I ask students why they tend to write research and papers in the third person or passive voice, or both, I’m told (that they’re told) that it’s more objective. I could never figure that out. So, I went to see how Einstein and Newton wrote, and Newton (1704/1952) simply wrote, for examples, “I measured” and “I made a little hole. . . .” (in Opticks) and Einstein (1916/1931) cheerfully wrote about “our old friend the railway carriage” (in Relativity: The Special and General Theory). Why then do students and others feel they need to write that “it was found that”, or “the investigator measured”, or “the data were collected by the investigator”, when they’re the investigator? Why write convoluted sentences? Surely Newton wouldn’t write that an investigator was sitting under an apple tree when an object that looked like an apple appeared to fall or was dropped upon the investigator’s head.
References
RESEARCH AWARD
A CASE STUDY OF THE IMPACT OF MEDIA LITERACY INSTRUCTION ON AT-RISK YOUNG ADOLESCENT FEMALES’ INTERPRETATIONS OF HETEROSEXUALITY IN MAGAZINE ADVERTISEMENTS

Dissertation Award

Roberta Linder
Aurora University

Abstract

The purpose of this study was to examine how at-risk seventh grade females responded to images of heterosexual relationships depicted in magazine advertisements before and after media literacy instruction incorporating deep viewing (Pailliotet, 1999). Participating in this case study were seven young adolescent females identified as at-risk. Data were gathered from the pre- and post-instruction interviews, physical artifacts, the researcher’s field notes, and written follow-up responses. The results of this study documented increases in the females’ understandings of advertising concepts following the media literacy instruction. In addition, it was concluded that the girls who were able to read the advertisements more critically were also more skilled in comprehending non-media texts. This investigation demonstrated that media literacy instruction within middle school classes should be developed, as skills involved in the analysis of media texts are similar to effective comprehension skills utilized with non-media texts.

Many young adolescent females engage in the reading of popular teen magazines (e.g., Seventeen, Teen People, CosmoGirl, YM) as a source of both information and entertainment (Currie, 1997; DeBlase, 2003; Durham, 1999; Finders, 1996; Zollo, 2004). Throughout the brightly colored pages of
these issues, young adolescent girls are immersed in the themes of fashion, beauty, and heterosexual relationships which have been the foundation of teen magazines for decades (McRobbie, 1991; Wray & Steele, 2002), and these popular magazines contain countless images idealizing these themes. These socially constructed images of femininity (i.e., fashion, beauty, and relationships) are the foci of the featured articles within the teen magazines and are also the basis for the advertisements placed throughout the magazines (Mazzarella, 1999; Signorelli, 1997). Young adolescent females are faced with the reading task of deciphering both the explicit and the implicit messages contained within the articles and advertisements in their popular teen magazines. Luke (1997) urges educators to expand their views of texts and literacy and to assume responsibility for educating students to read both non-media and media texts:

Not to attend to these new cultural forms and texts, not to teach children the value and the constructedness of our media and mediated understandings of how these texts structure experience, knowledge, and social relations, is pedagogically and politically irresponsible. It is irresponsible in an age when current generations are inheriting a technologically mediated world of work and leisure that is significantly different from how most of us grew up. (p. 25)

Literacy educators must assure that their adolescent readers learn to read the messages communicated through the visual and printed elements of media texts.

This investigation focused on two of my major areas of concern as a reading instructor: adolescents' engagement with popular culture and the population of young adolescent females struggling to succeed in the middle school setting. This set of case studies sought to examine the interpretations of young at-risk adolescent females as they viewed advertisements portraying heterosexual relationships and participated in media literacy instruction involving the deep viewing media analysis framework (Pailliotet, 1999). The following research questions provided the basis for my study:

1. What parts of advertisements are used by young adolescent at-risk females when determining the messages in advertisements that portray males and females in images described as sexually explicit, sexually implicit, or sexually neutral?
2. How do young adolescent at-risk females interpret the motivations and messages of the advertisers in the three types of advertisements?
3. How do the young adolescent females respond to the portrayal of adolescent girls and boys in the three types of advertisements?
4. What changes occur in young adolescent females' interpretations of advertisement messages as the result of critical media literacy instruction involving deep viewing?
This study was unique to the field of literacy because it incorporated a media analysis model as the basis for the intervention, addressed the importance of adopting a critical approach to literacy, and utilized a group of participants often marginalized in a traditional middle school setting.

**Conceptual Framework**

The conceptual framework underlying this investigation drew upon the theory and research from three fields of study: critical theory and critical literacy, adolescents and their engagement with popular culture, and media literacy.

**Critical Theory and Critical Literacy**

Scholarly publications and research grounded in critical theory address one or more of the following principles: (a) the interrelatedness of economy, society, and politics, (b) the stance of questioning and critiquing, (c) the relations of power existing in human relations, and (d) the agency of the individual. Several individuals writing from a critical perspective have guided my work as an educator interested in critical media literacy. First, the works of Giroux (1994, 2000) and Gee, Hull, and Lankshear (1996) have demonstrated that literacy and media are influenced by the economic, cultural, and political interests of societies and that readers of media and non-media texts should be aware of the way messages have been shaped by these interests. Next, the concept of power relations is central to understanding the production of media messages. Essays by Foucault (1994/1984) provided valuable insights into the structures of power existing in our everyday relations. Last, the work of Freire (2000) and the four-tiered reading model of Luke and Freebody (1997) both emphasize that the act of reading extends beyond the decoding and comprehending of text. It also requires individuals to read from a critical and analytical stance, leading to reflection and, ultimately, action. In order to prepare children with the skills to meet the reading demands of today’s society, educators should provide opportunities for students to critically analyze both media texts (e.g., newspapers, magazines, movies, television programs, video games, song lyrics) and non-media texts (e.g., narrative and expository texts).

**Adolescents and Their Engagement with Popular Culture**

Young adolescents, such as the females in this study, are undergoing a variety of cognitive, psychological, social, and physiological changes as they enter middle school. Cognitively, young adolescents are becoming less reliant on concrete representations to aid their thinking and are developing the ability to hypothesize about situations and to foresee likely consequences (Piaget, 1972). The lives of young adolescents are often driven by their de-
sires for socialization. Their feelings of self-worth are determined largely by their beliefs about their physical appearance and their social acceptance by their peers (Harter, 1990). Physically, young adolescents witness rapid physical growth, with females maturing one and one-half to two years earlier than the males. Literacy educators have utilized this information about young adolescents to identify factors that contribute to effective literacy educational programs. Young adolescent readers need reading instruction that acknowledges their multiple and shifting identities, an expanded notion of literacies and texts, the individual needs of the learners, and their desire for socialization (Alvermann, 2002; Luke & Elkins, 1998; Moje, Dillon, & O’Brien, 2000; Moore, Bean, Birdyshaw, & Rycik, 1999). Marketers have taken the same information about adolescents to effectively market their products to this group of consumers (Siegel, Coffey, & Livingston, 2004; Zollo, 2004). As adolescents spend greater amounts of time engaged with media and popular culture, they become targets for advertisements declaring that the consumption of materials will provide them with the excitement, fun, beauty, popularity, or peer approval they crave.

**Media Literacy**

Media literacy involves students with accessing, analyzing, evaluating and communicating in a wide variety of forms (Aufderheide & Firestone, 1993). Thoman (n.d.) adds that it is important for media literacy to encourage the consumers of media to raise the appropriate questions about what they watch, listen to, and read. Two approaches to media literacy are most prevalent. The first, the inoculation approach, emphasizes that consumers should scrutinize media so they do not fall prey to negative or false messages from products. Second, the cultural studies approach examines how different segments of society make meaning from media by using a student-centered approach to media production. Although media literacy courses have long been offered in Australia, United Kingdom, and Canada, they are slow to become part of curricula in the United States.

The media analysis framework of deep viewing (Pailliotet, 1999) enables a reader or a viewer to systematically analyze and answer questions about various forms of media. As shown in Table 1, the deep viewing process consists of three levels, with the activities at each subsequent level requiring the reader to engage in a more critical analysis of the text. The deep viewing media analysis framework was selected, because it offered a structure for analyzing media messages which did not require extensive background knowledge in media.
Table 1. Deep Viewing Media Analysis Framework

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>STUDENT BEHAVIORS</th>
<th>COMPONENTS</th>
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<tbody>
<tr>
<td>One</td>
<td>Observe, identify, and describe elements in the medium being analyzed</td>
<td>• Action/sequence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Semes (units of visual meaning)/forms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Actors/words</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proximity/movement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Culture/context</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Effects/processes</td>
</tr>
<tr>
<td>Two</td>
<td>Respond, explore, and construct meaning using data gathered from level one observations to support their explanations</td>
<td>• Summarize, question, compare, and contrast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Explore meanings of key words, images, or ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Form hypotheses, identify purposes and audiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make connections to other texts or experiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Note what is missing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Identify contexts (social, cultural, historical)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Note the author’s strategies and possible motivations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Describe thoughts and feelings</td>
</tr>
<tr>
<td>Three</td>
<td>Synthesize, extend, evaluate and apply their knowledge</td>
<td>• Make connections among personal observations and those of others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Indicate personal likes and dislikes, supporting responses with recorded data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Identify ways group members agreed or disagreed</td>
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<tr>
<td></td>
<td></td>
<td>• Pose questions and develop ways to change the text and/or actions and responses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Describe findings, themes, questions, or issues that seem important or interesting</td>
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</tbody>
</table>

Methodology

Although the research design was primarily a qualitative case study, it also included a quantitative element in order to measure changes in the girls’ understanding of advertising following their media literacy instruction. This investigation drew from studies conducted by Hobbs and Frost (2003) and Hobbs (2004) that examined students’ responses to media messages before and after media literacy instruction. The inclusion of a quantitative component, which measured the changes in the participants’ learning, provided evidence regarding the impact of the media literacy intervention.

Context of the Study and Participants

The seven young adolescent females who participated in this study attended four of my five seventh grade reading classes during the 2005-2006 school year. My classroom was located in a northern Illinois district in the only middle school which houses approximately 1300 seventh and eighth
grade students who are assigned to one of the four teams at each grade level: Academic Academy, Performing Arts, or one of two general education teams. Academic classes in the middle school were 47 minutes in length and met on daily basis for the entire school year. My reading classes were required for students on this general education team, and they contained several students who had been identified for special education or English as a Second Language services. Although the student population was predominantly White Non-Hispanic (89%), the student body was becoming more diverse and the number of students receiving free or reduced lunch was increasing. In addition, the school had been struggling to attain Adequate Yearly Progress (AYP) on the mathematics portion of the Illinois Standards Achievement Test (ISAT).

An initial consultation with other classroom teachers on my team and our team’s counselor generated a list of girls who were considered to be at-risk based on their grades, behavior, or socioeconomic status. Following a review of records, I purposefully selected seven females who attended my classes and who possessed one or more of the following criteria generally associated with the identification of at-risk students (Hixson & Tinzmann, 1990; Land & Legters, 2002; Naff & Fones, 1998):

- Receiving services for students identified as at-risk, struggling reader, or special education based on district guidelines
- Receiving free or reduced lunch
- Living in a single-parent household
- Retained or had a history of academic difficulty

My purposeful selection assured that I had participants representing a variety of reading abilities and at-risk characteristics.

The media literacy intervention lessons involved all of my reading students, but because I was primarily interested in the responses of at-risk females, I sought and obtained student assent and parent consent from each of the seven young adolescent females I asked to participate in the study. The consents allowed me to audiotape interviews, copy physical artifacts, and record field notes, which are described in the section on data collection. Table 2 lists the at-risk characteristics of the 7 participants. The student participants selected the pseudonyms appearing in Table 2 and in the remainder of this manuscript.

In addition to their unique at-risk characteristics, each girl also displayed distinctive reading abilities and interests. Two of the girls, Alivia and Theresa, exhibited above average reading abilities as measured by their performances on the state reading assessment, and their contributions to class discussions were consistently insightful and demonstrated their effective use of comprehension strategies. However, the girls differed in their preferences of reading materials. Alivia chose to read the popular teen fashion and music maga-
zines, enjoying their features containing celebrities, clothing, or quizzes and displaying their posters on her walls at home. Theresa was an infrequent magazine reader, preferring instead to read novels, which she would always carry with her school materials.

Although their reading skills were not as strong as Alivia and Theresa, Mandy and Jamie’s test scores and completed assignments indicated that they had reading abilities that were adequate for success in their seventh grade classes. However, they achieved below average and failing grades due to inconsistent assignment completion. Although struggling to achieve success in school, both girls were avid readers. From the classroom library, Mandy frequently checked out novels with animals, and outside of school she liked reading *National Geographic* and *Teen*. In her teen magazines, Mandy enjoyed reading articles about celebrities and new bands, horoscopes, and song lyrics. Jamie also engaged in reading teen magazines, usually a couple of times a week, and she always looked forward to reading the gossip columns and checking out the posters.

The three remaining girls, Terena, Tinkerbell, and Jameice, experienced difficulties with reading. Terena’s past state test results in reading generally fell in the “below average” or “warning” range. However, her consistent homework completion along with support from her special education teacher helped her achieve average grades in her classes. Tinkerbell struggled with reading comprehension although her oral reading was fluent and expressive, and she would often rush through her assignments. Many times, assignments were not turned in at all. Jameice was a very reluctant reader in

<table>
<thead>
<tr>
<th>STUDENT (PSEUDONYMS)</th>
<th>AT-RISK CHARACTERISTICS</th>
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</thead>
<tbody>
<tr>
<td>Mandy</td>
<td>Free or reduced lunch</td>
</tr>
<tr>
<td></td>
<td>History of academic difficulty</td>
</tr>
<tr>
<td>Jameice</td>
<td>Single parent family</td>
</tr>
<tr>
<td>Alivia</td>
<td>Free or reduced lunch</td>
</tr>
<tr>
<td></td>
<td>Mother &amp; stepfather</td>
</tr>
<tr>
<td></td>
<td>Group for at-risk girls</td>
</tr>
<tr>
<td>Theresa</td>
<td>Single parent family</td>
</tr>
<tr>
<td>Jamie</td>
<td>Free or reduced lunch</td>
</tr>
<tr>
<td></td>
<td>History of academic difficulty</td>
</tr>
<tr>
<td></td>
<td>Foster placement</td>
</tr>
<tr>
<td>Tinkerbell</td>
<td>History of academic difficulty</td>
</tr>
<tr>
<td></td>
<td>Brother &amp; girlfriend</td>
</tr>
<tr>
<td>Terena</td>
<td>LD support services</td>
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</tbody>
</table>
the classroom although state test scores indicated that she possessed adequate reading skills. Her grades were low due to incomplete assignments and low test scores. Despite their struggles with seventh grade academics, all three girls were enthusiastic magazine readers. Terena, a member of the girls’ basketball team, preferred reading *Sports Illustrated*, but Tinkerbell reported reading teen magazines, especially *Seventeen*, several times a week. Jameice liked to read *J-14* and *People* magazines because they had pictures of young people and some of her favorite recording artists.

These seven young adolescent females possessed a wide range of reading abilities and interests. However, they all engaged in reading popular teen magazines that provided them with information and pictures related to their interests in sports, fashion, celebrities, and music.

**Data Collection**

As a teacher participant observer, I delivered the media literacy instruction and collected the data for this inquiry. The study proceeded through five phases beginning in early November, 2005, and concluding in early April, 2006:

1. A survey, which was completed by all my reading students to identify their magazine reading practices and the types of magazines read, was given approximately 2 weeks prior to media literacy instruction.
2. Pre-instruction interviews were conducted in after-school sessions which lasted approximately 30-45 minutes with the seven female participants.
3. Media literacy instruction was conducted with all students during their regular reading class periods.
4. Post-instruction interviews were conducted in after-school sessions with the seven female participants prior to winter break.
5. Follow-up meetings were conducted with each girl to obtain written responses during April, 2006.

Data were collected from three primary sources throughout the investigation, establishing methodological triangulation (Stake, 1995): interviews that were audiotaped and transcribed, physical artifacts produced by the girls as they participated in the media literacy instruction, and the field notes I recorded as I acted as teacher participant observer in the research.

**Media Literacy Instruction.** The introductory activity, in which the students described elements in the media text, represents level one of the deep viewing process. In this activity, the students engaged in an exploration of advertisements in different types of pre-selected teen magazines. I had purposefully packaged three issues of the same magazine (*Game Pro, GameNow, Road and Track, Entertainment Weekly, People, Popular Hot Rodding, YM, Seventeen* (two envelopes), *Car and Driver* and *Alternative Press*) in large
manila envelopes. Once each team of students selected the magazine with which their group preferred to work, they were given the corresponding manila envelope.

The students were asked to examine their chosen magazine and collect data regarding the advertisements. The survey (see Appendix A) asked the students to record three types of information: (a) the number of pages containing ads that were 1/4, 1/2, 1, 2 or 3 pages in size; (b) the types of products that were advertised; and (c) the types of people featured in the advertisements (ethnicity, age, and gender of the models). Even though they were working in small groups, each student was asked to fill out the survey instrument using an advertisement that was found in her/his magazine.

Following the data collection, the students’ second activity was to summarize their data by completing a series of sentences based on information recorded on their sheets. The following sentences guided the students’ summaries of the data:

1. In my magazine, (name of magazine), the largest number of ads covered (1/4, 1/2, 1, 2 or 3) pages which equaled ___% of the pages in my magazine. Altogether, ___% of the pages in my magazine contained an advertisement.

2. The two products featured most often in my magazine were ____ and ____. Altogether, ___% of the ads featured these products.

3. The ads in my magazine featured people who were ____, ____, and _____. I found no ads (or very few ads) with people who were ____.

4. Three things I learned about ads in magazines were:

This summarization activity represented a level two activity in the deep viewing process, using the data from level one to form a summary.

The final part of this exercise involved a class discussion in which the groups investigating the different magazines now shared their findings. Students were then able to compare and contrast the findings from the various magazines being examined, leading them to discoveries about the pervasiveness and content of the advertisements. For example, students discovered that differences existed across magazines regarding the number of pages containing advertisements (e.g., teen and gaming magazines had the most, entertainment magazines had far fewer) and the ages and genders of the models in the advertisements. All groups noted a lack of racial diversity in the advertisements and an absence of older or handicapped persons used as models in the ads. This concluding exercise, which encouraged students to articulate their findings and to look for connections among the different groups, represents level three in deep viewing.

**Pre- and Post-Instruction Interviews.** The interviews employed a focused interview format (Yin, 2003) and contained three types of survey
questions that elicited the girls’ responses to three clothing advertisements, shown at both interview sessions. The first type of survey question was related to the six components of the deep viewing process, listed in level one of Table 1 (e.g., Describe what is taking place in this advertisement. What advertising technique was used in the ad? What thing(s) are used by the advertiser to attract a readers’ attention? Which pictures or words gave you clues about the target audience?). The second type of interview question asked the girls to interpret the messages of the advertisements (What is the message of this ad?), and the final type elicited their responses to the portrayals of females and males depicted in the advertisements (e.g., Why do you think the advertisers pictured the female/male this way? What is your opinion about the way the advertisers chose to picture the female/male? Explain).

When selecting the advertisements to be viewed and interpreted by the girls, I wanted to utilize magazines I knew were read by girls in my classes (i.e., Seventeen and CosmoGirl), which were current relative to the time of the study, and which provided images representing three portrayals of heterosexual relationships (i.e., explicit, implicit, neutral). The first advertisement was two-pages and advertised the Arizona Jean Company. It was from the September 2005 issue of Seventeen and featured three young adults, two female and one male, on the porch of a lodge that appeared to be located in a beautiful mountain resort region. The two girls were pictured on the left page, both facing and smiling at the male, who was pictured on the right page holding a pair of deer antlers pointed in toward his head, not on his head like a deer. The models in the advertisement were not dressed in a sexual or revealing manner, their attire consisting of jeans topped with two layers of shirts. In small black print across the white clouds in the sky and above the heads of the girls on the left page was the question, “Where’s a tranquilizer dart when you need it?” On the opposite page, in the bottom right corner was the sentence, “No matter where you are, you’re always in . . .” followed by the Arizona Jeans logo. Above the logo was the company website, and below the logo was the phrase, “Available at J. C. Penney.” The Arizona Jean Company advertisement represented a sexually neutral portrayal of a heterosexual relationship (i.e., friendly, nothing suggestive or provocative).

The second advertisement took two-pages to advertise American Eagle clothing, found in the August 2005 issue of CosmoGirl. In this advertisement, a couple was kissing as they sat on the floor of a library. Books were stacked on the floor around them and also on the bookshelves in the background, taking up most of the area of the left page. On the right side, filling almost the entire page with their image, was the kissing couple. The models were attractive, dark-haired, and appeared to be in their late teens/early 20s. The male was wearing a pink polo shirt over a t-shirt with a yellow and black striped necktie loosely tied and draped around the upturned collar of his
shirt. He also wore two woven bracelets on his left wrist and held an opened book in his hands on his lap. The girl's clothes were barely visible, but it appeared that she was wearing some kind of plaid jacket over a white shirt and flip-flops on her feet. Both were clad in blue jeans with the hems turned up. In the upper left corner on the left page was the name of the company and its website in small white letters, and in the bottom right corner on the opposite page was the information, “29 styles, 24 washes, 8 fits,” in larger white lettering. Running across both pages in large, red, upper-case letters was the slogan “LIVE YOUR LIFE,” in which the American Eagle image is the V in LIVE. The American Eagle clothing advertisement characterized a sexually explicit portrayal of a heterosexual relationship (i.e., involving sexual contact such as kissing).

The third advertisement came from the September 2005 issue of Seventeen contained the full-page advertisement for plugg jeans (See Figure 1). The featured couple was partially clad, displaying tattoos on their arms, clinging to each other, and gazing at each other in a very sexual manner. The female wore only a black, bra-like top and blue jeans that were thread-bare above the left knee. Her lips were slightly parted, long dark hair somewhat tousled, and her tattooed right arm hooked over the neck of the male as he held her behind his back. She supported herself by grabbing the male’s left pant leg with her left hand, and his left hand braced her elbow. A pair of low-rise, khaki-colored jeans and boots were the only items of clothing worn by the male. He displayed a tan, muscular torso, short hair, and tattoos on his left forearm and right shoulder. The shoulder tattoo was the dog with

Figure 1. Advertisement for Plugg Jeans (Sexually Explicit)
spiked collar that was featured in other advertisements for plugg jeans. The background appeared to be New York City with a body of water behind the couple and the Statue of Liberty in the distance. Near the bottom, right corner of the page printed in white was the slogan, “Get USEd to IT!” with the name of the company printed in larger letters below this. The website was in the smallest letters in the corner of the advertisement. The advertisement for plugg jeans depicted a sexually implicit portrayal of a heterosexual relationship (i.e., involving provocative poses and/or clothing).

As the girls viewed these three advertisements in separate interview sessions, I read the questions from a copy of the survey, took notes related to their responses, and audiotaped their comments. The tapes were later transcribed and analyzed.

**Physical Artifacts.** Copies of student work samples were gathered throughout the media literacy instruction. Examples of student work included the magazine reading survey, guide sheets and written responses that accompanied two videos about advertising, responses to the first deep viewing practice activity, selection and labeling of three advertisements, completion of the advertisement project, and the follow-up written responses related to the texts of the advertisements viewed during the interviews.

**Field Notes of the Researcher.** Throughout the interviews and the media literacy instruction, I acted as teacher participant observer, recording and documenting the girls’ involvement with the advertisement activities as well as other behaviors related to their at-risk status (e.g., behavior referrals, suspensions, parent conferences).

**Data Analysis**

Transcripts of the interviews, copies of physical artifacts, and field notes were coded and analyzed for recurring themes utilizing open and axial coding (Strauss & Corbin, 1990). During open coding, themes emerged from analysis of the girls’ written and verbal interview responses and their completion of media literacy classroom activities. A reorganization of these themes during axial coding led to new insights related to the girls’ interpretations, particularly connections to their use of comprehension strategies.

For the quantitative element of this study, data were analyzed following the coding of students’ responses to the questions in the survey, “Why do you think the advertisers pictured the female this way?” and “Why do you think the advertisers pictured the male this way?” The girls’ responses were audiotaped, transcribed, and then coded on a scale of 0 to 3 points by myself and an independent rater, achieving 95% interrater agreement. In instances where ratings differed, the scoring of the independent rater was used for analysis. The coding protocol was developed following a preliminary study
conducted during the spring of 2005 and is similar to a system used by Hobbs (2004) to analyze students’ responses to open-ended questions about advertisements. More points were assigned to responses demonstrating a more sophisticated understanding of the role of the image in the advertisement. The system of coding is shown in Table 3.

Table 3: Protocol for Rating Students’ Responses

<table>
<thead>
<tr>
<th>POINTS</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 points</td>
<td>No response or incorrect response</td>
<td>“Don’t know.”</td>
</tr>
<tr>
<td>1 point</td>
<td>Makes a general comment describing the female/male or about the commercial nature of the advertisement</td>
<td>“Because the girl looks sexy” “To get people to buy this product”</td>
</tr>
<tr>
<td>2 points</td>
<td>Refers to the ability of the ad to attract attention</td>
<td>“So it will catch people's attention, mostly guys”</td>
</tr>
<tr>
<td>3 points</td>
<td>Connects the emotional response of the consumer with the purchase of the product</td>
<td>“So girls will think they can attract guys if they wear the perfume”</td>
</tr>
</tbody>
</table>

The ratings were analyzed with the computer software Statistical Package for the Social Sciences (SPSS 12.0 for Windows) using the Wilcoxon signed-ranks test to determine the significance of any changes as a result of the media literacy instruction.

Trustworthiness was established in a number of ways throughout the investigation. Methodological triangulation of data was established through the variety of data collection sources (i.e., interviews, physical artifacts, field notes). As teacher participant observer I acknowledged that I was viewing this research through the lens of a middle-aged, middle class white female whose perspective regarding teen magazines differed from that of the young adolescent females in the study. I also modified the order of advertisements and questions in the second interview session in order to minimize a possible test effect and utilized an independent rater for the coding of the participants’ responses to reduce bias in the rating of the responses.

Findings

This study sought to determine what parts of advertisements the young adolescent females used when interpreting the advertisements, how they interpreted the motivations and messages of the advertisers, how they responded to the portrayals of males and females, and what changes occurred
as a result of their involvement in a critical media literacy unit with deep viewing (Pailliotet, 1999). The following sections present the findings related to each of the four research questions.

**What Parts of the Advertisements Were Used by the Girls to Determine the Messages in Advertisements that Portray Males and Females?**

The majority of the responses provided by the girls during both their pre- and post-instruction interviews made references to the images of the models, and from these responses, three categories emerged. First, the girls commented on the apparel of the models, identifying their clothing with the product being advertised or with the sexual manner in which the models were portrayed. The girls' reactions to the attire of the scantily clad female in the plugg ad revealed mixed interpretations. Jameice was one of the girls who rejected the manner in which the female was portrayed, stating, “I don't think they should have pictured her like that 'cause she looks, like, she just looks nasty.” Mandy, however, found nothing wrong with the manner in which the female was pictured, “I think it’s fine, really. She’s not really showing anything. She’s not really doing anything.” However, none of the girls strongly objected to the male wearing only his low-rise jeans and a pair of boots in the plugg advertisement, although Mandy felt that perhaps he could have worn a tank top.

Second, the girls noted the actions of the models when they were identifying the most important element in the advertisement, which was most often the male, or when they were describing what would attract a reader's attention. Jameice’s response, “I think, like, they got the man holding the deer antlers so, like, if you were just flipping through the pages, you might stop to see what they’re selling 'cause he looks he’s pictured kind of funny” describes how the male’s actions in the Arizona Jean advertisement could attract attention.

Third, the expressions of the models were described when the girls were determining the friendliness or sexiness being portrayed by the models. However, the girls' interpretations varied depending on the explicitness of the advertisement. Their responses all identified the friendliness of the models’ expressions in the sexually neutral Arizona Jean advertisement, but the facial expressions in the sexually implicit plugg advertisement elicited a wider range of interpretations.

Although the participants most frequently referred to the images of the models, they did make some references to the texts of the advertisements, most frequently the brand names printed in the advertisement. However, I noticed that the girls often incorrectly responded by reading the slogans or parts of the texts when answering certain survey questions, specifically when they were asked to identify any pictures or words that helped them identify the
target audience. For example, Tinkerbell responded with “Like this thing, like ‘No matter where you are, you are always in Arizona Jean Company.’” After noting the difficulties the girls experienced with the texts of the advertisements, I followed up later in meetings in which I asked them to write their interpretations of the texts from the advertisements. Even when questioned directly, the girls experienced difficulty comprehending the texts and relating them to other elements of the advertisements (i.e., the images of the models, the product).

**How Did the Girls Interpret the Messages and Motivations of the Advertisers?**

Initially, the young adolescent females responded that the message of each advertisement was simply to sell the product or have the reader buy the product. Prior to the media literacy instruction, only two of the participants recognized that the advertisements were constructed to appeal to the emotions of the reader, creating a need for the product. Following the instruction, five of the seven young adolescent females recognized the emotional appeal in one or more of the advertisements. For example, in her response to the American Eagle advertisement, Theresa noted, “It’s like, if you buy American Eagle jeans, you will have a better relationship with your girlfriend or get more dates.”

The quantitative component of the study confirmed that the girls became more aware of the emotional appeals created by the images following the media literacy instruction. Results revealed that in four of the six instances coded, the mean ratings of the post-instruction responses increased, indicating that the girls’ comments contained more references to the emotional appeal generated by the images in the advertisements (see table 3 for explanation of ratings). The greatest difference in the girls’ responses involved their perceptions regarding the image of the male in the American Eagle advertisement, $Z(6)=-2.00$, $p=.05$, a statistically significant change. Descriptive statistics for the quantitative component of the study are summarized in Table 4.

**Table 4: Descriptive Statistics for Survey Question—Why Do You Think the Advertisers Pictured the Female/Male this Way?**

<table>
<thead>
<tr>
<th>IMAGE IN ADVERTISEMENTS</th>
<th>PRE-INSTRUCTION</th>
<th>POST-INSTRUCTION</th>
<th>T</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Female—Arizona</td>
<td>1.86</td>
<td>1.22</td>
<td>1.29</td>
<td>0.76</td>
</tr>
<tr>
<td>Male—Arizona</td>
<td>1.57</td>
<td>0.79</td>
<td>2.33</td>
<td>0.82</td>
</tr>
<tr>
<td>Female—American Eagle</td>
<td>1.71</td>
<td>0.76</td>
<td>2.14</td>
<td>0.69</td>
</tr>
<tr>
<td>Male—American Eagle</td>
<td>1.57</td>
<td>0.79</td>
<td>2.14</td>
<td>0.69</td>
</tr>
<tr>
<td>Female—plugg</td>
<td>2.14</td>
<td>0.38</td>
<td>2.29</td>
<td>0.76</td>
</tr>
<tr>
<td>Male—plugg</td>
<td>1.43</td>
<td>0.98</td>
<td>2.14</td>
<td>1.07</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Based on positive ranks. \textsuperscript{b}Based on negative ranks. \textsuperscript{p}=.05
How Did the Girls Respond to the Portrayals of the Males and Females?

Three categories emerged from the girls’ pre- and post-instruction responses to the images of the male and female models. First, the girls based their comments on three types of details contained in the advertisements as described in the section What Parts of the Advertisements Were Used by the Girls?: apparel, actions, and expressions of the models. Although their interpretations were in agreement regarding the friendliness of the images depicted in the Arizona advertisement, comments varied in response to the images in the sexually implicit plugg advertisement.

Second, the girls’ responses reflected their personal beliefs or preferences. Repeated comments from Jameice revealed her unquestioning acceptance of male authority within heterosexual relationships (e.g., “I don’t know, just ’cause he’s the man”), and Mandy made frequent references to the need for reliance upon one another in a relationship. The girls’ comments demonstrated how they had internalized some of the socially constructed ideas regarding femininity and masculinity.

Third, some of the participants relied on constructed scenarios when providing their responses. For example, Terena talked about the relationships the boys and girls in the advertisements must have had with their parents. Jaime concluded that the male and female in the American Eagle advertisement must have been boyfriend and girlfriend before going to the library, and she also described a scenario in which the male in the plugg advertisement was holding up the female because if he were to drop her, the current was probably strong and would pull her under.

What Changes Occurred as a Result of the Girls’ Participation in Critical Literacy Instruction?

As the girls became more analytic in their interpretations of the advertisements, a number of changes occurred in their responses. First, they began noting and referring to more of the details in the advertisements to support their responses. When asked to provide descriptions of the actions in the advertisements, responses were lengthier and more thorough in the post-instruction interviews. The girls also identified and described more objects in their post-instruction interviews. Second, the post-instruction comments of the girls made more references to the photographic techniques utilized within the advertisements. For example, Terena noted that the female was positioned higher than the male in the American Eagle advertisement, and Alivia mentioned that the models in the plugg advertisement were the largest images and were in the center. Third, by attending more closely to the details in the advertisements, the girls were more accurate in identifying the target audiences of the advertisements, particularly with regard to race and
age. In their pre-instruction interviews, the girls tended to select all races as being the target audience and often included the 10-13 year-old group, but following the instruction the girls noticed the lack of diversity in the advertisements and the older models that were pictured. Fourth, following the media literacy instruction, the girls’ responses were more specific when referring to the manner in which specific emotional appeals were used in the advertisements. For example, Jameice made this comment about the advertisement for plugg jeans, “I guess they saying if you wear them, you’ll get a woman or get a man or something.” Initially, the girls were aware that advertisements were designed to attract a reader’s attention, but they were unable to identify the underlying message being communicated to the reader.

Conclusions

Four questions guided my investigation into the interpretations of the seven at-risk young adolescent females as they viewed advertisements: what parts of the ads were used, how they interpreted the messages and motivations of the advertisers, how they responded to the portrayals of the females and males, and what changes occurred in their interpretations as a result of the media literacy instruction. The following sections present conclusions for each of the four questions and relate media analysis skills to processes of effective comprehension.

First, the females in this study relied most often on the images of the advertisements when forming their interpretations. However, their replies were relatively similar when referring to the sexually neutral advertisement of Arizona jeans but displayed more variations when responding to the sexually implicit advertisement for plugg jeans. In addition, the difficulty the girls experienced in comprehending the message of the written texts or in understanding how the texts related to the products or images seemed to indicate a weakness in supporting responses with details stated in a text. Second, data from the study supported by my knowledge of the girls as readers indicated that the girls who displayed the stronger skills in comprehending narrative and expository non-media texts were also the ones who provided more critical readings of the advertisements. Third, I also noted that the readers with the stronger skills were less likely to respond to the portrayals of the females and males with personal preferences or constructed scenarios. The more highly skilled readers used print and visual details from the advertisements to support their responses. Fourth, as a result of the media literacy instruction, the girls were more proficient in analyzing the elements in the visual composition of the advertisements, a valuable skill in a society that communicates extensively with visual images.

In response to the third and most unexpected finding, I engaged in
additional review of the literature related to the comprehension processes used by good readers (Duke & Pearson, 2002; Pressley & Afflerbach, 1995; Pressley & Wharton-McDonald, 1997). Several comprehension processes were identified because of their relevance to the participants’ interpretations of advertisements:

- Draw from, compare, and integrate prior knowledge with material in the text
- Read different kinds of text differently
- Infer connotations of the word and sentences in texts, going beyond literal meanings
- Make inferences about the author’s purposes, intentions, effects on readers, audience
- Integrate different parts of text and their interrelationships

In particular, these processes attracted my attention because they were used less strategically by some of the participants. For example, lack of prior knowledge hindered some readers from making connections to the scenery in the background of the Arizona advertisement. The less strategic readers had difficulty applying comprehension processes to advertisements and making connections between the print and visual elements of the advertisements. Because of the limited context provided in the printed text and the implicit messages of the slogans, some participants struggled to understand the meanings conveyed in words. Although the girls initially had not realized that advertisements, like other texts, had authors with specific purposes and audiences in mind, the media literacy instruction helped them gain a greater understanding about the construction of media messages.

Further examination of literature led me to conclude that various components of the deep viewing media analysis framework, as seen in Table 1, correlated with several of the most commonly cited effective comprehension processes. Table 5 highlights the major points of comparison between five processes for effective comprehension and the deep viewing media analysis framework.

As a result of my experience with and investigation into media literacy instruction utilizing the media analysis framework of deep viewing, I have witnessed firsthand the transformation of students’ reading skills as they engaged in the three levels of the deep viewing process. The students learned to first gather data and describe the elements of their advertisements (see Appendix 1), then to construct meaning based on their observations and descriptions, and finally to extend and apply their knowledge. Throughout the process they developed effective comprehension strategies such as summarizing, inferring, predicting, and using prior knowledge.
Table 5: Relationship Between Effective Comprehension Processes, the Understanding of Non-media Text, and the Deep Viewing Analysis of Media Texts

<table>
<thead>
<tr>
<th>Comprehension Process</th>
<th>Non-Media Text</th>
<th>Media Text (deep viewing)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prediction</strong></td>
<td>Using existing knowledge to speculate about up-coming events or ideas</td>
<td>Using knowledge gained in level one to form hypotheses and make predictions about the media text (level two)</td>
</tr>
<tr>
<td>(Block &amp; Pressley, 2003; Duke &amp; Pearson, 2002; Oczkus, 2004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Questioning</strong></td>
<td>Generating questions about the texts that have been read</td>
<td>Generating questions about the visual and textual elements in media texts or the intent of the author (level two)</td>
</tr>
<tr>
<td><strong>Imagery</strong></td>
<td>Producing an internal visual image based on the text or a more concrete mnemonic representation</td>
<td>Using the deep viewing sheet to record data or the mnemonic device to determine target audience (GRAM) (all three levels)</td>
</tr>
<tr>
<td>(Allington, 2001; Block &amp; Pressley, 2003; Duke &amp; Pearson, 2002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prior Knowledge</strong></td>
<td>Reflecting on what is already known about a text; used in prediction</td>
<td>Gathering data about the media text in order to facilitate more in-depth analysis (level one)</td>
</tr>
<tr>
<td>(Allington, 2001; Block &amp; Pressley, 2003; Oczkus, 2004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summarizing</strong></td>
<td>Synthesizing the most important ideas from text content</td>
<td>Summarizing what was seen in the text (level one)</td>
</tr>
</tbody>
</table>

**Implications**

The findings and conclusions of this study may have several implications for literacy educators, teacher educators, and for future research. However, when generalizing the findings of this study, the limitations should be kept in mind. First, it must be noted that only seven female students participated in the study, and they attended school in a blue-collar, working-class community. Second, the advertisements selected as containing explicit, implicit, and neutral portrayals of heterosexual relationships were chosen by the researcher, thereby representing the interpretations of a white, middle-aged female. Third, the responses of the female participants may have been influenced by their relationship with the researcher, who served as participant observer and media literacy instructor for the study. As a result, the girls’ comments may have reflected “school-type” answers in which they stated what they thought the teacher wanted to hear.
**Literacy Educators**

First, I would like to recommend that literacy educators utilize texts of popular culture as a component of their middle school language arts curriculum. By including popular culture texts such as magazines, teachers can communicate to the students that their texts are valued and important. Teachers would have opportunities in which they and their students could read the messages in these texts with a critical eye.

Second, by sharing the student’s out-of-school literacies, personal connections can be fostered between teachers and their students as they learn about each other. In addition, teachers would always have knowledge of the literacies currently in their students’ lives.

Third, I would like literacy educators to recognize the need to help students develop comprehension skills related to both printed and visual components of texts and the interrelatedness of these components. Instruction in these skills would also strengthen students’ understanding of textbooks and internet websites.

Fourth, I would ask that teachers begin to recognize that media literacy instruction may provide another alternative for developing effective comprehension skills. By developing instructional practices that include popular culture texts and methods of media analysis, literacy educators can help their students develop a larger repertoire of reading skills that prepare them for their media-saturated society.

**Teacher Educators**

First, teachers, both preservice and inservice, should adopt an expanded notion of the meaning of text. Magazines, video games and their manuals, song lyrics, textbooks, movies, and television programs are all examples of contemporary media and non-media texts. In addition, as part of a research agenda, teacher educators could investigate different media models to determine which could be incorporated into language arts classrooms without extensive training in media literacy instruction (Pailliotet, 1999; Semali, 2005) in order to demonstrate that adding media-based literacy instruction does improve the outcomes of classroom literacy instruction. Teacher educators hold the key to the future inclusion of media literacy instruction within language arts classrooms.

**Future Research**

This study has indicated the need for further research in many areas. First, future investigations could examine young adolescents’ responses to different types of advertisements, perhaps those designed for non-commercial purposes (e.g., abstinence, voting, tolerance) or their responses to different parts of magazines (i.e., quizzes, letters to the editor, advice columns) to determine which improves the student’s education and builds their com-
prehension skills the most. Next, research could investigate the responses of readers as they interpret other types of texts constructed with images and textual elements (e.g., content area textbooks, websites, nonfiction trade books) to determine their impact on students' learning. Third, researchers could examine the reactions of young adolescent males to media instruction, perhaps identifying a type of literacy that would engage reluctant male readers to develop better comprehension reading skills. Such research would help develop a body of literature demonstrating the similarities in comprehension processes necessary for reading and understanding both media and non-media texts. In this manner, media literacy instruction will be viewed as a necessary component of a comprehensive literacy program to improve the outcomes of classroom literacy instruction.

References


## Appendix A: Data Collection Sheet for Introductory Activity

### Magazines and Their Advertisements

<table>
<thead>
<tr>
<th>Amount of page covered by ad(s)</th>
<th>Tally</th>
<th>Your math computations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2 page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/4 page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 pages</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of product featured in ad</th>
<th>Tally</th>
<th>Your math computations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of people featured in ad</th>
<th>Tally</th>
<th>Your math computations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
NAVIGATING
INSTRUCTIONAL
DESIGN
Preservice Teachers’ Interactions While Tutoring Primary Grade Children

Beverly J. Timmons
Denise N. Morgan
Kent State University

Abstract

This study describes the teaching interactions and decisions of two effective early childhood preservice teachers as they tutored a kindergarten child. Effective tutors must have an understanding of the reading process and of their student as they make on the spot teaching decisions to support working at the child’s point of need. Findings indicated that the two preservice teachers were able to offer strategic instruction at their students’ point of need, to flexibly engage in interactive moves that provided necessary support for their students, and demonstrate a reflective stance as they considered the efficacy and appropriateness of their prompts.

Teaching reading is a complex process. The findings from The National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction (Hoffman et al., 2005) suggest that there is a positive influence of strong teacher preparation programs on teaching in the classroom. However, much needs to be learned about how programs support preservice teachers’ development as thoughtful decisions makers (Anders, Hoffman, & Duffy, 2000). Roskos, Riskos, and Vukelich (1998) remind us that the “heart” of literacy preservice education is strong. That is, teacher educators are well aware of instructional goals. However, the “head” (how class experiences and assignments help preservice teachers reach instructional goals) is less clear. At this point, the field of teacher preparation is still grappling with what constitutes effective practice in reading teacher preparation (Anders, et al.). As teacher educators and researchers, we are committed to systematically
examining our own practice, by engaging in data driven reflection, in an effort to better understand what our preservice teachers are learning to do (Duffy & Atkinson, 2001; Massey, 2002). Teacher educators and teacher researchers often closely examine course assignments to study the impact on preservice teachers' learning (Massey, 2002; Roskos & Walker, 1994). In previous work (Morgan, Timmons, & Shaheen, 2006), we documented that preservice teachers found tutoring one child to be a valuable experience, an assignment that provided a “safe space” to observe, assess, and problem solve as they orally coached young readers. The purpose of this study is to continue investigating this tutoring assignment by describing how preservice teachers interacted with their tutoring child at the child's point of need.

Theoretical Framework

Our study is informed by research from the fields of effective literacy teaching and tutoring, preservice teacher education, tutoring education, and teacher reflection. Research on reading has demonstrated the importance of helping primary children develop as strategic, independent readers. To help develop this independence, teachers must understand the complex nature of the reading process, plan for appropriate instruction, analyze errors or miscues “on the run” and possess the ability to quickly and efficiently provide feedback to students that foster their growth as self-extending readers (Clay, 1991, 2001; Schwartz, 2005). It is not enough for teachers to know “what” to teach, they must also understand “how” to provide supportive interactions that impact learning (Taylor, Peterson, Pearson, & Rodriguez, 2002). Effective teachers coach students to success more than they tell students the answer (Pressely, 2001); engage in active instruction, taking a “watch me or let me demonstrate” approach, and provide personalized, targeted responses using clear, specific language (Allington, 2002). The best instruction occurs through on-going interactions, as teachers make instructional decisions in light of their students’ reading behaviors (Duffy & Hoffman, 1999).

An examination of research on tutoring furthers the importance of interactions in literacy learning contexts. Rodgers (1999, 2004/2005) has studied the work of successful and unsuccessful Reading Recovery tutors. She initially based her work on models of scaffolding (Wood, Bruner, & Ross, 1976; Wood, Wood, Ainsworth, & O’Malley, 1995) in which successful tutors demonstrated understanding of both the task and the student. She extended their work to reading by emphasizing that teachers must also decide what errors to attend to and what kind or level of assistance to offer. Rodgers identified four categories of interactional moves: telling, demonstrating, directing, and questioning. These categories provide a clear framework for understanding how effective teachers interact with students.
It is crucial that preservice teachers develop both the disposition and expertise to provide the supportive interactions documented in the effective teacher research. To do so requires a reflective stance that frames teaching as a problem-solving process (Duffy, 1998). Through Schon’s work (1983, 1987), we have come to understand teaching as a thoughtfully recursive process based upon reflection-in-action. The teacher considers and adjusts instructional dialogue and actions while teaching. Reflection-on-action later occurs as the teacher reviews and revises plans based on in-action perceptions. This problem solving approach, difficult for experienced teachers (Schwartz, 2005), becomes even more complex when working with preservice teachers who are only beginning to view teaching as a thoughtful problem-solving process.

Preservice teachers typically hold strong beliefs about teaching based on their observations of what teachers do during their prior school experiences (Richardson, 1996). As beginners, preservice teachers seek practical knowledge. When teacher educators provide assignments that focus on thinking about teaching, preservice teachers often fail to see connections between this reflective course work and their practical growth as teachers (Pope & Yeung, 1996). Massey (2002) found that, although her preservice teachers could “voice” course concepts, many had difficulty in applying concepts to lesson plans. Preservice teachers need to develop a deep understanding of the processes of teaching reading, their ability to adjust instruction, and a sense of efficacy to problem solve the application of newly learned strategies in working with individual students (Duffy & Hoffman, 1999).

Increasingly, teacher education programs are turning to field-based experiences to provide opportunities for preservice teachers to link the theoretical knowledge of methods courses while working with children in classrooms (Sailors et al., 2004). Roskos et al. (1998) emphasize the importance of providing learning opportunities that engage preservice teachers in problem solving while working in classroom contexts. Several researchers have reported tutoring as an experience with rich potential for preservice teachers to apply theoretical knowledge in a school setting (Duffy & Atkinson, 2001; Fang & Ashley, 2004; Massey, 2003). Furthermore, these researchers emphasize the importance of self-study, that is, the on-going reflection in and on practice that is integral to the research of teacher educators.

Previously, we have studied the impact of our own tutoring assignment that emphasizes tutoring as individual decision-making observations. We found that preservice teachers appreciated the “safe space” of tutoring as a place to problem solve without needing the classroom teacher’s approval or having to modify their instructional plans to fit a predetermined curriculum (Morgan et al., 2006). However, our research left us with further questions. We wondered about the nature and quality of the teaching interactions our preservice
teachers had when their students experienced reading difficulty. We also wondered if we could see evidence of our preservice students engaging in the types of interactional moves such as telling, demonstrating, directing and questioning. Our research questions were: (a) In what ways did the preservice teachers interact/help their student at point of difficulty? (b) What kinds of interactional moves did the preservice teachers make while tutoring their student? (c) What other insights emerged from studying our preservice teachers’ interactions that will help us continue to refine our own practice?

Method

Context of the Study

At our university, preservice teachers take four literacy courses in the early childhood program. The first literacy course focuses on language development of children, ages birth to preschool. The second literacy course focuses on beginning literacy instruction for grades K-3. At the time data were collected, we both served as professors for this course. While enrolled in this course, preservice teachers have a field placement in partnership schools in one of five neighboring schools. The preservice teachers tutor one child for 20-30 minutes during the school day for approximately 10 sessions in their field placement. The preservice teachers select their student with input from their cooperating teacher.

In this course, we focus on beginning reading instruction, with the goal of helping preservice teachers understand how students develop as readers. Attention is given to understanding concepts about print, early reading behaviors, the cueing systems, how to provide support to students at reading difficulty, in addition to exploring instructional methods (read aloud, shared, independent and guided reading, word study), and assessments (running record, spelling inventories). We want preservice teachers to understand their role in helping students develop a self-extending system, one in which students learn from their encounters with reading to help them with future reading tasks (Clay, 1991, 2001). We emphasize learning how to teach for strategies, to teach in such a way to help support and promote students’ development as strategic readers.

In designing our tutoring assignment, we hoped to support both responsive strategic teaching and teacher reflection and decision-making. We do not require preservice teachers to follow a specific format, but rather encourage preservice teachers to carefully observe and to develop plans for subsequent sessions based on their observations. It is common in education to talk with preservice teachers about capitalizing on the teachable moment. In reading, the teachable moment occurs when a student experiences difficulty while reading. We define reading difficulty here as the point where the
beginning reader comes across an unknown word, hesitates, stops, or skips a word. The preservice teachers complete a tutoring write-up following each lesson. We specifically asked preservice teachers to self-report two to four teaching encounters they believed were important interactions they had with their student during a particular session. We identified a teaching encounter as when the student first encountered difficulty in reading and asked the preservice teachers to provide a moment-by-moment verbal and nonverbal exchange until the child was able to continue reading. We did so to focus the preservice teachers' attention to their in-action responses. Preservice teachers also reflected on each exchange to illuminate their thinking and decision-making while interacting with students. Each week we read the reports and responded with questions or suggestions as well as included conversations about the tutoring process in class. At the completion of their tutoring experience, preservice teachers wrote a tutoring reflection highlighting what they learned about their child and what they learned from this experience.

**Data Sources and Analysis**

We used a case study approach to provide an in-depth understanding of how two successful preservice teachers interacted with a tutoring child (Merriam, 1998). From our combined 50 students, we each selected one student to study, for a total of two cases. We selected students who demonstrated a high level of understanding and ability to match instruction to their student’s need. We felt these cases would be information rich (Merriam) and provide us with a greater understanding of what these preservice teachers could apply while working with a child.

Both preservice teachers selected for this study were of European-American background, female, and in their early 20s. Each tutored a kindergarten child. Margaret’s teacher selected Sally, a child who was just beginning to use first letter cues late in the kindergarten year. The teacher hoped that tutoring would provide additional support that Sally seemed to need to move from reading pictures to reading words. Heather worked with Julie, already an advanced kindergarten reader, in the fall. The teacher hoped that Heather would support Julie’s growth as an early reader. (All names are pseudonyms.)

Data collected included the weekly tutoring write-ups, the students' final reflections, and field notes. Each week the preservice teachers chose to report two to four teaching encounters per lesson. Our data set included a total of 62 teaching encounters across the 10 week period. In addition, the first author supervised both students at their field site. She observed both preservice teachers tutor their students, and her observational notes detailed several of the preservice teachers’ teaching encounters. These field notes were used to verify the interactions reported by the preservice teachers.

Using the constant-comparative method (Lincoln & Guba, 1985) we
looked across teaching encounters for evidence of what preservice teachers attempted in their teaching. In our first round of analysis, we examined what action the preservice teachers took to help their student at the point of reading difficulty. We then determined if preservice teachers offered strategy instruction and if so, what kind (looking at the picture, looking at the first part of the word, etc.). During the second round of data analysis, we identified the preservice teachers’ interactional moves using the following categories: telling, demonstrating, directing, and questioning, as identified earlier by Rodgers (2004/2005). Once we identified emerging categories, we initially analyzed the data for our own preservice teacher. Then we independently coded the data for each other’s preservice teacher. We were in agreement on our codes 95% of the time and came to consensus on those differing items through discussion. In the results section, we used a code to reference the data. For example, in the code (H, 5.4) the letter represents the first name of the preservice teacher, followed by the number representing the tutoring session and the number of the teaching encounter. Lastly, we examined the teaching encounters and final reflections to search for additional insights about their learning that would inform our future work with preservice teachers.

Results

First, we asked how the preservice teachers would support their students at the point of difficulty. The two preservice teachers were able to apply their understanding of the reading process as they interacted with their student through engaging in various prompts. Secondly, we found the preservice teachers engaged in various kinds of interactional moves, moves that are similar to what Rodgers (2004/2005) found that effective tutors used with their students. Thirdly, to help refine our own practice, we found several issues to consider as we work with future classes.

Offering Help at Points of Difficulty

Teachers have to make many on-the-spot decisions while listening to a child read. When the child makes an error, the teacher must contemplate whether or not to address the error. If the error is addressed, the teacher must take into account the child’s current strengths as a reader, while deciding what to call to the child’s attention to support successful problem solving. These decisions occur quickly. This is challenging for many practicing teachers. It proves to be even more challenging for novices just learning about the reading process, learning how to look closely at students, and learning about the kinds of help you can provide students. Often preservice teachers apply ideas from their own school experiences (Massey, 2002) with many believing instructing a child to “sound it out” as the most helpful (and sometimes only) advice to offer a child who is having difficulty.
The preservice teachers offered three kinds of help at the point of reading difficulty for the child: (1) prompting the child, (2) telling the child the word, and (3) letting the error go (not calling attention to the error, so the child continues reading). In addition, one preservice teacher sometimes named what she noticed the child doing when the child problem solved. Because prompting was a rich category, we further examined that category to specifically name what strategies the preservice teachers used, since helping students become strategic is an important step in fostering children’s reading ability. We found that these two preservice teachers provided students with multiple strategies that seemed appropriate when the students were having difficulty. (See Table 1). Specifically, Margaret and Heather prompted their students to closely examine some part of the word, by either directing their attention to the first letter of a word, the last letter of a word, or looking at the beginning or ending part of a word. Heather also prompted her student to look at the picture.

Table 1. Categories of Help Offered at the Point of Difficulty

<table>
<thead>
<tr>
<th></th>
<th>Margaret</th>
<th>Heather</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prompting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Looking at picture</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Looking at first letter</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Looking at last letter</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Covering up part of the word</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Naming the child’s action</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Telling the child the word</strong></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Letting errors go</strong></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Focusing on Parts of Words.** Margaret’s prompts were focused on supporting her early reader’s beginning use of first letter clues. In eight cases, Margaret directed Sally to look at the first letter of the word such as when Sally misread washer for cleaner (M, 2.1), driver for farmer (M, 2.2), and lovely for muddy (M, 4.1). During the last few sessions, Margaret began to direct Sally’s attention to the end of words. For example, when Sally consistently read “this” for “that,” Margaret slowly “stretched” the words “this” and “that,” asking Sally to listen for difference in the ending sounds (M, 5.2). Margaret expanded her type of prompt as she observed Sally develop increasing independence in using first letter cues.

In four cases, Heather directed her student Julie to attend to the first letter mismatch when Julie said rat for mouse (H, 4.2), girl for hiker (H, 6.2), singing for acting (H, 7.3) and gloves for mittens (H, 8.3), but asked Julie to look at the last letter when she read door instead of dad (H, 8.2). In another case, it made more sense to not focus on just a single letter but rather look
at a part of the word. When Julie read ball instead of dodgeball, Heather covered up the beginning part of the word (dodge) so Julie could just see ball. Once Julie reread ball, Heather uncovered the first part of the word asking her what else she noticed. Heather applied different prompts and used different interactional moves based on her analysis of the difficulty of the word, the student, and the kind of help that would help the student be successful in reading the word.

**Looking at the Picture.** In addition to focusing on aspects of a word, Heather also offered many different kinds of help to Julie. For example, Heather directed her to look at the picture when the picture would support Julie’s attempt to problem solve the word. This was a prompt she used judiciously. In an interaction the following week, she did not ask Julie to look at the picture when she knew that looking at the picture would not offer the kind of support Julie needed continue reading.

**Naming What the Child Did.** During these interactions, Heather often chose to report times when she noticed what Julie was doing and then tried to name those actions for her. In one instance, Julie was trying to read the word toothbrush and initially began sounding it out. She said /t/, /too/ but then looked at the picture and said “toothbrush.” Heather noticed this and used this opportunity to let her know, “You just did two really good things when you didn’t know that word. You looked at the beginning of the word and then looked at the picture to help you. That is what good readers do all the time” (H, 7.1). In this example, Heather closely watched Julie to see what she was doing. By paying attention to her student, Heather could see her look at the picture to help with her reading of that word. What Heather named at the end of the child’s problem solving helped solidify what the student did.

**Telling the Word.** Heather also made the decision to tell Julie a word; so that her reading could continue smoothly. She did this three times. In all instances, the words were difficult or ones that Julie could not easily analyze. For example, Heather told Julie the word “whose” because it was written as “who-o-o-se” and while Julie read “who,” it was clear to Heather that she did not know what to do with the rest of the word, because of its unusual look on the page. Heather explained that the word was written to look like it was coming from an owl and told her the word was whose (H, 6.3). In another example, the last page of a predictable text read: “clever happy monkey” (H, 3.2). In this case, Heather told Julie the word was clever after she attempted to make the /c/ sound twice. Clever is not an easy word for a young reader to get to by looking closely at the letters or from picture support. Heather gave Julie the word, a decision reflecting Heather’s growing knowledge that sometimes it is most helpful for the teachers to supply the word, so that the reading can continue without too much disruption.
Letting Go. In deciding what to attend to, a teacher must also decide on what to let go. In three instances, Heather made a decision to let the error go. In one instance, Julie read *bug* instead of *beetle*. Heather said she let that error go because, “it made sense, it started with the same letter, and in all honesty, I would not have known what it was from the picture” (H, 4.2).

Engaging in Multiple Interactional Moves

Teachers must teach in flexible ways; they must modify their instructional moves to best represent what that student needs at that time and what move will best help the child succeed. Rodgers (2004/2005) found that effective tutors engaged in four types of instructional moves in efforts to support their students' growth toward independent strategy use: (a) demonstrating (taking the student’s role in performing a specific action), (b) directing (prompting the child to take a particular action), (c) questioning (asking the child), and (d) telling (stating or revealing the correct response). We found evidence that preservice teachers engaged in all four kinds of interactional moves while tutoring.

Demonstrating. At the point of difficulty, preservice teachers frequently took on the student’s role to demonstrate for their students what actions they might take in order to look more closely at the beginning, word part, or endings of words. Preservice teachers often demonstrated using their fingers to cover or reveal single letters of words. Early on, Margaret typically covered all but the first letter of a word to show her child how focusing on just the first letter can aid in problem solving the word. Heather also covered parts of words. When Julie misread girl for hiker, Heather covered the word leaving just the “h” visible. She then asked, “If that word was girl, what letter would it start with?” (H, 6.2). We noticed that preservice teachers’ demonstrations were frequently followed by an act of directing or questioning, a move that immediately called the child to action.

Directing. Both Margaret and Heather directed their students to engage in various strategic behaviors during each point of problem solving. Most frequently, the students were directed to look closely at some aspect of the word. Because Margaret focused on helping her child use first letter cues, she typically asked her student to look at the word more closely while getting her mouth ready to say that sound (M, 2.1). Several times Heather directed her child to look at the picture to check her reading. In addition, Heather directed Julie to reread in 12 of the 18 encounters. Using directing moves, the preservice teachers handed over more responsibility for reading to their students.

Questioning. Questions were used to help the children pay close attention to both meaning and visual information. Margaret questioned Sally to reflect on the semantic content of her reading, “That does kind of make
sense, doesn’t it?” (M, 4.1). More typically, Margaret used questioning to help her student think about the sounds of letters. For example, when Sally miscued jumped for rolled, Margaret used a series of questions to help Sally attend to sounds, “What does the word begin with? What sound does r make? Now does /r/ sound like /j/?” (M, 4.2). Heather used questioning to nudge Julie to think a bit more about her reading, “That didn’t make sense, did it?” (H, 6.3). Questioning also helped Heather better understand what her student knew. In one example, when Julie read a sentence with expression, Heather asked, “Why did you change your voice?” In listening to Julie’s response, Heather learned that Julie knew the purpose of an exclamation mark (H, 8.1).

**Telling.** When telling, the preservice teachers provided their tutoring students with some necessary information. Both preservice teachers engaged in telling when their student encountered a word or word part that was too complex for the child to read. Margaret realized that she wanted to help Sally attend to first letter sounds. Margaret directed Sally to “Get ready to say the first letter,” and told her, “The end of the word says “armer” (M, 2.2). In addition to telling words and word parts, Heather provided Julie with specific information to aid in problem solving, such as informing her that the misread word did indeed begin with the same letter as the word in the text (H, 8.2) or when she told Julie that, “This page isn’t like the rest of the story. Sometimes the author makes the last page completely different” (H, 3.2). We noticed that both frequently used telling to confirm what their students did well while reading. Margaret frequently told her student, “I liked how you looked at the picture” (M, 2.2; 3.1; 4.1). Heather told her student, “You just did two really good things when you didn’t know a word, you looked at the beginning of the word and then you looked at the picture to help you. That’s what good readers do all the time” (H, 7.1).

We found the preservice teachers did not use these instructional moves in a singular fashion; rather they used them flexibly, orchestrating the different forms of help to support the child’s problem solving attempts. They frequently made on the spot decisions about how to best support their students’ new understandings. Tables 2 and 3 illustrate a problem solving exchange for each preservice teacher highlighting the different interactional moves used within a single exchange.
## Table 2. Margaret’s Interactions

<table>
<thead>
<tr>
<th>SESSION 4.2</th>
<th>KIND OF HELP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Text:</strong> “And the pig rolled in the mud.”</td>
<td></td>
</tr>
<tr>
<td><strong>Student:</strong> And the pig jumped in the mud.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> It does look like they could be jumping doesn’t it?</td>
<td>Questions</td>
</tr>
<tr>
<td><strong>Student:</strong> Yeah.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> Let’s look at that word again. What does that word begin with?</td>
<td>Directs, Questions</td>
</tr>
<tr>
<td><strong>Student:</strong> r</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> What sound does r make?</td>
<td>Questions</td>
</tr>
<tr>
<td><strong>Student:</strong> /r/</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> Now does /r/ sound like /j/ in jumped?</td>
<td>Questions</td>
</tr>
<tr>
<td><strong>Student:</strong> No.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> (covered up the ‘ed’ just showing ‘roll’) Get your mouth ready to say the sound.</td>
<td>Directs</td>
</tr>
<tr>
<td><strong>Student:</strong> Roll.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> (uncovered ed)</td>
<td>Demonstrates</td>
</tr>
<tr>
<td><strong>Student:</strong> Rolled. And the pig rolled in the mud.</td>
<td></td>
</tr>
</tbody>
</table>

## Table 3. Heather’s Interactions

<table>
<thead>
<tr>
<th>SESSION 4.2</th>
<th>KIND OF HELP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Text:</strong> “This is my home, said the mouse.”</td>
<td></td>
</tr>
<tr>
<td><strong>Student:</strong> This is my home, said the rat.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> (covered up the word, leaving the m visible) If that word were rat, what letter would you expect to see at the beginning? Rraat?</td>
<td>Directs, Questions</td>
</tr>
<tr>
<td><strong>Student:</strong> r</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> Let’s check.</td>
<td>Directs</td>
</tr>
<tr>
<td><strong>Student:</strong> Mouse.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> How’d you know that?</td>
<td>Questions</td>
</tr>
<tr>
<td><strong>Student:</strong> It’s an m.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher:</strong> Okay, let’s read it again.</td>
<td>Directs</td>
</tr>
</tbody>
</table>

## Insights to Refine our Teaching

Developing a strategic approach to supporting struggling readers requires teaching in new ways. By studying the preservice teachers’ interactions we found it possible to see what, we as teacher educators, need to address in our future classes. We identified three areas for attention in future coursework. One issue needing attention is the importance of providing clear, specific...
praise. The preservice teachers varied in their quality of praise to their tutoring student. Margaret believed that Sally needed to develop confidence in herself as a reader and praised her at each exchange. However, 14 of Margaret's 18 praise statements were general, “Great, good job!” and did not offer Sally specific feedback on her use of reading strategies. In contrast, Heather typically offered specific praise so important in confirming for children how they are growing as readers, “You just did two really good things when you didn’t know that word. You looked at the beginning of the word and then looked at the picture to help you. That is what good readers do all the time” (H, 7.1). Helping preservice teachers understand the importance of specific praise is something that can further their understanding of teaching readers.

A second issue needing attention is that of helping students weigh their teaching decisions to determine the most crucial strategy. Heather made teaching decisions that did not always help her tutoring student. Heather allowed Julie to continue reading “I’m” for “I am” (H, 5.1). She felt it was a good mistake, because the meaning was not changed, so she decided not to correct her. However, the child is no longer matching one to one, which is often a more pressing issue. Although Heather’s thought process indicates her willingness to let things go, which is important, she needs to better understand the complexity of weighting decisions. In cases like this, preservice teachers need help in considering which teaching interaction trumps another.

A third issue is the need to continue to develop preservice teacher’s ability to reflect in and on practice (Schon, 1983, 1987). Both preservice teachers demonstrated their ability to reflect upon their on the spot decision making and after the fact decision making. Margaret used on-going observations as a basis for her decisions. When her student misread “muddy mud” for “lovely mud” Margaret considered, “I was going to use the prompt, ‘Does that make sense?’ but from the picture, muddy mud could have almost made a little sense. But this is not what the word said. Therefore, I wanted her to look really closely at the word” (M, 4.1). Heather’s student read about an alligator and said “splash, splash, splash” for text that read, “snap, snap, snap.” Heather asked her if that made sense. Julie replied that it did make sense because splash is the sound the crocodile makes in the water. Heather reflected:

Once she gave me her explanation, I realized that it really did make sense. I was not sure if I should give her any more cues to use; so I simply gave her the word. I am not sure if asking her to look more closely at the word would confuse her more. I am still torn about my decision. I somewhat wish I would have had her look at the word to see if she could notice the /sn/ cluster (H, 5.4).

This evidence is encouraging as it shows that preservice teachers are able to take on reflective behaviors through problem solving, an important quality
of effective teachers (Allington, 2002; Schwartz, 2005). Continuing to support and further extend preservice teachers’ ability to reflect in and on practice is critical. Identification of these specific issues provides us with a focused direction for our future work as teacher educators.

Discussion

Our study is limited in that we focused on two successful preservice teachers’ interactions with their students. These interactions were not audiotaped; rather the preservice teachers reported these encounters in their tutoring write-ups. Despite these limitations, there are three findings that illustrate the value of engaging preservice teachers in developing their teaching abilities through tutoring.

**Preservice Teachers Can Offer Strategic Instruction**

Findings indicate that preservice teachers were able to teach for strategies and could adjust instruction to create a match between the child’s current knowledge and the difficulty of the text. Teaching for strategies supports students developing their own self-extending system as they learn to help themselves as readers. The tutoring setting provided repeated opportunities for preservice teachers to not only try out strategies, but to do so in a way that overall, provided a good match with the child’s reading needs. When given an opportunity to observe, think, and respond, our best preservice teachers were able to do so in ways that were responsive to the developing needs of their child.

**Preservice Teachers Can Flexibly Provide Different Instructional Support**

Effective tutors must make many decisions when working with students in considering how much and what kind of help to provide. Preservice teachers demonstrated an ability to use a repertoire of interactional moves found in effective tutors (telling, demonstrating, directing, and questioning) flexibly during their teaching encounters, calling upon different actions to provide necessary support to their students. The orchestration of moves, the flexibility of combining strategies and appropriate interactions at the point of need is an important aspect of becoming an effective teacher.

**Preservice Teachers Can Reflect In and On Their Teaching Decision**

The findings provide evidence that preservice teachers are able to not only apply instructional moves flexibly, but they then reflect upon them, possibly influencing their next encounter. This beginning ability to question their decisions helps demonstrate a level of sophistication as not merely judg-
ing something as helpful or not helpful, but rather trying to determine why something did or did not help the child move forward. Our findings indicate that the tutoring assignment that emphasized the reporting of encounters provided repeated opportunities for reflecting in and on teaching.

**Implications for Teacher Education**

By studying two successful students we were able to learn what is possible for preservice teachers to apply in a tutoring situation. Findings from our present study increase our confidence in the efficacy of how we have fine-tuned the tutoring assignment. Knowledge gained from our first study helped us understand how and why the preservice teachers valued the tutoring assignment. However, we also identified a need for improvement and adjusted the assignment to emphasize the interactional component of teaching. Our teacher educator/research process suggests two implications for literacy teacher education.

**The Importance of Studying Preservice Teachers’ Work to Improve Assignments and Course Instruction**

In our first study, we learned that preservice teachers valued the tutoring experience, believing it to be a “safe space” to observe children and try out strategies (Morgan et al., 2006). We wanted to strengthen this instructional space. We did so by requiring the preservice teachers to capture their specific teaching encounters. By adjusting the assignment to include the reporting of teaching encounters when tutoring, we were able to determine specifically what the preservice teachers did when a child encountered difficulty and the various interactional moves they utilized. In this way, we could see their understandings about teaching readers and examine their application of course content in a tutoring situation. In addition, by studying these assignments, it is possible to identify pertinent issues to address in future classes to further refine preservice teachers’ knowledge of teaching readers. We join with others (Duffy & Atkinson, 2001; Massey, 2002) in identifying teacher educator research as a basic element of good preservice practice.

**The Importance Of Tutoring As An Assignment**

We again add our voices (and the voices of our preservice teachers) to support the value of tutoring as an effective preservice assignment. Preservice teachers value practical experiences in applying course concepts and building confidence. Tutoring is one such assignment that seems to provide a space for preservice teachers to thoughtfully apply knowledge and strategies in response to a student’s reading needs. Additional research is needed to explore other kinds of assignments that are both valued by preservice teachers and are rich in learning experiences.
Effective tutors must consider their knowledge of the reading task, their student, and the amount and type of help they should give when making on-the-run teaching decisions (Rodgers, 2004/2005). Preservice teachers need support and experiences that help them encounter the complexity of teaching readers. Just as preservice teachers support their tutoring students in orchestrating reading behaviors, it seems that offering preservice teachers tutoring opportunities supports them in learning how to orchestrate their teaching interactions.

References


RECONNECTING THE DISCONNECT: CREATING A SERVICE LEARNING EXPERIMENTAL PROGRAM THAT LINKS THEORY AND PRACTICE TO MENTORED APPRENTICESHIPS

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Abstract

This paper describes a service learning pilot program designed to establish a link between literacy coursework at the university level (theory), hands-on classroom experiences (practice), and home-school connections (community). The pilot service learning group consisted of 24 preservice teacher candidates enrolled in their first literacy class at a university in Northeast, Ohio. Literacy students in the experimental group were partnered and then assigned to an elementary school teacher (grades 1, 2 and 5) in an urban school in Northeast, Ohio. Assessment of university students’ responses to the project took multiple forms including a self-assessment rubric designed by the university students, a survey instrument developed by the authors, and a service learning focus group discussion. Each of these instruments provided information to help determine if students were connecting university coursework and instruction to the authentic teaching and professional development.

Over the past two decades, several community colleges, private colleges and state universities have required preservice teacher candidates to participate in service learning experiences as a component to their teacher preparation program. Kindsvatter, Wilen, and Ishler (1992) referenced the...
importance of creating teachers who make wise choices within a decision-making continuum by considering the range of extremes represented on a continuum of possibilities. Service learning experiences provide new teachers with the opportunity to learn appropriate decision-making within a supportive environment prior to student teaching experiences.

In addition to providing decision-making opportunities, service learning experiences offer strong connections between theory and practice. Vacca et al. (2006) theorized that a teacher’s professional development is “built from the inside, as we interact with people, ideas, processes and things” (p. 44). Their explanatory framework is a constructivist model based on the interactions of personal knowledge (personal experiences), professional knowledge (an on-going study of the practice of teaching), and practical knowledge (experiences within the context of the classroom and community).

The roots of service learning can be traced back to John Dewey (1938) who, “emphasized the principles of experience, inquiry and reflection as the key elements of the theory of knowing in service learning” (Eyler & Giles, 1994, p.3). He determined that educative experiences should: “(a) generate interest, (b) be worthwhile intrinsically, (c) present problems that awaken new curiosity, (d) create a demand for information” (p.5). Needless to say, Dewey’s philosophical wisdom has greatly influenced modern day scholars, such as Janet Eyler (2000), who wrote:

Service learning, which actually allows students to confront issues and problems in complex natural contexts, appears to be ideally suited to help students develop a deeper understanding of subject matter, a practical knowledge of how community decision making processes work and strategies for transferring knowledge and problem solving skills into new information. (p.3)

Nationwide, today’s schools have a rapidly changing demographic base that has become transformed by multicultural influences. In contrast, many of the students in our midwestern teacher preparation programs come from a primarily monocultural environment grounded in European American beliefs, standards, and values. It is important that our education majors become sensitive to, and appreciate the social context of, schools and communities, and also develop an understanding of how the culture of the school and community will impact their instructional interactions with students. With this in mind, teachers can respond to linguistic and cultural differences in their classrooms by scaffolding instruction in the use of vocabulary and comprehension strategies, and by creating classroom environments that encourage discussion and cooperative work (Vacca & Vacca, 2005).

An old adage states, “It takes a village to raise a child!” Although the research offered in this paper will not examine the rearing techniques of
children residing in communal villages, it will discuss how a small group of dedicated individuals including a university instructor, a service learning coordinator, 24 university education majors and four inner-city elementary school teachers collaborated on a service learning pilot program that sought to address a disconnect between college theoretical instruction, practical classroom applications and community interactions.

**Service Learning Requirements**

The research and pilot program for this study were conducted at a public university in Northeast, Ohio. Students majoring in early childhood and middle level programs were required to complete four courses in literacy education. These courses taught students strategies, methods and practices related to early and emergent literacy, literacy learning in the content areas, the teaching of multiple literary genre, and literacy assessment and evaluation. Three of these courses required the completion of a 10 hour service learning component. Traditionally, these service learning hours were self-selected by the university students from a wide pool of schools and community agencies.

**Observing the Disconnect**

As we observed our undergraduate students, read their summative service learning reflections, and debriefed them about their service learning experiences, we discovered chasms existed between the literacy theories taught within the coursework and the reality of practice within public school classrooms. There were several instances when university students indicated that they were apprehensive about venturing into a classroom or service organizations for the first time without the combined guidance of a university professor and classroom teacher. Students expressed some concerns about never having been engaged in lesson plan creation for real students, literacy engagement with children, individual tutoring, small group instruction or working in a low SES, urban school setting.

An examination of the university’s current service learning practices revealed a disconnect between the critical components described in accepted definitions such as this one offered by Bringle and Hatcher (as cited by Butin, 2003):

Service learning [is] a course based, credit bearing educational experience in which students (a) participate in an organized service activity that meets a community need, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciate of discipline and an enhanced sense of civic responsibility. (p. 1676)
Other than the final written reflection, students had little or no opportunity to share or discuss their experiences with their peers, the university instructor or the service learning coordinator during the service learning program. Additionally, some of the service learning experiences required little or no active engagement with classroom students, because teachers and service sites sometimes misunderstood that service learning, unlike observation, required university students to be actively engaged. During classroom discussions, preservice teachers often stated that classroom teachers had asked them to sit quietly and observe. Consequently, preservice teachers who may have wanted to become involved in classroom activities sometimes developed passive attitudes. In other instances, classroom teachers complained that the service learners were nonparticipatory in their classrooms, or they lacked experience working with children. Obviously there was a miscommunication related to service learning and its purpose, as well as the preservice teacher’s role within the classroom environment.

The incongruity of defining roles between the classroom teacher and the university students became a second disconnect during the service learning experience. Many classroom teachers needed to understand the true essence of service learning as a type of active, experiential learning for preservice educators. When related to an educator’s instructional growth over time, service learning experiences are often the first professional development opportunity for university students in authentic classroom settings. Gallini & Moely (2002) state, “A well planned service learning course in which the service learning activity is coordinated with course concepts will challenge students and develop their interest and motivation in the content of the course” (p. 14).

Addressing the Disconnect

These divisive concerns led to the development of a pilot service learning program whereby classroom teachers would provide genuine literacy experiences for university students with the intent of melding literacy theory with active classroom practice.

It was our belief that students also needed to be scaffolded into the process; baby steps that would permit them, as peer partners, to be gently “apprenticed” into the classroom environment with the guidance of the university instructor, support of the service learning coordinator and mentorship provided by the classroom teacher. According to Swick and Freeman (2003), who cite research from the Commission for the States (1999), “Service learning is not a form of ‘make work’ or simply ‘students doing good things in a community’ but instead, ‘involves learning and using real academic skills, performing needed service and producing real results that command respect” (p. 108). Sleeter (2001) extended this thinking by stating, “Teachers and
preservice students, who talked together about what it means to teach real students in their classes well-learned to ask more complex questions, examine themselves more deeply and question how schools respond to student diversity” (p. 101).

**Scaffolding an Pilot Service Learning Program**

The 24 participants in the pilot service learning program came from a single university literacy course classroom. Except for one African American student and one Asian Pacific Rim student, 22 of the women were white, and most were under the age of 24, with the exception of two students who were between the ages of 25 - 40. As part of the regular coursework requirement, the university students were asked to generate a lesson plan that would be discussed and shared with their peers during course time through simulated instruction. In the pilot service learning program, peer partners were asked to generate and teach two related lessons to a group of six to eight elementary school students at the service learning site. The university students were partnered with a classmate seeking similar licensure. Early childhood majors were placed in a first or second grade classroom, while middle level students were assigned to a fifth grade classroom. Students were given their teacher assignments and asked to spend 2 to 4 hours of their service learning time in the classroom observing and interviewing (also a class requirement) the teachers with whom they would be working.

The student partners were asked to develop two sets of activities that could be sent home to reinforce the strategies that were part of their lesson plans. These “outreach packets” were to be designed to build university to school to home connections by incorporating interactive literacy activities. The lessons were to be related to books, narrative and expository text, that had been preselected by each mentor teacher participant. The books and materials were purchased through a small grant obtained by the service learning coordinator and instructor. All books, materials and outreach packets would remain housed within the school for use by future students and teachers.

The university students were provided a variety of methods and strategies for researching and implementing their lessons, including the support of the instructor and service learning coordinator. Additionally, students were asked to conduct an Internet search of “best practice” websites that would assist them with their lesson plan development. The students were also given the e-mail addresses of their classroom mentor teachers and encouraged to stay in communication with them. As students developed ideas, they often ran them past the mentors and the instructor, who offered suggestions and voiced concerns about approaches that students were including in their lesson design. Students also conducted peer reviews of their lessons which led
to the exchange of ideas and strategies with each other. As lesson plans were discussed in the course, university students began to see how literacy activities could be applied to their instruction. They realized that service learning had become a testing ground for their ideas and an arena for applying the strategies and activities that were read and discussed at the university.

In addition to the connections made through the lesson planning, preservice teachers discovered a strong interaction between themselves and the classroom teachers. Students consulted with their classroom mentors regarding the design of the lessons. These practices aligned with a study published by the NEA Foundation (2001):

The efficacy of mentoring is linked to the amount of time that a mentor and protégé work together. Only 36 percent of protégés who work with mentors ‘a few times a year’ report substantial improvements to their instructional skills. That figure jumps to an impressive 88 percent for those who work with a mentor at least once a week. (p. 7)

Implementing the Solution

When the first day of lesson delivery finally arrived, the preservice teachers apprehensively moved toward their assigned classrooms. As the teaching partners began to gather their students, they quickly discovered the need to work in tandem in order to keep students on task.

The university students conducted their lessons over a 2 week period. It was interesting to observe their initial levels of trepidation and concern about how they could efficiently communicate their lessons to real students. They checked and double-checked their lessons for flow, transitions, questioning skills, and assessment of students’ prior knowledge related to the information they would be covering. They kept one another on task in lesson plan design and the development of the outreach packet. They confirmed the number of students (and the names of the students) who would be assigned to their instructional groups. Several of the mentors provided background information about the students within the various groups; so that the university students would be aware of problems related to learning styles, attention delays, and behavioral issues that might affect lesson delivery. The university students assisted in the design of a checklist of skills that they would be expected to demonstrate as they were being observed within the classroom.

Discussions from their assigned text became more meaningful because the students made connections between what they were observing in their service learning classrooms and theoretical constructs being discussed at the university. Yet, this service experience sent a more powerful message to its participants. Literacy is not only about university textbooks, foundational knowledge, theoretical constructs or philosophical principles; it is also about
real teaching experiences and real children who live in communities that are not part of a dominant culture. The university students discovered that service learning could no longer be viewed as a nonparticipatory event because this experience brought literacy education, classroom teaching, mentor relationships, partnered lessons, student learning and community outreach to life.

Implementing service learning projects into teacher education programs provided greater flexibility of experiences than traditional student teaching placements. Service learning placements focused on the needs of K-12 teachers, their students and/or the school environment. As preservice teachers assumed a service learning role, they were providing service outside their own school and developing what LeMaster (2001) referred to as a “reciprocal learning” environment.

**Benefits of the Pilot Service Learning Program**

Prior to the implementation of the pilot service learning program, service learning students in the traditional program were held accountable for making connections between their literacy coursework and their service learning experiences. Many times students completed experiences that had little alignment to the classroom and real teaching experiences, and it was often difficult for university instructors or service learning personnel to observe students enrolled in these traditional service learning placements due to time constraints, locations, settings and distances from one site to the next. Student site selection was often based on considerations such as proximity from home, school and work, hours of availability and familiarity of sites. Often times, students would not venture outside their comfort zone and chose sites that were located in suburban or exurban communities, rather than poor rural and urban communities.

The service learning pilot program added several new dimensions to the previous experience due to the deliberate placement of university students within the same service learning setting. These benefits included (a) mentoring through instructor selected apprenticeships which were aligned to the university student’s licensure area, (b) expanded and applicable discussions of literacy theories and their relationship to instructional practice, (c) analysis of planning and teaching through peer discussions, and (d) thoughtful reflection through individually written responses. Preservice teachers received substantive instructional feedback and support through observation from three separate sources; including the university instructor, service learning coordinator and mentoring classroom teacher.

In addition, service learners had increased awareness of how cultural and socioeconomic factors can affect a school. Romo and Chavez (2006) state, “For some preservice teachers, this was the first time they realized what
it felt like to be a minority. This experience helped them to realize that they were raised with many economic advantages compared to the students with whom they were engaging” (p. 149). During their study, Gallini and Moely (2002) made similar observations:

The service experience provided students with opportunities to leave the campus for the “real world,” where they worked with people quite different from themselves in race, social class and other characteristics. They were required to show initiative, understanding, and flexibility in interacting with new situations and individuals with different backgrounds from themselves, providing opportunities for them to become engaged with the community (p. 14).

Comparisons of traditional service learning programs in contrast to the pilot service learning program are outlined in Table 1.

Table 1. Comparison of Traditional and Pilot Programs

<table>
<thead>
<tr>
<th>Traditional Service Learning</th>
<th>Pilot Service Learning</th>
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<tbody>
<tr>
<td>• Self selected registration in variety of settings: urban, rural, suburban</td>
<td>• Instructor selected: urban poor</td>
</tr>
<tr>
<td>• No outside funding</td>
<td>• Some resources available from grant funds</td>
</tr>
<tr>
<td>• Sporadic orientation for students</td>
<td>• Student and mentor teacher orientation</td>
</tr>
<tr>
<td>• Few orientations for mentors</td>
<td>• Student expectations outlined</td>
</tr>
<tr>
<td>• Varying connections to university coursework</td>
<td>• Deliberate connections to university coursework</td>
</tr>
<tr>
<td>• Active participation varied and inconsistent</td>
<td>• In-class debriefing</td>
</tr>
<tr>
<td>• Little or no time for in-class debriefing</td>
<td>• Student to student exchange of information during lesson design</td>
</tr>
<tr>
<td>• Inconsistent debriefing of site expectations</td>
<td>• Active engagement of university students in lesson plan design and classroom experiences</td>
</tr>
<tr>
<td>• Ten hours of contact time required</td>
<td>• Increased community awareness</td>
</tr>
<tr>
<td>• Summative reflection required</td>
<td>• Increased sensitivity to SES conditions</td>
</tr>
<tr>
<td></td>
<td>• University to school to home connections</td>
</tr>
<tr>
<td></td>
<td>• Ten hours of contact time required</td>
</tr>
<tr>
<td></td>
<td>• Summative reflection required</td>
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Initial impressions of the program’s success were later confirmed through the use of a survey document designed by the authors of this study. Both traditional and pilot service learning students participated in the survey. They were asked questions about their perception of service learning in relationship to course alignment, theory to practice and mentor feedback. Information related to students’ responses to survey questions about alignment between the university coursework and the service learning experiences, as well as university students’ perceptions of connections between theory and practice and mentoring experiences is located in Tables 2 and 3.
Survey responses from students who participated in the traditional program revealed fairly high levels of satisfaction with their service learning experiences. While the majority of students agreed or strongly agreed that the program aligned to each of three constructs addressed in Table 2, a considerable number (16% - 23%) of the students expressed dissatisfaction with the service learning experience regarding the overall alignment to the course, theory to practice and mentor feedback.

In Table 3, the pilot service learning group provided feedback to each of the three concepts. A comparison of pilot participant responses to the survey can be found in Table 3. This table demonstrates that the pilot service learning program provided high levels of satisfaction regarding course alignment, connections between theory and practice, and mentoring experiences. In addition to the survey, the pilot participants were asked to share insights through an open discussion and written reflections. One student wrote:

“During the long hours of putting together the lesson I thought ‘Why am I spending this much time creating a lesson and why do I want to be a teacher?’ . . . When I saw the excitement on the students’ faces all my questions were answered. I saw them learn more [about fish] because of the time I put into my lesson plans . . . it was then I knew I had made the best decision in my professional career.”

A second student wrote, “This experience also allowed me to grow socially, not only with the students and teacher, but with my partner. I have previously worked with partners creating lesson plans, but have never been able to test them out on real students.”

Service learners were not the only participants satisfied with the outcomes of the pilot program. Mentor teachers were also pleased with the level of student professionalism and commitment to the program. Several teach-
ers indicated they would be willing to participate in a similar program. One mentor teacher wrote:

This was the most effective interaction with the university that I have ever had. Honestly, I was hesitant to be part of this program because previous experiences were not very worthwhile and university students did not take these experiences seriously; but this was an exception.

Conclusions

The authors of this paper gained many insights related to student successes in teaching, achievement, mentorship, cultural and community awareness throughout this service learning experience. This pilot program helped us recognize that the definition of service learning embraces multiple perspectives to meet the needs of the agencies being served and the learners who are providing the service. Service learning helps to build character, increases interpersonal communication skills, encourages community involvement through partnerships, allows students to better understand the concept of civic responsibility, the nature of community involvement, and the importance of diverse learners. Structured service learning programs promote educative experiences that are aided through the assistance of university instructors who encourage students to think about theoretical applications, service learning coordinators who locate resources to develop such programs, and classroom mentors who apprentice students into their intended field of study. Service learning apprenticeships allow students to analyze and assess their experiences through peer led discussion and written reflection, and planning with mentor teachers, instructors and service learning coordinators. We believe the summative reflection is the student's affirmation that they will continue to persevere and grow in their intended course of study.

Additional Alternative Service Learning Models

The initial pilot program was developed and delivered during spring semester, 2005. Since that time, similar service learning experiences have been designed and implemented. In each case, the intention of the service learning project was to create meaningful connections between university students, their preservice professional development experiences and community outreach. Two of these alternative service learning projects are described here.

Young Writer's Voice is a partnership between the university and a local newspaper to provide literacy support to an urban after school, latchkey program. The purpose of the program is to involve K-6 students in written responses to quality picture books centered on family themes. The projects
culminate in the publication of original stories and poems written by the participating student authors.

Meeting weekly over a 6-week period, service learners introduce K-6 students to picture books through read alouds and engage the students in small group discussions or book talks. Participating student authors are encouraged to respond to the book through a variety of writing modes (poetry and prose). Students are guided through the writing process and orally share each week's work. Students choose a favorite piece of writing from their portfolio to be published in a special edition newspaper.

Connections between theory and practice are reinforced through the use of award winning picture books, preparation of read alouds, the use of book talk strategies to build schema, and the selection of jackdaws as methods of encouraging the students' active listening, as they move toward the final written product. Service learners rely on their knowledge of response to literature to guide these young writers through individual conferencing. This project is an opportunity for preservice teachers to be fully immersed in authentic learning situations.

The Storytelling option is organized into several sections. Initially, the preservice teachers research the storytelling process and select appropriate stories for presentation. Next, they create a storyline to be reinforced through the use of props and costuming. Then, they present the story to an audience of K-6 urban students. Ultimately, the process concludes with a written reflection on the preservice teachers' personal growth through this experience.

We are all storytellers. At its most basic form, storytelling "enables us to make sense of what is happening in our immediate environment" [and] enables us to read the signs and between the lines" (Pirrie, 1999, p. 348). Storytelling facilitates vocabulary development and fertilizes the seeds of complex language and thought (Trostle & Hicks, 1998). At the same time, it is an impetus for greater self expression. In the home setting, it provides for emergent literacy and writing skills; while, in the schools, storytelling permits classrooms to benefit from the natural link to diversity of learners and cultures.

Storytelling acts as a bridge between theory and practice, as it anchors the learner's individual construction of story elements through the design of props and costumes. Performed as a service to cooperating elementary schools, this activity also offers the preservice teachers an authentication of their study of the art. Evaluation of the program is completed through the use of personal reflections, a final survey and a review of the field based, storytelling experience.

Taken together, these three service learning pilot programs, Outreach Experiences, Young Writer's Voice, and Storytelling, have served to reconnect authentic teaching and learning experiences that are often disconnected within university coursework. These programs helped the students realize that ser-
Service learning embraces multiple perspectives to meet the needs of the agencies being served and the learners who are providing the service. Structured service learning programs promote meaningful educative experiences that honor diversity. Aided through the assistance of university instructors, these experiences encourage students to think critically about theoretical framework and its application to classroom practice. Through a reciprocal relationship, service learning helps to build character, increases inter- and intrapersonal communication skills, encourages community involvement through partnerships while allowing students to better understand the concept of civic responsibility and the nature of community in a multicultural society.

References
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Using Graphic Organizers to Facilitate Elementary Students’ Comprehension of Informational Text

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Abstract

Students in second, fourth and fifth-grade classrooms in a South Texas elementary school served as both the experimental group and the control group to compare the traditional read-and-discuss method of instruction with reading instruction that included the use of various graphic organizers to aid in comprehension. First, the students in the control groups received the traditional read-and-discuss instruction while reading an informational children’s picture book. Next, the same group of students became the experimental groups, as they received reading instruction using an informational children’s picture book that included the use of graphic organizers. Prior to both reading sessions, a pretest was administered to the students, and after both methods of instruction, a posttest was given. The pretest scores of the students in both the control groups and the experimental groups were not significantly different. However, the posttest scores of the students who received reading comprehension instruction which included the use of graphic organizers were statistically significantly higher than the posttest scores of the students who received the traditional read-and-discuss comprehension instruction.

Teaching children how to learn from informational text is an important component of the school curriculum, starting in the upper elementary grades. As students advance through the grades, they spend a great deal of their academic time reading and learning from expository text. So, it is believed that if learning from informational text became an integral part of the lower elementary school reading program, it may help to provide the foun-
dation that students need to become successful with learning content area subjects when they reach the upper elementary grades. Since nonfiction text can prove challenging for many students, teaching methods need to be explored that help our children understand content area textbooks and the vast array of informational children’s books available for students to read. One such method, graphic organizers, offers much promise for improving students’ reading comprehension.

**Study Purpose and Research Question**

The purpose of this study was to examine the effect of utilizing graphic organizers on second, fourth, and fifth-grade students’ comprehension. This study adds to the body of knowledge on the use of graphic organizers at various grade levels to help students with their comprehension. The study was designed to answer the following question regarding the use of graphic organizers: Does the use of graphic organizers with shared reading of informational text in second, fourth, and fifth grade result in greater reading comprehension than traditional read-and-discuss instruction without the use of graphic organizers?

**The Role of Informational Text in the Elementary Grades**

Experts in literacy emphasize the need to develop proficiency in comprehending not only narrative text but also expository text (Snow, Burns, & Griffin, 1998). Reading informational text has many benefits for elementary-age students. First, nonfictional text provides a meaningful framework for students to learn word identification skills. Second, children gain powerful knowledge about the world around them (Duke & Kays, 1998). Third, children gain knowledge of new vocabulary words in context (Dreher, 2003).

Comprehension, which is necessary to successfully advance in school, is also positively impacted by reading informational texts that spark the student’s curiosity. A study done by Smolkin and Donovan (2001) found that reading informational texts about science concepts not only helped students build their comprehension skills, but provided motivation to help the students learn. Young children are naturally curious about the world around them and have many questions. These questions provide a strong purpose and motivation to read (Dreher, 2003; Norton, 2007).

Despite the importance of reading informational text in elementary school, researchers have found that the vast majority of reading materials in first grade are narrative text or stories (Duke, 2000; Palmer, & Stewart, 2003). Doiron’s (2003) study showed that children were choosing twice as many informational books as fictional books from their school library, but access to informational books was limited in their classroom libraries. Neuman (2001) suggested that one reason fiction is preferred in primary classrooms is that early
childhood programs often emphasize process to the exclusion of content. In other words, the belief that children need to be taught how to read before they can read to learn may still be prevalent (Duke & Tower, 2004). Also, Palmer and Stewart (2003) found that what hindered some teachers from including nonfiction in their classroom instruction was lack of knowledge of what is available and lack of access to quality nonfiction books.

The Challenges of Comprehending Informational Text

Expository text can prove challenging to comprehend for many students. (Griffin & Tulbert, 1995; Neuman, 2001). Thus, it is important for every teacher to understand the challenges that reading informational text presents so they can help their students meet the variety of challenges understand the informational text being read.

First, expository text includes a textual, or organizational structure very different from that of the narrative text structure that students in the early grades are taught. Informational books can be organized in a variety of patterns. Five of the most common organizational patterns that are used in informational books are (a) description, (b) sequence, (c) comparison, (d) cause and effect, and (e) problem and solution (Goldman & Rakestraw, 2000).

Second, vocabulary knowledge is critically important in comprehending expository text. Herber and Herber (1993), express the belief of many educators when they state:

Students are often outsiders because they have limited schemas about topics and words that make up content subjects, thereby affecting their ability to read, understand, and communicate about the subject itself . . . One of the most important instructional goals for any content teacher is to take students who are by and large outsiders, in terms of vocabulary and concept knowledge, and make them insiders. (p. 5)

Expository materials, even those written for young children, often contain a high density of specialized vocabulary, making them difficult for readers to grasp.

Third, possessing and activating background knowledge, although important to comprehending all text, is especially essential when reading expository text. The ability to understand the author’s intended message is greatly restricted when a student does not have adequate prior knowledge or does not have the means to activate prior knowledge while reading (Alao & Guthrie, 1999) in order to build connections between the old information and the new information (Searfoss & Readence, 1994). In order to comprehend, this background knowledge must be activated, so it can provide a framework for new learning to occur.

Therefore, teachers must implement comprehension strategies for infor-
Navigating the Literacy Waters: Research, Praxis, and Advocacy

Figure 1: Types of Graphic Organizers

<table>
<thead>
<tr>
<th>Hierarchical</th>
<th>Conceptual</th>
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<tbody>
<tr>
<td>Sequential</td>
<td>Cyclical</td>
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mational text that correlate to each expository text structure, enhance vocabulary knowledge, and build and activate prior knowledge. One such strategy is the graphic organizers.

Graphic Organizer Research

Graphic organizers, also known as cognitive maps, semantic webs, and concept maps, highlight main ideas and represent relationships among key concepts. Properly constructed, they make visually explicit the organizational patterns of text. Of the numerous types of graphic organizers, four are the most common: hierarchical, conceptual, sequential, and cyclical. The content and organization of the material being read determines the type of graphic organizer the reader uses.

Hierarchical graphic organizers present a main concept or idea and supporting details in ranking order. Hierarchical graphic organizers are familiar to many in the form of family trees. They can be used to explore a subject that has several ranks or levels, such as the branches of the U.S. government. Sequential graphic organizers illustrate a series of events or steps in chronological order. A timeline of the major events of the Civil War would be an example of this type of organizer. In addition, sequential graphic organizers are often used for outlining a story plot. Figure 1 shows the organizational pattern of each of these graphic organizer types.

This study also used conceptual and cyclical graphic organizers (See Figure 1). Conceptual graphic organizers display a main concept and supporting facts or characteristics in such a way that relationships are evident. In this study, a conceptual graphic organizer was used to organize informa-
tion about the Cherokee (see Figure 2). A map with the main concept, Cherokee, branched out with related concepts (appearance, food, celebrations, etc.). Another example of a conceptual graphic organizer is a Venn diagram, used to compare and contrast concepts. Cyclical graphic organizers depict inform-

**Figure 2: Partially Completed 2nd Grade Graphic Organizer Constructed Before and During the Reading of If You Lived With the Cherokee by Peter and Connie Roop**

![Diagram of Cherokee graphic organizer]

...mation that is circular or cyclical and has no beginning or end. This kind of organizer is useful for showing cycles, such as the life cycle of the penguin in this study (See Figure 3).

Studies have shown that graphic organizers can help students to understand how content ideas and concepts are organized and related. The *Report of the National Reading Panel* (2000) analyzed 203 studies on instruction of text comprehension. The research reviewers felt that eight instructional strategies “offered a firm scientific basis for concluding they improve comprehension” (pp. 4-5). One of the eight strategies listed by the Panel as beneficial in improving comprehension was the use of various organizers, “Graphic and semantic organizers allow the reader to represent graphically (write or draw) the meanings and relationships of the ideas that underlie the words in the text” (pp. 4-6).

Although a number of research studies have investigated the use of
graphic organizers with older students, those conducted with elementary students are harder to locate. In fact, Nesbit and Adesope (2006) conducted a meta-analysis of graphic organizer research which included 55 studies involving 5,818 participants and found only three studies involving 276 elementary students to include in their review. Clearly, more research is needed on the use of graphic organizers in the elementary grades.

Three studies were found that compared instruction that included the use of graphic organizers with instruction that did not include graphic organizers. First, Prater and Terry (1988) examined the effect of key concept mapping strategies on the reading comprehension and writing performance of fifth graders using basal reader selections. Graphic organizers were found to positively affect the comprehension of the reading selections that were factual or informative in nature. Another study conducted by Armbruster, Anderson and Meyer (1991) compared two instructional approaches during a social studies lesson. It was found that the instruction using a graphic organizer was a more effective instructional technique than the instruction that was suggested in the teacher’s edition of the textbook. Also, adding to the research on graphic organizers, Wachter (1993) investigated the effectiveness of studying a semantic map on delayed recall. This study had an experimental group of fourth-grade students study a semantic map before reading a text passage. The comparison group read the text passage without the benefit of the seman-
tic map. The experimental group outperformed the comparison group in assessments of comprehension and retention of the expository prose.

Several previous studies investigated how best to implement graphic organizers and to determine if the use of graphic organizers made instruction more effective. Wanting to determine if graphic organizers were more effective if completed in cooperative groups, Seaman (1990) conducted a study with fifth graders in which she set up three groups: (a) a cooperative concept mapping group, (b) a standard concept mapping group, and (c) a control group. Seaman found that fifth graders in both concept-mapping groups received higher scores on weekly vocabulary tests and on a final unit test than the control group which received general classroom instruction without the use of mapping. Also, Chang, Chen, and Sung (2002) conducted graphic organizer research with fifth graders in Taipei, Taiwan. These researchers designed three concept-mapping approaches: (a) map correction, (b) scaffold fading, and (c) map generation. The experimental results showed that text comprehension and summarization abilities were enhanced when students completed map-correction activities. The map-correction method consisted of students correcting a concept map in which 40% of the map contained incorrect information according to the text content. In addition, the summarization ability of these fifth graders was enhanced when a scaffold-fading method was used. The scaffold-fading method consisted of assisting learners in constructing concept maps until they were able to complete a concept map independently. In both cases, the experimental group scored statistically higher on comprehension assessments when compared to the control group which read the text provided without constructing a concept map.

Appendix 1 presents a summary of the research studies found over the past 20 years that examined graphic organizer use at the elementary grade level.

Methodology

Setting and Participants

The location of this study was a parochial school located in a small South Texas town (population approximately 25,000). One hundred fifty-five students in grades prekindergarten through fifth grade attend this school. All classrooms were self-contained. The curriculum at this elementary school was aligned with Texas curriculum standards, the Texas Essential Knowledge and Skills (TEKS), which designated the instructional objectives for each grade and subject. The school had approximately 50% diversity (African American, Asian, and Hispanic) with Hispanic students making up the largest minority group.
Thirty-five elementary students attending this school served as participants for this study. The second-grade class consisted of 10 students (6 boys and four girls). Of the 10 students, the ethnic background included six Whites, three Hispanics, and one African American. The fourth-grade class had 11 students (seven girls and four boys). The ethnic background of these 11 students included five Whites, four Hispanics, one African American, and one Asian American. Fourteen students made up the fifth-grade class (five girls and nine boys). The ethnic background of this class included eight Whites, five Hispanics, and one Asian American. The 19 boys and 16 girls that participated in this study came from lower-middle class families.

The three female teachers who volunteered to participate in the study each had more than 10 years of experience teaching elementary school students. An informal discussion with teachers before training began determined that the teachers had some knowledge of graphic organizers but were not using them in their classrooms.

**Training**

The three teachers who volunteered to participate in this study, along with the other ten teachers employed at this elementary school, were given 16 hours of training in the use of graphic organizers. The training consisted of two 8-hour workshops.

During the first workshop, teachers reviewed the available literature and research on the importance and challenges of including informational text in the elementary classroom. Also, teachers were shown examples of graphic organizers and the research studies involving graphic organizer use with elementary students were discussed. With guidance from school administrators and university reading professors, teachers developed a plan for implementing more graphic organizer strategy use in their instruction. The training also included a discussion of attributes for effective use of graphic organizers. According to Merkley and Jefferies (2000), when using graphic organizers the teacher should do the following:

- verbalize relationships (links) among concepts expressed by the visual,
- provide opportunity for student input,
- connect new information to past learning,
- make reference to the upcoming text, and
- seize opportunities to reinforce decoding and structural analysis (p. 354)

Day 2 of the training showed teachers how to take lessons to higher levels of thinking by guiding students to organize graphically new concepts being learned from reading nonfiction. Teachers focused on ways to process the concepts of nonfiction texts at various levels of depth and complex-
ity by using specific types of graphic organizers in daily classroom lessons. Specifically, teachers explored when each of the following types of graphic organizers was most appropriate: hierarchical, conceptual, sequential, and cyclical. Teachers constructed graphic organizers and teaching guides using the children’s literature they were currently using in their classroom, selections from the basal reader, and content area textbooks. Teachers also constructed sample graphic organizers and teaching guides using the children’s books that were to be used in this study. The workshop presenter reviewed the materials that teachers created to ensure learning and to provide feedback. Some of the criteria used to evaluate the appropriateness of the teacher constructed graphic organizers and teaching strategy guides included:

- Macrostructure of text is presented using a graphic organizer
- Graphic organizers do not contain too much detail as to result in cognitive overload
- Adequate scaffolding during graphic organizer activity is provided
- Graphic organizer activity provides for maximum student participation (partially complete graphic organizers)
- Structure of graphic organizer is appropriate for structure of text
- Graphic organizer is creative, consistent, and coherent.

Teachers made improvements to graphic organizers based on feedback from presenter. Teachers were also given additional assistance with implementing the graphic organizer strategy during the course of this study.

**Measures**

Six criterion-reference tests were developed by the researcher of this study based on the content and vocabulary of each children’s book chosen for this study. Two university reading faculty and the three elementary teachers participating in this study evaluated each test to determine if it assessed the major concepts presented in each of the children’s books and to ensure that the difficulty of each test used to assess the comprehension of both the control group and the experimental group were similar. For example, in second grade the experimental group test included the following question: “In the winter, the Cherokee lived in a kind of house called a ___.” The control group was asked to answer the following question: “The Sioux lived in a kind of house called a ___..” The tests used in second grade consisted of 10 multiple-choice questions. The fourth and fifth-grade tests contained 20 multiple-choice items each. The dependent variable in this study was the comprehension ability of students determined by researcher-constructed comprehension tests.

**Materials**

The two books chosen for each grade level were very similar in readability and format. For second grade, *If You Lived With the Sioux Indians*
(McGovern, 1992) was read by students in the control group, and *If You Lived With the Cherokee* (Roop & Roop, 1998) was read by students in the experimental group using a graphic organizer to introduce a unit on Native Americans. Both concept dense (approximately 80 pages each) children’s books presented detailed information about a selected Native American tribe utilizing a question and answer format.

Fourth-grade students participating in the control group read *The Whale* (Crewe, 1997). *The Penguin* (Crewe, 1998) was read by the fourth grade experimental group receiving shared reading comprehension instruction, which included the use of graphic organizers. The picture books, containing large and easy text, were read as part of an integrated unit on life cycles.

Fifth-grade students participating in the control group read *Volcanoes* (Morris, 1996). Fifth grade students participating in the experimental group read *Earthquakes* (Morris, 1998). These children’s books (approximately 40 pages each) contained very detailed scientific information and were used to introduce a class study on the wonders of our world.

**Design of Study**

In order to address the research question, a field experiment was conducted. A pretest-posttest control-group design was used. This design is among the most commonly used experimental designs in education research. To further enhance internal validity, the same teachers and students were used for the control and the experimental groups.

The following steps were followed in using a pretest-posttest, one group design.

1. Three teachers, who volunteered to be part of this study, received 16 hours of training on the use of graphic organizers presented by the researcher.
2. Parent permission was sought from children enrolled in the classrooms of the teachers who volunteered to be part of this study.
3. A pretest was administered to each control group in second, fourth, and fifth grade.
4. Traditional comprehension instruction was delivered to the three control groups. Second and fifth grade received instruction over 3 days for a total of 3 hours and fourth grade received instruction in 1 day lasting 1 hour. All reading was conducted utilizing a shared reading format.
5. A posttest was administered to each control group.
6. A pretest was administered to each experimental group.
7. Comprehension instruction which included the use of graphic or-
ganizers was delivered to the three experimental groups. Second and fifth grade received instruction over 3 days for a total of three hours and fourth grade received instruction in 1 day lasting 1 hour. All reading was conducted utilizing a shared reading format.

8. A posttest was administered to each experimental group.

The groups were treated as nearly alike as possible during both the traditional and nontraditional instruction, except for the use of graphic organizers.

Serving as the control groups, the second, fourth and fifth grade classes were given a pretest on the children's books chosen for each class. The teacher at each grade level introduced the reading by having students look at the cover and predict what the book was about. Next, the teacher and the students discussed background knowledge related to the topic of the book. The students then participated in a shared reading of the book stopping often to discuss and answer questions posed by the teacher. When the reading of each book was concluded, the teacher led the students in a retelling and further discussion. Second and fifth grade students read longer concept dense picture books over a 3 day period, breaking the reading and discussion up into three 1 hour segments. The picture book chosen for fourth grade contained a simpler shorter text and the shared reading was completed in one hour long session. Students were then given a posttest to access comprehension.

Serving as the experimental groups, the same second, fourth and fifth grade classes were given a pretest over the children's books chosen for each class. The format and readability of each book was matched as closely as possible to the books which were used with the traditional read-and-discuss instruction delivered to the control groups. The books were introduced by having the students look at the cover, predict what the book was about, and then discuss what they knew about the topic of the book. The students also began constructing a graphic organizer. The second and fifth-grade classes began to construct a conceptual map graphic organizer. The concept map was started by writing the title of the book in a circle at the center of the map and the titles of the sections of the book in smaller circles around the center circle. The nature of the book chosen for fourth grade made a cyclical graphic organizer most appropriate. Before reading, the teacher explained to students how the graphic organizer would be completed. As the teachers of each class led students on a shared reading of the book, they would stop and discuss the new concepts introduced and add the main ideas from the text to their class graphic organizer. Each student also completed a graphic organizer of their own. At the conclusion of the reading, students were asked open-ended and higher-level questions. They were also given time to study
the graphic organizer before taking the posttest. As with the control groups, the second and fifth-grade experimental groups received 3 hours of instruction and the fourth-grade experimental group completed the shared reading and graphic organizer activity in 1 hour.

Results

Table 1 presents the descriptive statistics for the pretest and posttest scores for the students in the experimental group, which utilized graphic organizers (GO) and the traditional read-and-discuss instruction groups (TI).

Table 1: Descriptive Statistics for Comprehension Scores for Graphic Organizer (GO) Experimental Groups and Traditional Instruction (TI) Control Groups

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>PRETEST MEAN</th>
<th>STD. DEV.</th>
<th>POSTTEST MEAN</th>
<th>STD. DEV.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd TI</td>
<td>10</td>
<td>58.00</td>
<td>11.35</td>
<td>88.00</td>
<td>10.33</td>
</tr>
<tr>
<td>2nd GO</td>
<td>10</td>
<td>56.00</td>
<td>15.06</td>
<td>96.00</td>
<td>5.16</td>
</tr>
<tr>
<td>4th TI</td>
<td>11</td>
<td>46.36</td>
<td>17.48</td>
<td>80.91</td>
<td>11.36</td>
</tr>
<tr>
<td>4th GO</td>
<td>11</td>
<td>48.18</td>
<td>19.40</td>
<td>93.18</td>
<td>6.0</td>
</tr>
<tr>
<td>5th TI</td>
<td>14</td>
<td>37.50</td>
<td>8.26</td>
<td>80.36</td>
<td>5.71</td>
</tr>
<tr>
<td>5th GO</td>
<td>14</td>
<td>38.92</td>
<td>10.22</td>
<td>88.93</td>
<td>8.59</td>
</tr>
</tbody>
</table>

Table 2 reports the paired samples test results comparing mean comprehension pretest and posttest scores. Results show that the pretest scores of the experimental and control groups were very similar. Results also show that the posttest scores of students receiving comprehension instruction which included the use of graphic organizers were statistically significantly higher than the posttest scores of students receiving traditional read-and-discuss instruction ($p < .05$).

Table 2: Paired Samples Test Comparing Comprehension Scores of GO Experimental Groups and TI Control Groups

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T-VALUE</th>
<th>df</th>
<th>sig. (2-TAILED)</th>
<th>SIGNIFICANT ($p &lt; .05$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Grade</td>
<td>802</td>
<td>9</td>
<td>.443</td>
<td>no</td>
</tr>
<tr>
<td>4th Grade</td>
<td>-.311</td>
<td>10</td>
<td>.762</td>
<td>no</td>
</tr>
<tr>
<td>5th Grade</td>
<td>-.446</td>
<td>13</td>
<td>.663</td>
<td>no</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Grade</td>
<td>-2.449</td>
<td>9</td>
<td>.037</td>
<td>yes</td>
</tr>
<tr>
<td>4th Grade</td>
<td>-2.865</td>
<td>10</td>
<td>.017</td>
<td>yes</td>
</tr>
<tr>
<td>5th Grade</td>
<td>-2.917</td>
<td>13</td>
<td>.012</td>
<td>yes</td>
</tr>
</tbody>
</table>
Discussion

This investigation explored the use of graphic organizers for improving comprehension of elementary students. Current research supports the use of graphic organizers; however, few studies exist that involve students in the elementary grades.

This study suggests that graphic organizers have the potential of increasing elementary grade students' comprehension of informational text. Unlike the Armbruster, Anderson and Meyer (1991) study, all grade levels examined benefited from the use of graphic organizers. Students receiving traditional read-and-discuss instruction did comprehend and gain knowledge from reading informational text. However, they did not comprehend and learn as much as when graphic organizers were included in the instruction. The posttest scores of students showed that students gained more knowledge and vocabulary when the information they were acquiring through reading was organized visually on a conceptual map (See Figure 1) or, as in the case of the fourth grade, a cyclical map (See Figure 2). The content and organization of the book led teachers to choose the type of graphic organizer that was most appropriate.

The students who benefited the most from the graphic organizer used in this study were students who scored the lowest on preassessments. Students in the control groups who scored less than 50% on the pretests gained an average of 44% on posttests given after instruction. In contrast, students in the experimental groups who scored less than 50% on the pretests gained an average of 53% after instruction. This shows that graphic organizers may be especially useful in helping students who lack background knowledge. This would support Alao and Guthrie's (1999) contention that background knowledge is one of the key factors in conceptual learning.

Limitations

There are several limitations to this study. Mainly, the sample size was small (35 students). The sample was not randomly selected and students at this school may come from families with average higher socioeconomic status (lower middle class) than the community at large (upper lower class). Despite these limitations, this study does add to the research on using graphic organizers.

Conclusion

Teachers are being asked to include more informational text in the elementary grades (Duke, 2000); therefore, they will need to know what strategies will effectively help young children comprehend this genre. The find-
ings of this study demonstrate that graphic organizers may serve as a useful strategy for improving the comprehension of informational text. There were statistically significant differences found between the control groups and the graphic organizer groups at all three grade levels. In addition to enhancing comprehension, graphic organizers may present a practical way to infuse variety and excitement into the traditional read-and-discuss lessons.

**Implications of the Study**

This study has provided some insights into a possible strategy for assisting young readers in their understanding of expository text. It suggests that teachers should be trained in how to use various graphic organizers; so that they can implement the strategy correctly while delivering comprehension instruction utilizing informational text. Concept maps and cyclical maps, especially, may be suitable for use with elementary students.

The positive outcomes of this study provide evidence that further research using the various graphic organizers in the elementary grades, especially the primary grades, is needed. Experimental studies with larger sample sizes and random assignment of participants that are assigned to both the treatment group and the control group are essential in order to acquire a clearer understanding of the importance of graphic organizers on comprehension.

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**Children’s Books Cited**


**References**


## Appendix 1. Elementary Level Graphic Organizer Research

<table>
<thead>
<tr>
<th>YEAR</th>
<th>GRADE LEVEL</th>
<th>RESULTS OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>5th grade</td>
<td>Concept maps enhanced text comprehension and summarization abilities.</td>
</tr>
<tr>
<td>Chang, Chen, and Sung</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>4th grade</td>
<td>Reviewing a semantic map before studying a text passage resulted in higher comprehension scores.</td>
</tr>
<tr>
<td>Wachter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>4th &amp; 5th grade</td>
<td>Completing an instructional graphic during social studies instruction resulted in higher unit assessment scores of 5th graders.</td>
</tr>
<tr>
<td>Armbruster, Anderson, and Meyer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>5th grade</td>
<td>Completion of a concept map while reading a science text resulted in higher scores on weekly vocabulary tests and a final unit test.</td>
</tr>
<tr>
<td>Seaman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>5th grade</td>
<td>Graphic organizers positively affected the comprehension of informative basal reader selections.</td>
</tr>
<tr>
<td>Prater &amp; Terry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE WE ARE REPORTERS PROJECT: DEVELOPING AN APPRECIATION AND PURPOSE FOR COLLECTING, RECORDING AND RECALLING DATA USING A VARIETY OF REPORTING TECHNIQUES

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Abstract
This paper discusses how to implement the We Are Reporters project into the daily schedule of a first grade classroom using a curricular framework structured around inquiry and discovery. The reporting theme supports a developmentally appropriate learning arena by implementing a range of inter-curricular instruction that embraces authentic learning experiences. This approach follows the child’s interests and gives the child the tools to take ownership of his/her own learning. Parallel learning opportunities for developing the research process and the skill of reporting establishes a purpose for seeking, documenting, comparing and analyzing information. The children’s experience improves communication skills using purposeful “reporting” opportunities that encourage diversified instruction using oral, written and aesthetic methods as a means for sharing information. Oral reporting evolves into written documentation of discoveries using a myriad of reporting strategies. The purpose of writing becomes meaningful and deepens the understanding of the value of writing as a method for sharing information.
First graders begin the school year with a range of reading, writing, oral language experiences and skills. Some children will begin the school year with less literacy experience and knowledge (e.g., letter knowledge, phonological awareness, and oral language ability) than other children in the class. Sometimes this gap in first grade reading and writing development can result in frustration, low self-confidence and competition for these beginning students (Bredekamp & Copple, 1997). It is imperative that teachers of early childhood students identify the strengths and needs of each child in the classroom and be flexible and responsive to his/her individual differences. Tailoring an educational program to meet this goal includes building a personal, communicative relationship between the home and school. A complimentary home/school partnership that bridges the child’s home and classroom experience promotes a mutual support network for the child (Downer, Driscoll, & Pianta, 2006).

Teaching purposeful writing for the early childhood student is a challenge that requires an understanding of how each child perceives communication. To successfully meet each child’s needs, communication in the classroom should progress from oral discourse, to writing information (e.g., drawing, labeling, and recording) to drawing conclusions. Not only do children need to be able to write information, it is also important for them to critically think about the information they gathered. Bloom (1956) developed a theory that discussed ways to help children develop higher level thinking skills (knowledge, comprehension, application, analysis, synthesis and evaluation). Therefore, it is imperative for teachers to incorporate the development of critical thinking skills into instruction as they work to improve children’s literacy skills.

Promoting literacy development requires daily participation in both oral and written discourse that heightens the child’s curiosity and interest for sharing information. Young children require ample opportunities to make sense of their world using real experiences (Helm & Katz, 2001). Early childhood students develop their communication skills through exposure to many strategies for conveying information within a meaningful context. An emergent understanding of the purpose of communication progresses when guided and self-initiated activities are imbedded within daily instructional routines (Duke, Purcell-Gates, Hall, & Tower, 2006). Encouraging children to act on their curiosity establishes the framework for student initiated learning. The We Are Reporters project uses children’s inherent curiosity to help improve their literacy and critical thinking skills.

A Project Approach: We Are Reporters

The We Are Reporters project is an integrative learning model that invites each student to investigate topics of inquiry and use reporting techniques as a venue for communication. The overall goal of the We Are Re-
porters project is to support each first grader’s literacy development. Within the framework of an inquiry model for learning, the primary objective of the project is to develop literary skills using a variety of developmentally appropriate communication techniques. Designing a classroom setting that nurtures and utilizes an inquiry model for learning is an essential component of the project. The first author, Karen, embarked on a journey to create a learning atmosphere where the students were active participants in their quest for knowledge and valued the perspectives of their peers. “The teacher has to draw into her instructional group the child who has limited control over language, and the one who is shy or withdrawn, and the one who is reluctant to try new things” (Clay, 2005, p. 8). Because of the various methods available to obtain, record and report results, this encourages all children over time to become actively engaged in the project approach.

The We Are Reporters project was modeled after the Project Approach (Katz, 1994). A Project Approach is an investigative instructional methodology that includes the student in the research and decision making process. Katz (1994) further defines the approach by saying:

A project is an in-depth investigation of a topic worth learning about. The key feature of a project is that it is a research effort deliberately focused on finding answers to questions about a topic posed either by the children, the teacher, or the teacher working with the children. (p.1)

The We Are Reporters project is a learning structure that develops the students’ perception of gathering and sharing information. The project accommodates individual learners by ensuring that all members of the first grade classroom assume the role of a reporter and have the opportunity to utilize a reporting strategy that optimizes their learning style. All “reporting” techniques (e.g., oral, written, illustrative, and photographic) are given equal consideration, and the first graders are able to make the transition from one method of reporting to the utilization of several reporting techniques at their own developmental pace by the end of the school year.

Understanding the role of the reporter as a person who seeks and shares information enables the first graders to reflect on their own style of communication (Roskos & Christie, 2002). Initially, recall of information is accomplished solely through oral reporting. Reliance on memory (i.e., oral recall) of information gradually becomes less effective when peers ask specific questions that cannot be thoroughly answered by the student reporter during the class reporting time (Duke et al., 2006). Students become eager to record their experiences using methods that would “save” their experiences, and writing becomes another venue for sharing or reporting information.

Through this approach, daily opportunities are available for oral reporting. This provides the students with the chance to express their thoughts
and interest in a topic, while describing their discoveries (Heath, 1984). Descriptive language, vocabulary development and fluency can be expected to improve, along with an ease for public speaking developed through participation in this type of project. Armbruster, Lhr and Osborn (2001) stated, "Young children learn word meanings through conversations with other people, especially adults . . . The more oral language experiences children have, the more word meanings they learn" (p. 35).

In general, reflection, discovery and supporting conclusions are also an outcome of active participation in the sharing of personal experiences. Another important aspect of the We Are Reporters approach is that the student audience has the opportunity to question the reporters. Audience participation promotes making sense of what the reporter reports, considering perspectives, taking turns and developing listening and questioning skills. As noted by Helm, Gottleib and O'Mara-Thieman (2003), "Asking questions of others is the forerunner of using silent questioning strategies while reading, such as asking oneself, What do I need to know?, or Is the answer here?" (p. 40).

The research and reporting process builds on the individual first grader's oral, written and reading background. Therefore, it seems natural to connect the scientific process skills (i.e., observing, comparing, counting, classifying, defining, communicating, hypothesizing, and predicting) to the literacy goals of the We Are Reporters project. The purpose of this paper is to describe how the project approach was implemented during the school year with a group of first grade students.

**Implementing the We Are Reporters Project**

**Participants**

The students were enrolled in a private, early childhood school with an approximate school enrollment of 125 students in pre-kindergarten through second grade. The school is located in a suburban area in New York State. The 18 students who participated in the yearlong project were in an inclusive first grade classroom with one general education, full-time first grade teacher and a part-time teaching assistant. Six students received additional support services for autism, Attention Deficit Hyperactivity Disorder (ADHD), speech and language delays and occupational therapy.

**Project Description**

There were three phases to the We are Reporters project (see Table 1). The first phase was the planning stage. During this stage the teacher identified the rationale and learning objectives for the yearlong project. The second phase included the initiation of the project approach with the students. It was at this stage that children learned the role of the reporter: investigat-
ing, recording and reporting information to an audience. The final phase included a reflection of the project and a description of how the project progressed. It was at this final stage that children initiated, planned, and implemented a new component of the We Are Reporters project with minimal support from the teacher.

**Phase I—The Planning Stage.** The framework of the project was created using the instructional goals (i.e., developing emergent reading and writing within a meaningful context) for each first grader and the curricular requirements (e.g., science units on weather, seasonal changes, and animals) as a guide. The underlying objective was to develop literacy skills using student initiated interest as the motivation for learning. The reporting project was integrated into the curriculum and used as the strategy to reach this goal.

The science and language arts curriculum were the most natural arenas for integrating the We Are Reporters project. The required fields of study for the year were environmental science, which included a late winter unit on weather. The classroom environment was utilized to provide research areas for in-depth study of topics of interest, an editorial area for writing, and a reporting site. The physical environment was designed to accommodate individual and small group research on student generated topics of inquiry (e.g., slugs, insects, spiders, cloud formation, and temperature). Tables were set-up in the research area for drawing, organizing collections, planning display arrangements and labeling collected artifacts. Along one wall, individual clipboards were hung and used as portable writing boards during nature walks. Student responsibilities included replenishing supplies (e.g., paper, paints, pencils, and collection bins) and keeping the research area orderly.

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**Table 1. Structure of the Project**

<table>
<thead>
<tr>
<th>PHASE I</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rational and Learning Goals</td>
</tr>
<tr>
<td>• Identifying student interest, learning style and instructional support</td>
</tr>
<tr>
<td>• Preparing the environment</td>
</tr>
<tr>
<td>• Research area</td>
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<td>• Editorial area</td>
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<td>• Reporting area</td>
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<td>• Site investigations</td>
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<td>• Family and community involvement</td>
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<th>PHASE II</th>
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<tr>
<td>• Initiating and structuring the We Are Reporters project and schedule</td>
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<tr>
<td>• Outline reporting procedures</td>
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<td>• Consider diverse methods for collecting information</td>
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<td>• Provide broad research opportunities</td>
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<th>PHASE III</th>
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<td>• Assessing Learning—Applying knowledge of the diversity of reporting through a student initiated designing of a Weather Broadcasting Station</td>
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Students were also exposed to a new genre (i.e., informational and concept books) through these student centered science activities. The lead teacher facilitated research opportunities by making available an ample array of informational books that provided accurate information on each topic of study. Mini-lessons were conducted on how to read nonfiction text, comparing and contrasting information, discussing new vocabulary, and assessing informational books for accuracy and design. Since the students already had an interest in topics associated with the required curricular unit on weather, they were enthusiastic about learning how to use these books to gain additional information about their individual meteorological topics of inquiry.

Establishing familiarity with the research process and reporting protocol was necessary before the first graders were ready to embark in gathering information and selecting new venues for sharing information. The students were beginning to rely on each other as sources of information and expected to have validation of new information. It wasn’t unusual to hear, “Where did you find that?” or “Show me the picture, book, website . . .”

**Phase II: The Project Begins.** It was decided that, at the start of first grade, the students would be introduced to the role of a reporter and would begin the *We Are Reporters* project by investigating their natural surroundings during weekly nature walks. Weekly nature walks around the school campus were a component of the environmental science curriculum for the first graders. The nature walks were intended to assist the students in developing their observation and listening skills, which were necessary for participation in the reporting project. This experience ultimately provided the foundation for the *We Are Reporters* project.

After students returned from the nature walks, they gave an oral report of their discoveries. Students began to expand their recording techniques once they recognized that relying on memory was not always an effective method for recalling information. They also realized that an artifact (e.g., drawing, photograph, list, and text) of their discoveries might authenticate their experiences. One group identified and created a list of ways that stu-

**Figure 1. Ways to Collect Information**

<table>
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<tr>
<th>Ways to Collect Information</th>
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<tbody>
<tr>
<td>October</td>
</tr>
<tr>
<td>Students identify and chart ways to recall and record information</td>
</tr>
<tr>
<td>1. “Bring sticks with you that have tape and thumbtacks on the bottom end. You can use this to pick up yucky stuff.” –John</td>
</tr>
<tr>
<td>2. “Bring your camera to take pictures. You have to be real quiet so the animals won’t run away.” –Evan</td>
</tr>
<tr>
<td>3. “Draw what you see on your walk.” –Jenna</td>
</tr>
<tr>
<td>4. “Write it down.” –Ashley</td>
</tr>
</tbody>
</table>
dents could collect information (See Figure 1). Scribing their thoughts modeled the purpose of writing as a means for recall. Students referred to these lists for suggestions on methods of collecting information.

Prior to embarking on her nature walk, one student in the class, Jenna, prepared a list of items she would need (See Figure 2). A list helps the child think about her task, organizes her thoughts and reinforces writing for a purpose. An evaluation of Reporter Jenna’s list indicated that she had a clear understanding of the format for compiling a list, but she had some confusion regarding reversals, vocabulary and conventional spelling. A teacher/student conference revealed that Jenna had used the class word wall for spelling, but indicated that the paper she used was not “big enough for long words.”

**Figure 2. Reporter’s List of Recording Resources**

![List of Recording Resources](image)

These writing samples were used as evaluative tools for instructional planning. Word solving mini-lessons, materials and resources were adapted to the specific needs for each student. For instance, longer and wider writing paper was included in the writing center and larger clipboards were designed to accommodate Jenna’s handwriting, allowing her the space to spell her words with accuracy.
A schedule for reporting was incorporated into the daily routine, and students were invited to share what they noticed on their weekly walks. Their enthusiastic sharing of information was nurtured and broadened by considering alternate means for reporting information, with parallel research opportunities that included collecting, categorizing and analyzing information. Table 2 provides a list of reporting techniques that the children could use in the classroom. The student reporter was expected to make decisions regarding what they would share with their audience (peers) by examining a variety of topic related resources (e.g., written text, photographs, illustrations, artifacts, and lectures). An example of lists that were used to report data can be seen in Figures 3 and 4.

**Table 2. Reporting Options**

Students could opt to “report” in the manner of their choice. All types of reporting were considered beneficial.

1. Describe the information by showing the illustrations or photographs
2. Read a passage from the book or magazine
3. Retell what the book was about
4. Answer questions about their researched topic
5. Describe artifacts or experiences that are topic related

Student “audience” had the opportunity to ask one question from a reporter.

---

**Figure 3. Reporter’s List of Observations during Nature Walk**

![List of observations]

- I saw a campfire at the playground.
- I saw a. a daddy long legs
During this phase of the project, the first graders were included in the project planning process. Students were fully engaged in preparing lists, collecting and comparing data, and researching topics of interest noted during their nature walk investigations. Figure 4 shows a list comparing information collected about animals and plants during the nature walk. The child recorded number 1, 2, and 3 under the animals section and number 1 and 4 under the plants section. The remaining information was dictated by the child and recorded by the teacher acting as scribe.

Preliminary discussions of the roles of a reporter, photojournalist and illustrator were established prior to undertaking a new method for reporting. Prior knowledge of these roles was charted during interactive writing sessions. Next, the children wrote invitations and invited local field experts (e.g., photographer, local newspaper reporter, and meteorologist) to visit the class and share their expertise with them. Demonstrations of trade tools (e.g., magnifying glass, binoculars) by field experts shaped an understanding and appreciation for the nuances among reporting professions. During scheduled reporting times, the students had the opportunity for comparing and reflecting on these different recording methods (See Figure 5).
Interactive writing sessions were routinely scheduled. Students prepared two charts that demonstrated their background knowledge on safety precautions and collecting information. The students’ thoughts, ideas and suggestions about safety were recorded (See Figure 6) and were used as guides in the classroom.

**Figure 6. Student Generated Safety Rules**

<table>
<thead>
<tr>
<th>SAFETY RULES</th>
<th>October</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporters: Mary Kate, David, Rachel, Kevin &amp; John</td>
<td></td>
</tr>
<tr>
<td>1. “Keep your eyes open.” –Mary Kate</td>
<td></td>
</tr>
<tr>
<td>2. “Don’t walk away from each other.” –David</td>
<td></td>
</tr>
<tr>
<td>4. “No fooling around.” –Kevin</td>
<td></td>
</tr>
<tr>
<td>5. “No biting the clipboards.” –John</td>
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</tbody>
</table>

**Facilitating Student Interest.** It became evident that the more investigative experiences the students had, the more inquisitive and self-directed they became. After the introduction of the reporting techniques, the first student initiated reporting topic was on the Arion Distinctus, commonly known as the garden slug. At the start of the school year, the first graders had shown
a keen interest in a lone slug who was spotted each morning at the entrance of the classroom. Arrival time became a jumble of 5 and 6 year olds stepping, hopping, prancing and scooting past the slug in an effort to avoid injuring it. Creative methods for transferring the slug outside provided a keen insight into the critical thinking and problem solving abilities of the first graders. Seizing this opportunity of heightened enthusiasm, slugs became an unlikely topic for developing research and reporting skills.

Observations of the visiting slug resulted in a barrage of questions regarding slug behavior. These topics of inquiry were recorded by the teacher on chart paper and in the individual student’s science journal (to be shared with families). The students were then encouraged to use the research resources in the library to investigate the answers to their questions. An annex to the classroom library was designed specifically for slug research. A children’s librarian was invited as a community expert to help with the planning and construction of the new library. Together the librarian, children and teacher gathered and examined a range of literary genres that would be relevant for researching slugs. Students who needed reinforcement in alphabetizing and categorizing skills were assigned the role of research librarian. Students who needed opportunities for gross motor skill development were project managers and helped with the physical construction of the library (e.g., clearing space for the library by moving bookshelves).

Each day, preliminary gathering of information was conducted during the twenty minutes prior to the morning conference. During this time, the students were given the option to research slugs using informational text (e.g., concept books, field guides, and journals), illustrations and photographs of slugs. Sticky-pads and student designed bookmarks were used to show evidence of where the information was located.

During the morning conference the students’ questions were recorded on chart paper and discussed in a whole group setting. Opportunities to discover the answers to their questions occurred during independent reading. The children were encouraged to respond to a range of genres for research investigation during this period. Attentiveness to introducing resources that were inclusive and met the learning needs of each student encouraged literacy development in a nonthreatening, noncompetitive format.

Phase III: Teacher Reflection: Student Initiated Reporting Venue.

Anecdotal records were kept throughout the year, with emphasis on participation, skill development and self-directed learning. The first graders began the school year with a wide range of literacy skills. Reporting was an opportunity for differentiated instruction, that included participation from all class members. The primary objective for implementing the project was for each first grader to develop an understanding of the purpose for reading and writing. Although the framework of the project was guided by required cur-
ricular goals, Karen, recognized that the students’ motivation for learning was heightened when the students were exploring their expressed topics of inquiry.

The *We Are Reporters* theme continued throughout the school year. The children became adept investigative reporters and continued to use the reporter role-playing as a means for sharing information. These investigations were structured according to the particular interest of individual or small groups of students. Several first grade reporters were involved in interviewing families during the construction of the class *Me Museum*, a collection of exhibits about class members, while another group was engaged in an investigation about potatoes and had created a witty script about interviewing famous potatoes (e.g., Long Island potato, Idaho potato, French fry, scalloped potato, and Mr. Potato Head).

The initial stages of the project were predominately teacher guided instruction, with Karen acting as a facilitator, supporting the students in their understanding of using reporting as a method for gathering and sharing information. A thorough examination of the project was noted approximately 5 months into the project. It was at this juncture that the first graders took full responsibility of the *We Are Reporters* project by initiating a weather broadcasting station into the science unit on weather. The science unit on weather was part of the New York State Science Learning Standards for first grade. Students were engaged in direct instruction regarding temperature reading and applied their understanding of temperature by documenting and comparing their recorded data in weather journals. The student initiated weather broadcasting station evolved from the first graders’ prior knowledge regarding reporting strategies. The students applied their understanding of the role of the reporter by assuming a new reporter role, that of meteorologist. The first graders were actively involved in researching and comparing the roles of the meteorologist and weather reporters. They became class meteorologists, comparing and analyzing local weather data collected at specific times during the day.

**Results of Implementation**

Integrating a parallel research/reporting focus into the daily curriculum encouraged students to become attentive listeners and value new perspectives. Students began to support their findings with additional documentation located outside of the classroom. Resources from home were brought in without provocation (i.e., photographs and drawings of cloud formations and weather maps). The first graders were eager to share their new knowledge and also became attentive to the perspectives of their peers. Many students interviewed family members and neighbors about weather patterns or
types of weather they had experienced (i.e., hurricanes, nor’easters, and tornadoes). One student wrote a letter to her cousin who was a tornado chaser and asked him to forward any information he had about tornadoes. This led to a new topic of inquiry on wild weather.

The class weather broadcasting station was then planned, designed and implemented by the first graders and used to broadcast (report) the results of their weather data investigations and make weather predictions. Student initiated interest for designing a weather broadcasting station illustrated how the first graders had taken ownership of the We Are Reporters project. Planning, preparing and implementing a broadcasting station became an opportunity for the student reporters to expand their knowledge of reporting techniques using sociodramatic play as a venue for developing literacy skills. This student initiated project became known as We are Meteorologists.

The format of the We Are Meteorologists differed from earlier reporting projects. Instead of working independently, the students worked in collaborative groups with each group responsible for one week of weather reporting. Each group was expected to keep a log of their weather data (e.g., temperature, rainfall, and cloud formations) in a class weather journal (See Figure 7). The weather logs provided an insight into how the students recorded information and were evidence of what the children were capable of doing.

---

**Figure 7. Meteorologists Record Temperature in Their Weather Logs.**

```markdown
Today's weather:  
Date: 3/8/00
Time: 9:30  
9:30-45°  
11:30-60°  
2 p.m. 65°

Tomorrow's forecast:  
partly sunny partly cloudy
```
and where they needed more support. Group weather logs, individual portfolios, construction plans, anecdotal notes, and photographs were methods for documenting evidence of how learning developed during the project. Each group of meteorologists recorded their names in the class weather journal during the week of their assigned weather reporting (See Figure 8). A temperature reading was taken at three specific times during the school day. The student meteorologists were responsible for noting the time and could use reminders (i.e., alarm clocks) to help them remember when to record.

**Figure 8. First Grade Meteorologists Prepare Weather Logs**

Additionally, the construction of a broadcasting station afforded the first grade reporters the chance to share (broadcast/report) the analysis of information collected during their daily observations and documentation of the weather by writing scripts for their scheduled broadcasts. Students further applied their knowledge by responding to requested weather broadcasts from family members and constructed weather broadcasting scripts using their collected and analyzed data. Because the children checked and recorded the outside temperature three times a day, they began to recognize a pattern of change in their recorded temperatures over time (See Figure 7). An analysis of this data enabled them to forecast the next day’s weather.

Viewing a television weather reporting broadcast at home was a way to include the family in the class project and encouraged a dialogue between the student and family regarding reporting styles. A letter was sent home to the families outlining the newest reporting venue. In this way, the students were continuing the project by adding some off-site research of their own.
They were to watch the evening weather report and list items the weather reporter used (See Table 3). Student reporters were asked to report, compare and contrast their findings during the morning reporting schedule. Guidelines for choosing and reporting information to the class were developed (See Table 4).

**Table 3. Reporters and Families Examine the Role and Tools of the Television Weather Reporter**

O **FF-SIT**E RESEARCH

Directions: Watch the evening weather report on television. Make a list of the items the weather reporter or meteorologist used to help report the weather.

<table>
<thead>
<tr>
<th>Weather Reporting Tool</th>
<th>Illustration</th>
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<tbody>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>

Meteorologist:

Date:

They were to watch the evening weather report and list items the weather reporter used (See Table 3). Student reporters were asked to report, compare and contrast their findings during the morning reporting schedule. Guidelines for choosing and reporting information to the class were developed (See Table 4).

**Table 4. Reporting Schedule**

The role of the reporters includes thoughtful reflection about their experiences and what they discover. The student reporters then make decisions on what they will share with their audience by examining written text, photographs, and illustrations.

- Routine time for daily reporting
- Every child has the opportunity to report using documents to support their theories
- Reporting is topical
- “Special” news is encouraged; but must be scheduled separately

All students in the class participated in the weather broadcasting project. Although student involvement varied and included a range of participation (designing the architectural plans, participation in the construction of the weather broadcasting station, writing the weather reporter’s script, advertising the new broadcasting station), the most exciting result was observing the children encouraging their classmates to participate in the planning and construction of the weather broadcasting station. Acknowledgement of each class member by their peers was an invaluable outcome of the project.
Discussion

The We Are Reporters project accomplished the initial goal of designing a learning environment that fostered inquiry and discovery. Cognitive skills developed as the first graders were given ample opportunities for participatory activities that encouraged curiosity and emphasized thinking about their immediate world. The major categories of Bloom’s (1956) Taxonomy of Educational objectives were demonstrated during the project. The students’ knowledge was evidenced by their recorded observations during weekly nature walks and by conducting research on topics of interest (e.g., slugs, weather, and potato production). Children demonstrated understanding of information (comprehension) by reporting their findings during scheduled reporting times. Introduction to the concept of temperature was done through sensorial experiences (touching and observing); so the students were able to synthesize what they knew about weather and connect it to the concept of reading a thermometer by recording the numbered temperature. The students connected their knowledge of temperature with weather conditions that were influenced by temperature changes. The students then applied their knowledge of temperature to make weather forecasts. The weather broadcasting station was one example of how the students took the lead in extending the We Are Reporters project into a broader realm of learning. The students extended their knowledge of reporting beyond oral recall into script writing, preparing weather logs, and analyzing data. Daily weather logs were utilized as sources of evidence for comparing and analyzing the data. The children chose what information they felt was the most valuable, and the results were compiled into a written script. The weather script was then shared by the first grade meteorologists during a weekly weather broadcast from the class weather broadcasting station.

Another aspect of this project approach was the use of sociodramatic play. Sociodramatic play became a powerful strategy for helping the first graders make sense of their world. Providing props, writing scripts and assuming the role of the reporter further guided the child through the literacy process. Planning and constructing the broadcasting station afforded the children a new lens for making the connection between the role of the reporter and alternate means for sharing information.

We also noted that young children need to be actively involved in the reading and writing process. Implementing real activities, that promoted good listening skills with daily opportunities for public speaking, influenced communication skills. Creating a reporting forum for researching and sharing knowledge gave credibility and value to expanding the way the first graders communicated and shared information. In addition, exposing the students to a range of speaking and listening activities resulted in a rich sharing of diverse ideas, a respect for different approaches to a task, developing problem solv-
ing skills and listening to new perspectives. The thrill of curiosity and discovery was evident when they eagerly sought answers to their questions.

The purpose for establishing a yearlong reporter project in the class evolved from the desire to create a classroom where the curriculum grew from the child’s interest and development. Karen recognized that the risk of being influenced by a scripted curriculum, conflicting parent expectations, and excessive testing may limit the depth of the project’s implementation. Yet, Karen had also seen the effects of “too much, too soon” and knew that adapting the child to an inflexible program was not developmentally appropriate and could possibly affect the child’s curiosity, self-esteem and motivation. After several attempts to superficially alter the curriculum, Karen began to carefully watch the children and pay close attention to their conversations. Gradually, she heard them.

Evidence of how communication progressed from oral discourse to an inclusion of drawing, labeling, recording experiences and using data for drawing conclusions was evidenced in the overlapping reporting projects. As a result, the students made predictions and supported their conclusions using informational text, field experts, and careful observations. Together they became a community of scholars!

**Implications for Teachers**

There are many advantages for early grade teachers who implement the *We Are Reporters* project in their classrooms. The approach is important for teachers for the following reasons:

1. The approach emphasizes the motivational impact of developing instruction based on student interest. This was demonstrated by the students taking the initiative to learn more about their topics of interest through active participation in researching additional information about these topics.

2. The approach creates a classroom community that values different perspectives. The project provided opportunities for students to listen to their peers, participate in discussions, and share thoughts and information with each other. Additionally, students generated questions and interviewed visiting field experts. These activities guided and built their knowledge as they listened, questioned and evaluated new points of view.

3. The approach strengthens observational and listening skills. Successful reporting requires keen observational and listening skills. Students began the project by learning how to identify sounds in their natural environment, noticing environmental changes, and studying the movement patterns of animals. These tasks gave the children background knowledge of their world and framed the devel-
The approach builds oral language skills. Language skills were developed through daily interactions in the classroom. The children worked in groups when investigating the weather; so many rich discussions took place. In addition, each child reported his/her results to the class.

5. The approach develops writing skills. Daily routines for purposeful, interactive and independent writing activities built a familiarity and purpose for written text. Students learned how to express themselves in writing by preparing lists, adding captions to illustrations, documenting their findings, labeling the parts of the weather station, and writing original scripts. The students’ written documents were then utilized as research resources in the class.

6. The approach develops research skills. The project approach encouraged the students to seek additional information regarding topics of interest. The research process developed, as the children pursued answers to their questions using a variety of carefully selected resources for gathering information (books, magazines, interviews, maps, photographs and websites). Students gathered information, categorized and analyzed the data, and then presented their findings during a scheduled reporting forum.

7. The approach offers ample opportunities for critical thinking and problem solving. The We Are Reporters project engaged the children in authentic learning experiences where they worked together planning, discussing, anticipating, analyzing, and making adjustments to their plans.

8. The approach promotes family/school/community partnership. The project actively sought the knowledge and expertise of the family and community. Feedback, suggestions, and support were routinely shared through visits from field experts, field site visits, newsletters, videos and photographs. Home/school activities were incorporated into the project, by extending the role of the reporter to include “reporting” about special events outside of the classroom setting.

The We are Reporters project is a unique approach that meets each child at his/her individual skill and interest level. It helps improve children’s observational, oral language, reading and writing skills by developing instructional strategies that emerge naturally from student interest and curiosity. Thus, these authentic learning experiences are both motivating and developmentally appropriate for each member of the class.
References
HELPING ENGLISH LANGUAGE LEARNERS: PREPARING TEACHERS TO PROMOTE CRITICAL THINKING AND LANGUAGE ACQUISITION

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Northern Illinois University

Abstract
This manuscript discusses the need for a revised paradigm of teacher preparation. Results of the 2005 Illinois Colleges Teacher Graduate Survey revealed less than 60% of first-year teachers surveyed reported having been prepared to work with English Language Learners (ELLs) at the university. This paper offers recommendations that include requiring that teacher candidates develop a philosophy of literacy and biliteracy, acquire knowledge of select theories of second language acquisition, and prepare to become strategic teachers who design lessons that address both content and linguistic objectives.

Background
As teacher educators prepare teachers to meet the needs of the diverse populations of students in the nation’s schools, they are increasingly aware of the challenges faced by teachers of English Language Learners (ELLs). Teacher candidates benefit from experience working with linguistic minority populations and in particular with learners whose primary language is Spanish. It is important to hear and heed the need for change in teacher preparation being voiced by recently certified teacher graduates. One such call was documented by the Teacher Graduate Assessment Project (Illinois State Board of Education, 2005), a survey of first-year teachers who graduates from the twelve public colleges of the State of Illinois. Teachers’ answers to how well their universities had prepared them to be successful teachers show graduates’ satisfaction with their alma maters in all areas but one.
The teachers stated they had not been prepared to work with ELLs. Less than 60% of those surveyed articulated a sense of confidence in their ability to plan instruction for ELLs.

Therefore, as we prepare teachers, the Ivory Tower must not become the Tower of Babel. There are ways of communicating when the teacher and the students speak different languages. For example, teachers can use visual displays with captions to promote vocabulary acquisition in science classes and model the tasks that they are asking of their students to complete at the same time. Simultaneous input through different modalities give ELLs two pathways to comprehension. All teacher candidates can graduate and begin their teaching careers prepared to plan appropriate instruction for ELLs. If projections for the year 2025 come true, then one in every four children enrolled in school will be of Hispanic origin (Cortez, 2003). These numbers illustrate why the reality that No Child Left Behind is mandating be acknowledged (Crawford, 2002). To provide an equitable education to all learners in the nation, the task of acquiring a second language must be as much a focus of instruction as meeting content areas standards. Monolingual educators deserve to know appropriate pedagogy for successfully promoting critical thinking in their ELLs across the content areas (Crawford, 2004).

A revised paradigm of teacher preparation is needed to achieve equity in education for both teachers and students. The monolingual educator who learns methods for teaching English as a second language becomes able to address both language and content objectives so that the entire curriculum is within the reach of all learners. Teachers assure equity by providing the multimodal instruction that facilitates comprehension regardless of the student's level of language proficiency (Daniel, 2002). Teachers who do this do not make ELLs wait to read critically in American classrooms until they are fully bilingual.

**English Only or Balanced Bilingualism**

It is possible that today's educational climate is making teachers question whether or not ELLs can achieve bilingual literacy in the nation's schools. Currently, the American school system appears to have an exclusive focus on English acquisition at the expense of the loss of the native languages spoken by our nation's children. In California, the passage of Proposition 227 clearly indicated that the voters of that state, rather than scientifically examining the reasons select populations were not making adequate yearly progress, chose to approve legislation dictating ELLs become proficient bilinguals in an amount of time that research indicates impossible (Cummins, 1981; Kerper-Mora, 2000). Such hasty and uninformed decisions deny the contributions of the diverse populations who call America home and whose children populate our
schools. Although cognitive advantages have been documented in learners who reach high levels of bilingualism (Cummins, 2000a), the United States faces a teacher shortage and monetary crunch that may be serving the ill-founded justification of English-only instruction for linguistic minority students. It is time to realistically assess how we prepare teachers to teach immigrant children and how much we can ask them and their charges to accomplish.

**Knowledge Teachers Cannot Do Without**

It is important that programs of teacher preparation offer teacher candidates opportunities for reflection, require they develop definitions of literacy and biliteracy, and prepare them to differentiate instruction in ways that allow ELLs to achieve the various literacies that are necessary to succeed in school. When teachers plan curriculum, they need to examine their personal ideology of literacy in reference to social, political, and historical contexts (Cadiero-Kaplan, 2004). Teachers who understand how the political climate of the country influences the schoolhouse are prepared to plan instruction that addresses the demographics of the nation. Teachers know that learners working to acquire English are individuals capable of thinking at high levels in the primary language as well as in English, the target language, but they do not feel confident they know how to reach these learners. Teachers can begin by investigating the ways the professional literature suggests the curriculum be delivered to promote English language acquisition; thus helping ELLs think critically and enable them to advance at the same rate as their monolingual classmates in the content areas. Although it may take ELLs a bit longer to complete assignments because of language issues, it is the caring well-informed teachers who advocate for these learners. Knowledge of how to modify the curriculum raises the bar for learning to include synthesis, analysis, and critical thinking. Appropriate instructional accommodations facilitate engagement of ELLs because factors related to acquiring English that may prevent learning are identified and overcome. For example, well-prepared teachers guard against too much teacher-led instruction, because they know that an exclusive focus on grammar will not offer learners the meaning-making engagement that keeps them interested and on-task. A differentiated curriculum assists ELLs to acquire academic English as students negotiate meaning and acquire language.

**The CUP Theory**

Teacher educators can begin by teaching the premises of Cummins’ (2000a) theory of common underlying proficiency (CUP); so that teacher candidates leave the university with some understanding of how bilingualism develops and how bilinguals-in-the-making think as they acquire a sec-
second language. The CUP theory proposes that learners process language input from a central operating system of knowledge. A person’s storehouse of linguistic knowledge is simultaneously accessible from the primary and the target language. This means that ELLs in mathematics, social studies, and/or science classes will make conscious and unconscious efforts to comprehend instruction by accessing this warehouse of knowledge that is within their brain. This mandates instruction for ELLs to be as engaging and challenging as instruction for native speakers of English. To maintain student interest, it is important to engage not only the frontal lobe, but also the amygdala or more primitive part of the brain. The rote learning that we know is inappropriate for the monolingual student paralyzes the second language learner because its exclusive focus on skills requires memorization rather than functional use of language and causes unnecessary stress.

When teachers study the premises of CUP, they discover that the types of language proficiency presented in the theory are divided into basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). One appears to be easier to attain than the other. An existing problem is that this theory has been frequently misinterpreted in the field as educators have attempted to develop a summary explanation of second language acquisition. Part of the reason for this may be that often learners seem to have BICS and efficiently negotiate meaning in oral exchanges, but do not function well in tasks that involve CALP, academic language. Many interpersonal communications do not demand critical thinking and ELLs succeed at these because the language that they require is the everyday type of expressions that students frequently hear and are able to use automatically. For example, a student who hears the words “Good morning. How are you?” over and over, along with the response, “Fine, thanks.” will soon be able to answer this question without concentrated effort. The catch in terms of language acquisition is that this conversation cannot go further as any deviance from the internalized automatic knowledge is incomprehensible to the ELL. A teacher with knowledge of the CUP theory will not interpret an automatic conversational exchange as indicating an ELL has mastered English. Instead, this teacher will evaluate the learner for proficiency in all language domains and in higher-level academic language before planning instruction. Teachers who do this help ELLs develop both BICS and CALP because they examine the context underlying the language that the learners need to know to understand a lesson and facilitate language development through context-enriched language. This adds a challenging component to identifying lesson objectives. Some opponents of bilingualism argue that it is not possible for teachers to accomplish all this. I propose that there are many ways to do so, if punitive testing is eliminated.
Teachers Experience the Differences Between BICS and CALP

Reflective practice for the teacher of ELLs is promoted when teachers are provided opportunities to experience what it is to hear language and be unable to make sense of what the speaker seeks to convey. For ELLs, understanding the meaning-making in classrooms requires comprehending what the teacher and classmates are saying while making efforts to learn new concepts. Sometimes the ELL may have neither the underlying base of content area knowledge to scaffold comprehension of new information nor the vocabulary to negotiate meaning. Teachers able to identify the gaps in ELLs’ knowledge base are cognizant of the many tasks required to understand classroom interactions. This is why, to prepare teachers to evaluate ELLs it is appropriate to ask them to perform classroom tasks similar to those their ELLs complete.

It is fruitful for teachers to be placed in the position of having to experience the incomprehensible. Through participation in a simulation in my Assessment of the English Learner classes, I ask teachers to step in the shoes of the frustrated ELL who is trying to understand incomprehensible input. They come to realize the contribution of visuals in comprehension and yet see that visuals are not enough to understand text. During participation in the simulation, the teachers feel discomfort if they cannot face the teacher. They become unhappy when they do not understand the language of instruction and lose their concentration. If practicing teachers are helped to open their eyes a bit wider through this simulation, it seems probable that all teacher candidates would benefit from a similar experience. Knowledge of what it is like to not understand text and be required to take a test is an important step that helps teachers grasp what must be considered when working with ELLs.

To begin, I simulate the experience of the ELL who cannot comprehend everything he/she is expected to understand by reading a few pages from Babar et le pere Noel (Brunhoff, 1985), a story written entirely in French. I divide the teachers into groups of students who have access to the narrative in different ways so that everyone’s experience comprehending during the instruction is different. I pre-teach vocabulary using pictures and exaggerated gestures to increase comprehension for some of the group. I also pass out a small copy of some of the pages of the big book to a few teachers. I give all instructions in French and forbid the use of English. Some of the copies of the book that I give out are in color; others are in black and white. Select individuals are allowed to look over the pages of their book before we read the text. Others are forbidden from even skimming their pages in a picture walk and can only listen. Next, I ask some of the teachers to turn their back to me and to their classmates. Some of these students sit next to each other and others are strategically separated so that a few have a shared group experience and others work in isolation. Then, I give a few of the students, who have a copy
of the story, a copy of a test that will be administered after I read the story to the class. These students are permitted to peruse the test and the book before listening to the story being read aloud. Select students receive a copy of the test only. Test questions are multiple choice, fill in the blank, open ended, and one question asks the students to write a sentence using select words from the text. I then read while pointing to the pictures in the text and act out some of the components of the story to clarify events for those able to see the book. After the reading, everyone completes the same test.

After this simulation, many of my students, who are certified teachers enrolled in graduate level coursework, voice recurring themes of frustration. They share a vision of providing multimodal instruction to their ELLs. They state that they answered test questions by guessing and by finding words that appeared to be English cognates. They realize the story that I read to them takes place during the Christmas holiday; so they grasp how their prior knowledge helped them to make sense of the text and the reasons some texts may be culturally incongruent with many immigrant children’s backgrounds. My teachers always laugh when I tell them that one of the multiple-choice questions had no right answer because they all answered the question! It is not uncommon for me to have native speakers of Spanish in the class in which I conduct this activity and this provides yet another component to the experience. Because the bilinguals seem to answer more questions correctly, participants see the cognitive advantages of being able to access an additional linguistic system.

Connecting with ELLs

All teachers want to connect with their ELLs; so that they will understand instructions and be able to complete classroom tasks. The following is a set of instructions that one of my graduate students, an eighth grade teacher, wrote to illustrate how he perceives that many teachers in his school communicate with their ELLs. The instructions rely on aural comprehension, lack step-by-step guidelines that the teacher explains and point to, include no preteaching of unknown vocabulary and confusing language, and offer the ELL no wait time.

Good morning. We learned about latitude and longitude yesterday and today we are going to use that to find absolute location. Could I have you please turn to page 69 in your book and use the map to follow along? Any line that has a degrees north or n is found above the equator and any line that has a degrees south or s is found below the equator. If anyone needs to they may use the definitions in the back of the book to refresh their memories. Going on, if you see a degrees east or west that will be found to the right of the prime meridian. So obviously, a degrees west or w means you will find it to the right of the
That this teacher generalizes about what he sees taking place in his school and brings this example to his graduate level class to share with his classmates, supports the hypothesis that university curricula is not addressing monolingual teacher candidates’ need to know how to strategically modify all aspects of instruction when working with ELLs.

Teaching Strategically

Strategic instruction is that which asks the ELL to become personally involved in the world that exists within the classroom, the neighborhood, and the larger society. It is a commitment that considers literacy to have the power to be transformative (Cadiero-Kaplan, 2004; Greene, 1996). It is an ideology of literacy that takes ELLs beyond the level of functional comprehension and retelling to a place where both teacher and student transact meaning as they question society’s power structure and the curriculum. Teachers help ELLs adapt to life in the United States when classroom tasks facilitate student questioning of what an author says or leaves unsaid, to search for the bias that exists in text, to see how an author tries to influence with words, and to subsequently grasp how words empower or disempower. Critical examination of text helps ELLs who are in the throes of developing bicultural, bilingual identities keep their interest in school. ELLs who critically analyze text even before they have mastered English are less likely to be bored in school, because they will have a personal investment in participation. Teaching from a critical literacy perspective gives teachers the power to change their students’ worlds (Canagarajah, 2005; Edelsky, 1997) as it expands the curriculum to reveal the sociocultural and sociopolitical influences of schooling.

Second language acquisition is also facilitated by the juncture of critical literacy and a focus on language through tasks such as language games, mini-lessons, etc. As an immigrant youngster, I remember struggling to understand the words to popular songs. At age ten, I lacked the background knowledge to understand all the nuances of Peter, Paul, and Mary’s hit song Puff the Magic Dragon. Yet, as I learned the words, I repeatedly played with them as I strove to sing the song. I recall monolingual friends’ efforts to memorize a word from Walt Disney’s movie Mary Poppins. Did a silly word like supercalifragilisticexpialidocious have to make sense or did it convey a feeling that gave it its magnetism? What power this word possessed! The struggle to memorize the syllables of this long word united me to my new American friends when I first came to the United States and helped me to see that native speakers of English also discover new language at school.
Obstacles to comprehension for ELLs are eliminated or decreased in intensity when the teacher uses visual, auditory, and/or kinesthetic clues and identifies cultural links or mismatches to text. A balance of critical literacy and tasks such as the aforementioned engage students because they promote language output in activities where the students feel comfortable. When planning instruction for ELLs, culturally responsive teachers identify language and content objectives, whether the ELLs will be asked to understand aural input, to speak to the teacher and classmates, or to read and write. The teacher of ELLs is more than a content area educator; he/she is also a second language instructor. In planning lessons, teachers consider what language their ELLs need to know to be able to understand the topic of instruction and to critically analyze, interpret, discuss, and internalize new information. Some language objectives may be vocabulary in the form of single words, or they may consist of short phrases, linking words, or prepositions used in sentences and questions.

A university professor (K. Mohr, personal communication, November 4, 2005) shared what she considers best literacy practices for ELLs and their teachers. The following is an adaptation of her thoughts:

- The classroom community must welcome and challenge ELLs.
- The schoolhouse must integrate and promote an appreciation of students' prior experiences.
- When teachers make home visits, they uncover the richness in students' cultures.
- Students should engage in purposeful tasks that use language productively and meaningfully.
- Exposure to English should be scaffolded and rich.
- ELLs should read and write daily.
- Teachers should model a variety of discourse styles for their ELLs.
- Teachers must know historical and current educational policy.
- Teachers are students' advocates.

Last Thoughts and the Future

Clearly, it is no longer an option for programs of teacher preparation to teach future teachers ways to work effectively with linguistic minority populations. It is crucial that university faculty and school districts reach out to practicing teachers. In their survey of 729 practicing teachers in one school district, Karabenick and Clemens-Loda (2004), found that teachers shared they were “less able to teach ELL students than to teach students in general” (p. 70). When Illinois graduates proclaim they were not prepared at the university to work with ELLs, there is reason for alarm because the state has one of the highest number of ELLs in the nation (Meyer, Madden, & McGrath,
Table 1 offers questions for reflection that may help both teacher candidates and practicing teachers identify what they do when they plan and deliver instruction to ELLs and what they could do better.

**Table 1. Questions for Reflection**

<table>
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<th>Question</th>
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<tr>
<td>Why is the curriculum appropriate for my student population?</td>
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<tr>
<td>How am I using my learners' backgrounds to promote bilingual literacy?</td>
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<tr>
<td>What language do my students need to understand the concepts that I am teaching?</td>
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<tr>
<td>Am I preteaching the language that my ELLs do not know before introducing new concepts using this language?</td>
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<tr>
<td>Can I read my ELLs' body language to know when they do not understand? What do I do when I cannot develop a sense of where my students are in the learning?</td>
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<tr>
<td>What ongoing evaluation am I conducting? In what ways am I basing instruction on my observations?</td>
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<tr>
<td>Are the assessments that I use fair for ELLs? Are my assessments language or non-language dependent in content area classes? Am I evaluating progress separately for language and content objectives?</td>
</tr>
<tr>
<td>How am I providing effective multimodal instruction?</td>
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<tr>
<td>How am I making instructional accommodations for English language proficiency in instruction and testing?</td>
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<tr>
<td>Am I teaching my students the reading strategies that they need to comprehend narrative and expository text?</td>
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<tr>
<td>In what ways is my teaching provoking my ELLs to think?</td>
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<tr>
<td>Are my students reading to learn English or are they reading to decode?</td>
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<tr>
<td>Are the tasks that my students complete brain compatible?</td>
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<tr>
<td>In what ways am I linking the reading and writing processes?</td>
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A revised paradigm for teacher preparation mandates the professoriate make certain graduating teachers know how to help ELLs overcome the linguistic and cultural obstacles that they face at school. In their “Second Language Literacy Instruction Position Statement,” the International Reading Association (2008) recommends teachers commit to professional development in L2 literacy as well as become knowledgeable of “the range of political, social, cultural, and economic issues” (p. 3) that affect L2 learners. It is not enough to prepare bilingual and ESL teachers to do the work alone. As more mainstream teachers have ELLs in their classrooms that are exited from bilingual programs, but are not yet fully bilingual, it is evident that what teachers do in their classrooms must change. To assure success for the ELLs in this nation, to help new teachers, and to decrease attrition in the profession, there is no alternative but to make certain all teacher candidates leave the university knowing ways to work efficiently with learners from different cultural and language backgrounds.
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**Abstract**

The present study investigated “if” and “how” regular education classroom teachers differentiate their instruction during literacy events in their classroom. A questionnaire about differentiated instruction was sent to 24 teachers across the country to find out what was happening in their classrooms. Of the 14 teachers who responded and filled out the survey, it was found that only 3 teachers explained differentiated instruction similar to the literature and the researchers’ understanding of what differentiated instruction means. These 3 teachers, 1 elementary and 2 high school were then interviewed and observed to find out “how” they differentiated instruction and what part of the lesson was differentiated. The researchers found that only 2 teachers differentiated the content they were teaching, while all 3 teachers differentiated the process that was used to help the students learn the content. None of the teachers differentiated the product, as they did not allow choice in how the students showed their understanding of the content being studied.

**Introduction**

For years, educators have dealt with issues related to meeting all students’ needs in their classroom. An effective way to accomplish this task is through differentiated instruction (Tomlinson, 1995; 2001). Tomlinson (1995) stated: Differentiated instruction is a flexible approach to teaching in which the teacher plans and carries out varied approaches to the content, the process, and/or the product in anticipation of and in response to student differences in readiness, interests, and learning need (p. 10)
Through differentiated instruction and activities, students take a greater responsibility and ownership for their own learning via activities that are primarily focused on students’ multiple intelligences, higher-order thinking, and learning styles. With this in mind, differentiated instruction is an effective tool to implement in the classroom in order to meet students’ learning styles and multiple intelligences strengths which, in turn, encourages them to use higher-order thinking.

Differentiated instruction is important, but it is also important to remember that decisions on how the curriculum should be modified is based totally on each individual student’s needs (Feldusen, Hansen & Kennedy, 1989; Maker, 1982; TAG 1989; Tomlinson, 1995, 2001, 2003; VanTassel-Baska et al., 1988). In return, using differentiated instruction will provide educators with a way for all students to fit within-the-cracks instead of falling-through-the-cracks in order to become successful individuals in today’s society.

**Personal Perspective of Researchers**

**Dr. Jennifer Bailey**

Prior to coming to the university where I currently teach, I was a classroom teacher with eight years of teaching experience in first, second, third and fifth grades. I had many opportunities to “differentiate” instruction, but I never called it that. At times, I felt unsure of how to teach those students who did not fit into the “average” learning curve of the class, and I grappled for ways to meet their needs. My last teaching assignment was in a K-12 setting at a small magnet school for the arts where the work of Gardner was implemented daily into the lesson plans for the children while infusing the arts into the curriculum. I believed it was so important to meet all my students’ needs by planning lessons and activities using the multiple-intelligences theory (Gardner, 2000), that in time, it became almost second nature for me while planning lessons for all my students.

When I began working at the university, I was given an opportunity to teach a graduate class entitled, “Differentiated Instruction.” This became an on-going learning experience for me, as I became an active learner right along with my graduate students. We worked together to learn how to effectively differentiate instruction in one classroom full of students who had varying abilities and were on different grade levels. I modeled how to differentiate the content, the product and/or the process in my own lessons and assignments. As I taught this graduate class, I became interested in investigating what other teachers were doing to differentiate instruction in their classroom, as I wanted to find some concrete examples that I could share with my students.
**Dr. Thea H. Williams-Black**

As a fifth-generation educator, teacher of gifted and regular education students, professor where I teach undergraduate and graduate level students' literacy and gifted education courses, literacy consultant and a former director for a nationally known gifted education program, I have had the experience of seeing and implementing differentiated instruction in a variety of ways. From implementing Blooms’ Taxonomy (1956) to using Gardner’s Multiple Intelligences (2000), I have exposed students and educators who have crossed my path with knowledge that I believe was differentiated in order to meet their academic needs. When teaching, my primary focus is to try to connect what I am teaching to each student in my class. Doing this requires me to seek personal information on my students, which is done by conducting interest inventories at the beginning of the year. Even though, at times, this is time consuming, I find it relevant in order to meet my students’ needs. Although I feel this style of teaching is very important and relevant, I was not sure if ALL teachers felt differentiating instruction was relevant too. Therefore, the research study was to determine if teachers felt differentiating instruction was important enough to use in the classroom and how differentiating the content, the process, and/or the product was incorporated into the lesson plans in order to meet their students’ needs.

**Theoretical Framework**

The theoretical framework of this study is supported by the research in differentiated instruction (Berger, 2000; Heacox, 2002; Theroux, 2004; Tomlinson, 1995; Willis & Mann, 2000). In the past, research in differentiated instruction has primarily targeted gifted and talented students. However, it is now becoming an instructional tool that regular education classroom teachers can use in their lesson plans to meet the needs of all of their students. Several researchers (Berger, 2000; Heacox, 2002; Theroux, 2004; Tomlinson, 1995; Willis & Mann, 2000) identified three ways to modify the lesson plan in order to provide differentiate instruction effectively in the classroom. They were (a) differentiating the content/topic, (b) differentiating the process/activities, and (c) differentiating the product. Thus, to meet each student’s individual needs in the classroom, the teacher can provide differentiated learning by providing choice in either or all of the areas listed above.

**Differentiating the Content**

One of the three ways to differentiate instruction is through changing the content. The content of the lesson is the curriculum that is being taught. Tomlinson (2001) identified this as the “input” of teaching and learning. When differentiating the content, teachers target what they want students to master. Differentiating the content requires teachers to either modify or adapt
how they give students access to the material they want the students to learn (Tomlinson, 2001).

Heacox (2002) identified several actions that teachers can take to differentiate the content for their students. One way teachers can differentiate the content or the curriculum they teach is by providing students with the opportunity to choose a subtopic within a main topic or unit. This allows students to explore in greater depth a topic of interest which will then be presented to the class. As each student presents the information on their subtopic, the whole class learns more about the topic in general. Another way to differentiate the content is to provide students with different resources that match their current reading level or level of understanding (Heacox, 2002). These levels are determined by preassessing both students’ skills and knowledge. In order to differentiate content, teachers need to be knowledgeable not only about their students’ skills and knowledge, and their content, but they also need to have access to a large variety of nonfiction content children’s books which are written at different reading levels on the content topic being studied.

There are several strategies that the teacher can use in order to implement differentiated instruction within the content of a lesson. Teachers can use acceleration, compacting, variety, reorganization, flexible pacing, advanced or complex concepts, abstractions, materials, and interdisciplinary or thematic approaches. While differentiating instruction within the content, it is encouraged, when relevant, that students move at their own pace (Berger, 2000); although, it is strongly encouraged for students to meet specified deadlines for projects even though students are working at their own pace.

**Differentiating the Process/Activities**

Differentiating the process/activities incorporates learning activities or strategies that provide appropriate methods for students to explore concepts of the content (Theroux, 2004). Tomlinson (2001) identified this procedure as “sense-making.” The process is differentiated not only by how the teacher decides to teach (lecture for auditory learners; centers for tactile learners; small group and whole group), but by the strategies the teacher has the students use to help them explore the content that is being taught.

In order to differentiate the process, Tomlinson (2001) believed that “activities should be interesting to the students, allow the students to think on a higher level, and allow the students to use key skills in order to understand the key ideas” (p. 79). She also emphasized that the activities be intellectually demanding. There are several strategies available that the teacher can use to differentiate instruction within the “activity” of a lesson. This can be done via higher-order thinking, open-ended thinking, discovery, reasoning, and research.
A few classroom strategies that a teacher can use to differentiate the process are literature circles, graphic organizers, learning logs, role playing, cooperative controversy, centers or workstations, interactive bulletin board and encouraging the students to use a variety of learning strategies within the classroom (Tomlinson, 2001). Children should be encouraged to choose the activity or strategy that best fits their learning style (Sprenger, 2003).

**Differentiating the Product**

A product is what a student develops to show their understanding of the content which was taught. Differentiating the product encourages students to demonstrate what they have learned in a wide variety of forms that reflect knowledge and ability to manipulate an idea. This phase of differentiating is identified as evaluation (Tomlinson, 2003). Differentiating the product allows students to self-select a way to show they have learned the material that was taught. When students self-select their product, they normally choose a method that will provide them success which most likely will coincide with their own learning style(s).

This can be accomplished by incorporating Gardner’s (2000) Multiple Intelligences or focusing on students’ learning styles. Gardner identified eight intelligences which enable teachers to better understand and teach all children successfully. These intelligences are: (1) verbal-linguistic, which is the understanding of graphophonics, syntax and semantics of language; (2) logical-mathematical, which means one uses logical structures such as patterns while thinking and writing; (3) musical, which is the ability to express ones thoughts and ideas in melody and rhythmic patterns; (4) spatial intelligence is the ability to perceive the visual world accurately; (5) bodily-kinesthetic intelligence is the ability to control one’s bodily motions and handle objects skillfully; (6) interpersonal intelligence is the ability to read peoples body language and determine their moods; (7) intrapersonal intelligence means you have the ability to understand yourself; and (8) the naturalist intelligence means to have the ability to recognize and classify various plants and animals in the environment and to adapt to living in any type of environment.

**Purpose of the Study**

This mixed-method study was done in order to answer the following questions: (a) How many teachers use differentiated instruction in their classroom? (b) What type of differentiated instruction is taking place in elementary and secondary classrooms? (c) How are the unique methods or strategies being used to differentiate the content, the process, and the product related to literacy instruction?
Methods

Participants

The researchers sent a survey to a purposeful sample of 24 elementary and secondary classroom teachers. These teachers were known by the researchers, and they were currently teaching in Florida, Mississippi, California, and Virginia. These teachers had varying degrees of classroom experiences, as they had been teaching anywhere from 1-13 years. They either held a master’s degree in reading or are currently working on an advanced reading degree. The teachers were all female and Caucasian. Even though each teacher was asked to pass a copy of the survey on to a teacher in their building, this did not appear to have happened, as only 14 completed surveys were returned (56%). However, the survey responses came from teachers who represented all four states.

After analyzing the data from the surveys, the researchers concluded that only 3 classroom teachers’ descriptions of classroom happenings matched the researchers’ understanding of differentiated instruction while teaching literacy, as they described two or more “unique” reading activities that differentiated the product, process, and/or content. They used instructional methods that allowed their students to use their best learning style(s) or preferred learning to adjust assignments, assessments, and activities while still adhering to the state-mandated standards. Thus, these 3 classroom teachers, 2 of whom were Dr. Bailey’s former graduate students, were further interviewed and observed while teaching by the researchers. These 3 teachers included 1 elementary teacher in a California school and 2 secondary teachers in a Florida school. The descriptions of their classrooms are below.

Background of Three Main Participants

Sharon’s Class

Sharon, a third-year teacher, held a bachelor’s degree in business and a master’s degree in Reading Instruction. She had certifications in secondary English and in exceptional student education. Sharon taught tenth-grade English in a suburban school in the Florida Panhandle where only 8% of the student population received free and reduced lunch rates. Sixteen percent of the students qualified for special education services. However, most of these students were in an inclusion class where they were taught the specific benchmarks and content area materials by either one teacher with a reading certification or two teachers in a coteaching situation. Eighty-six percent of the students were Caucasian, while 14% of the students were considered minority and none had limited English proficiency rates.

Sharon was in an inclusion, coteaching class wherein she was the Special education/English teacher and her coteacher was the official “reading”
teacher. Together their goal was to help the students in their Florida Com-
prehensive Assessment Test (FCAT) deficient class pass the state required
test. Students in this class had to pass the test in order to graduate. There
were 20 students in the class during the observation. Two of the students
were of Hispanic/Latino decent, 1 student was African American, and 17
students were Caucasian.

In her own words Sharon said,

Although we are an English class, our focus is on reading strategies
that will improve their reading skills. My students do not use “good
reader” practices. They can answer surface questions, but not deep,
inferential questions. They are afraid of giving the wrong answer and
do not take responsibility for their learning.

Keisha’s Class

Keisha, a first-year teacher, taught at the same school as Sharon. She
was asked by her principal to take the “Fast Track” reading endorsement
program; so she could proficiently teach students who needed remedial work
in content area reading. She had a bachelor's degree in business and was
working on her master's degree in reading instruction.

Keisha’s class was a 9th and 10th grade reading and world history com-
bination class in a high school in the Florida Panhandle. Her 15 students
were mainly Caucasian and consisted of 8 boys and 7 girls. These students
had not passed the FCAT and were placed in remedial classes because of
their poor grades. The passing score for the FCAT was 300 and the students’
average scores were 221. The students were labeled “level one” because of
their academic history and had shown little to no gain the year before.

Becky’s Class

Becky had been teaching for eight years in both Florida and California.
She had a bachelor’s degree in elementary education and a master’s degree
in reading instruction. She participated in several district led inservice train-
ing sessions on differentiated instruction.

Becky taught in a self-contained third-grade classroom in a Title I school
in the city limits of Los Angeles, California. Her 19 students, which consisted
of 9 girls and 10 boys, were mainly Latino with 5 English as a Second Lan-
guage (ESL) students, 1 gifted and talented student and 1 special education
student. Three were performing above grade level, 9 were performing at
grade level, and 7 were performing below grade level.
Materials

This study consisted of the researchers’ self-designed survey, informal interviews, and instructional documentation. Each instrument was used so the researchers could gain a better understanding of “if” and “how” teachers differentiated instruction within their classroom.

Survey

The survey (See Appendix A) asked the teachers how long they had taught, what type of school they taught in, how they defined differentiated instruction, how receptive students, parents and administrators were to differentiated instruction and what literacy activities they did with their students. The researchers wanted to gain an understanding of what teachers actually understood about differentiated instruction and if they truly valued it as an instructional tool. There was also an interest in finding out the different perspectives on differentiating instruction at various school sites.

Informal Interviews

During each of the classroom observations, time was set aside to meet informally with each teacher. Each teacher was asked to reflect on the particular lesson or activity, that was observed and to explain how they felt this activity differentiated instruction. Teachers were also asked how they planned for each activity including any types of needs assessment. Student work samples and/or other types of instructional material were available for the researcher to peruse. All three conversations were informal, yet very informative as to how they each planned for instruction based on the needs of their students.

Instructional Documentation

While observing Sharon, the primary focus was on gaining a better understanding of how she had implemented the “Mystery Monday” activity as well as viewing student writing samples. Sharon was able to show several different mysteries and the students’ writing notebooks. She had changed the activity several times since the beginning of the year and she would continue to change and make adjustments either for the whole class or for small groups of students.

In Keisha’s class, observation of the actual work pieces the students produced at each of the work stations was available. The researcher was introduced to the READ 180 (Scholastic) program they used on the computers and the lexiled material that went with the program. The researcher was also interested in seeing the passages they read for the fluency checks and the charts used to graph their results.

Observation of the actual spelling assessment in Becky’s classroom was not available; however, the researcher was able to observe the state man-
dated text and examples of the Super Star Speller assignments and tests. Classroom bulletin boards and other learning areas/centers around the classroom, as well as examples of student work that had been completed at the different centers, were available to view.

**Researcher’s Observation**

The researcher wanted to observe each teacher in their natural setting. Thus, the researcher set up purposeful observations to see particular lessons of interest revealed in the surveys. When the researcher entered Sharon’s classroom she was interested in seeing the entire “Mystery Monday” lesson. The researcher was able to observe Sharon’s classroom several times throughout the year due to her proximity to the university. Every time the researcher arrived in Sharon’s classroom, she purposely came in between periods so students were just entering the classroom. This way the researcher was able to sit in the back and observe Sharon’s lesson as a nonparticipant. The entire lesson was observed and time was allotted to wander around the classroom, as the students were involved in solving the mystery and writing their conclusions.

Keisha and Sharon taught at the same school; therefore, it was easy to access their classrooms. Observation of Keisha occurred on two different occasions. As with Sharon, the researcher arrived in between classes as not to disturb the students. On the first visit, the researcher was able to sit in the back of the class and watch as she informally assessed three different students using a 1 minute fluency check. Then an observation of Keisha administering informal conferences with each of these students occurred. She discussed with each student how they each raised their fluency level. They each graphed their new fluency level on a chart and discussed future goals, such as working on prosody or voice inflection as they read. Each assessment and conference lasted no more than 5 minutes. On the second visit, the researcher was able to observe Keisha’s students in their work stations. She chose a group of four students to read with her while she allowed the other students to choose a work station, such as: computer, word wall, partner reading or independent reading. Observations of these students occurred for approximately 20 minutes at the station of their choice, after which a small group lesson/conference session was observed.

Observation of Becky’s class in Los Angeles, California, took place right before the winter break. Only one chance was allotted to conduct this observation due to its location. While observing, the researcher became more of a participant-observer, as the students were very interested in the stranger in their classroom especially at this time of year. Observations of shared reading, a read-aloud and circle time were conducted during this time. Unfortunately, the researcher was not able to see the actual Super Star Speller activity but was able to view student work samples, teacher-made interactive
bulletin boards, and center areas around the room. Additional data was collected through in-depth teacher interviews.

**Data Collection**

Data for this research was collected in several different ways. The initial data was collected through a survey that was e-mailed to a purposeful sample of 24 classroom teachers who were known to the researchers (See Appendix A). They were also asked to share the survey with fellow teachers in their building. However, this did not seem to occur, as only 14 surveys were filled out and returned. Once the surveys were returned, they were read several times by the researchers and a discussion took place to determine “if” and “how” each teacher perceived differentiated instruction.

The “if” gave quantitative results. It was determined that only three teachers out of the 14 who responded to the survey had the same understanding of differentiated instruction that the researchers had. The “how” was determined by qualitative data. For the qualitative data, Lincoln and Guba’s (1985) criteria was used to verify data collection, analysis, and reporting. The participants in the study judged the credibility of the research. Member checks were used with the teachers to confirm the content of the information collected from their informal interviews. To ensure credibility of the data, triangulation procedures were followed by obtaining multiple sources of evidence such as interviews, observations from the teachers and the researcher as a participant observer. Lincoln and Guba identify transferability as the degree to which the results of qualitative research may be generalized or transferred to other contexts or settings. Transferability is the responsibility of the researchers. The transferability was enhanced by describing the research context and key issues, such as patterns and themes, which were important to the study. Dependability was maintained by describing any changes that occurred in the setting and how the changes affected the way the researchers approached the study. The researchers checked and rechecked the data collected throughout the study. All participants in the study were given the opportunity to confirm the findings of the study. The researchers also used peer analysis to verify themes that emerged from the data and to verify interpretations that were made throughout the process of data collection. Interview data were transcribed by the researchers and destroyed when the study was completed.

Eleven of the 14 teachers listed activities that did not meet characteristics that the researchers were looking for based on Tomlinson’s (2001) work (differentiating the content, differentiating the process, and differentiating the product). From the analyzed data and the in-depth discussions on several surveys, three teachers were chosen for a further interview and a time was
set up to both observe the happenings in the classroom and have an in depth discussion with the classroom teachers. Work samples, lesson plans, photographs, and other instructional materials were collected from each of these teachers during the interview and observation process.

Data Analysis

Marshall and Rossman (1995) suggest four procedures for data analysis. These procedures include (a) organizing the data; (b) generating themes and patterns; (c) checking the emerging theories, inferences and postulations against the data; and (d) searching for alternative explanations. These procedures were used to analyze the data collected throughout the research. Initially, the surveys were analyzed by reading and rereading the information provided to see if any answers matched what the research suggested were “good” or unique differentiated instructional strategies. Once the data were highlighted the researchers developed a list of strategies and determined who submitted the particular strategy or suggestion of interest. Next, they determined which researcher would visit each classroom. Depending on if the teacher was easily accessible, one or more classroom visits and informal interviews with that teacher were planned.

After completing each visit, each researcher separately reviewed and analyzed the work samples, pictures, anecdotal and observational data collected from each of the three teachers. As they did this, they were able to organize the information into three themes that matched the work of Tomlinson (2001). The themes included how each teacher differentiated instruction through the use of either one or more of the following: (a) differentiating the content/topic; (b) differentiating the process/activities; and (c) differentiating the product. The researchers discussed how each piece of data fit into one of the categories above as methods of differentiated instruction. The data were rechecked several times before forming a conclusion. Table 1 identifies the happenings in the classroom and how each teacher differentiated the content, the process, and/or the product through their literacy activities and how they differentiated through the use of learning profiles such as Higher-Order Thinking Skills (HOTS) (Bloom, 1956) and Multiple Intelligences (Gardner, 2000).

Data analysis procedures found that each teacher truly used unique activities to differentiate instruction. They used one or more of the methods outlined by Tomlinson (2001) to differentiate their literacy instruction. Several of the activities used met the needs of the students’ learning styles.
**Findings**

**How Sharon Differentiated Instruction**

Sharon found that her students had trouble reading and identifying with the grade level reading textbook that had been provided by the school district. The textbook not only contained stories that were too long, but they were written at a higher reading level than her students could read. Thus, Sharon wanted to locate some high interest, low reading level material. While attending a workshop, she learned about www.mystery.net, which is an online resource containing a variety of short mystery scenarios. Sharon felt that these stories would help her students develop a larger vocabulary and motivate them to work on their comprehension skills. Therefore, Sharon developed “Mystery Mondays” as a way to meet the needs of her students and keep them motivated while working on building their vocabulary, grammar, and reading comprehension.

Each Monday, the students received a new, short, one-to-two page, high-interest low-reading level mystery scenario. Prior to their reading of the mystery, Sharon and her coteacher helped the students determine the meaning of key vocabulary words that they felt would cause the students trouble. On the day that the first observation occurred, the words “strangulation,” “Medical Examiner,” “indicate,” “compact” (from a lady’s purse), “belligerent,” and “bigamist” were being taught during the vocabulary instruction.

After the vocabulary instruction occurred, the students were instructed to read and solve the mystery. At the beginning of the year, Sharon read the mystery scenario to the students and had them work as a class to solve the mysteries. However, as the year progressed, the students worked in small groups, and then independently read and solved the mystery and determined who had committed the crime.

Based on her students' needs, Sharon developed and introduced a content frame (See Appendix B) graphic organizer to assist her students with their comprehension while reading the mystery scenarios. At first, the content frame was used as a scaffolding tool that the students used to write down the clues. This provided the students with a visual representation of the story so they could write down and examine the details in order to analyze and piece together the information accurately and determine who committed the crime. However, as the year went on and the students became better at solving the mysteries, they could decide if they would continue to use the content frame to help them in their quest.

When the second observation took place at the end of March, the researchers noticed that the process had changed since their first observation in January. Now, the students were grouped together and there was no discussion prior to reading the mystery scenario. Plus, Sharon had divided the mystery into parts, and the first task of each group was to reassemble it in the correct order. Even with this extra task, the students still effortlessly com-
completed the activity within the class period. It was quite evident that they could not wait to find out who committed the crime. The researchers also noticed that fewer students relied on the content frames to organize their thoughts. When Sharon was asked about the success of this activity she stated,

I don’t really care if they ‘solve’ the mystery correctly. I am looking to see if they have clear, coherent ideas and can back them up. That is why I introduced the content frame. I wanted them to use the tool to organize their thoughts and writing.

How Keisha Differentiated Instruction

Keisha presented unique activities which helped her differentiate instruction for comprehension and fluency for her high school students. These students were in class an extended period of time to allow for more instruction in both history and reading.

At the beginning of each new world history theme, Keisha introduced the text chapter to the whole class. This whole group instruction included such activities as defining the vocabulary terms given in the chapter, giving supporting details of the particular era being studied, or discussing any other facts that she felt the students needed to know before reading. Groups were then determined. Each group was assigned a different task while they were reading the text chapter. For instance, one group may need to use a specific strategy such as Survey, Question, Read, Recite, Review (SQ3R) (Anderson & Armbruster, 1984) to assist with their comprehension of the story. Another group may need to gather more background knowledge on the topic through either library or computer research. Keisha used three different work stations in her classroom as a means to help her work either one-on-one or in small groups with the students. The stations consisted of independent reading, computer time, and small groups. Station time was approximately 30 minutes every day. The school used the READ 180 Program (Scholastic); so the independent station and computer stations were developed with materials from that program.

The day of observation, the group working on the computer station was reading a passage about the “Harlem Renaissance.” They worked through a short (5 minute) vocabulary lesson then read a passage. They were asked a series of 10 comprehension questions and were guided to a story at a particular lexile level. Keisha had these books in various “cozy corners” around the room. After completing the computer activity, the students would select a book and head to a self-chosen area to read quietly. Many students started by reading their books. At various times throughout the chapter books, students were prompted to do a “quick write” on the computer based on what they read. Keisha had the ability to view each student’s file to read and track the quick writes and assessments. The program provided instructional recommendations that Keisha could use to help match her instruction to the assessment data she gathered about the students.
Keisha selected other students to work with in small groups or one-on-one during the third station time. She worked on specific strategies that they needed during this time by taking anecdotal records and noting patterns of behaviors for each student weekly during the small group station time. These notes also helped guide her instruction and place students into groups to work on specific strategies or to review content material.

Since her goal was to help her students pass the FCAT while learning social studies content, the other part of the class time was devoted to specific reading strategy instruction. On Fluency Fridays, students tracked their own progress on a chart where they graphed their words per minute. Then, they were given teacher input during individual conference time. Keisha stated that many of her students knew exactly what they used (voice inflection, using a faster pace, being more familiar with high frequency words) to increase their fluency rates. Students were then paired together to work on increasing their fluency rates. Each quarter Keisha placed the students in groups based on their fluency rates to perform a reader's theatre presentation for the class. Sometimes she would mix the students of various rates and other times they were at approximately the same level. The plays were performed orally for the class. After the performance, the class discussed together how fluently each student performed and how fluency could be improved.

In order to differentiate instruction effectively, Keisha recommends:

- Use strategies that you can vary to fit the learning styles and comprehension level of the students in your class. Provide instruction of new material to the whole class; then tailor it to the individual abilities during small group time. Remember, it's not about what you teach, but what students learn and how they grow.

Literacy stations helped Keisha differentiate the content. She had three different stations including the READ 180 (Scholastic) station, independent reading and a teacher/student conferencing station. During the conferences, the student and Keisha worked together to make goals for learning based on self-analysis and teacher anecdotal records. Weekly fluency checks were a big part of the assessment analysis process, as Keisha found that this was a large area of need based on initial assessments and state test scores.

Keisha also had the students write scripts and perform in reader’s theatre, which differentiated the process of her students’ learning. Each student was placed in a group based on their fluency rate and prosody. The students either were given scripts, or they wrote their own script depending on their ability level and interests. Each group performed the reader’s theatre production for a class, and then self-evaluated their performance.
How Becky Differentiated Instruction

Becky differentiated her spelling instruction through an activity she called, “Super Star Speller (SSS).” On Fridays all of her students would take a pretest on the next week’s spelling list from the district’s adopted text. If 100% was earned on the test, then the students were allowed to choose five words from their reading, science, or social studies text glossary or from the dictionary. This became their spelling list for the next week. Students brought the words each Monday for the teacher to approve for the spelling test on Friday. Students still received a grade that week based on their state mandated list and were required to do spelling lessons with the class based on their Super Star Speller (SSS) list. However, students worked on spelling words that interested them, as long as they knew the spelling patterns that were important.

Becky also used literacy centers and interactive bulletin boards as a means to differentiate literacy instruction in her classroom. According to Tomlinson (2001), the use of centers assists with providing small-group instructional time. She used word game centers where the students could choose games independently, or she would choose for them, based on a particular need she saw (working with word families or spelling). One bulletin board in the classroom was used as her word wall. During center time, the students would use pointers and clipboards and play games related to the words as a means to practice high frequency words. Becky used transparency activities on an overhead projector in order for the whole class to have the opportunity to see the lesson as it was being taught. The students would read poems, circle parts of speech, word patterns, sentence parts or whatever designated activity she let them choose from for that day. While small groups were participating in the centers, she held guided-reading groups or individual conferences to work on particular strategies the students’ needed. One whole area of the room was designated as “Our Literacy Corner” and one bulletin board in the corner caught the researcher’s eye. It said, “We’re Growing Our Reading Tree.” Becky had placed definitions of different genres of books: folk tales, biographies, non-fiction on leaves. As students read a particular book of that genre, they wrote the title on a cut-out leaf and placed it on the tree. Becky shared that students were encouraged to read from every genre throughout the year. Students who placed leaves on the tree were encouraged to share with their classmates about their book. Becky found out which students were interested in certain topics or genres through informal discussions and placed students into groups based on their interest, as Tomlinson (2001) suggests.

According to Becky, “Differentiation is what we have always done. It is really just taking responsibility for helping all students and meeting their needs. You have to provide something for all of them. You have to keep everyone motivated.”

While teaching, Becky differentiated both the content she taught and the process she used to help her students learn. She differentiated the content and
helped her “higher” spellers who had already passed the state-mandated tests by encouraging them to create their own spelling lists. As students showed proficiency on their weekly spelling list, they were allowed to choose their own words in other content books to use with the spelling assignments they created also.

To differentiate the process, Becky used literacy centers and interactive bulletin boards. This helped her work with small guided-reading groups as other students read independently or in small groups in literacy centers around the room. Students could choose centers based on their interest and many of the centers contained activities at various ability levels based on the needs of the students. She encouraged the students to read books based on their interests by providing opportunities for every student to share orally. The goal of this sharing was to help those students who had a hard time choosing books on their own to learn about books that they might enjoy. Through an interactive bulletin board, the students were able to identify books in different genres.

**Table 1. “How” Teachers Showed Differentiated Instruction**

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Differentiating the Content/Topic</th>
<th>Differentiating the Process/Activities</th>
<th>Differentiating the Product</th>
</tr>
</thead>
</table>
| Sharon  | • Developed content frame to aid with comprehension and writing a reflection  
          • Various levels of scaffolding for each student  
          • Asked multiple levels of questions and expected students to make inferences (HOTS)  
          • Students worked with linguistic, spatial, musical, bodily-kinesthetic, interpersonal and intrapersonal intelligences | | |
| Keisha  | • Workstations  
          ~ Mini-lessons determined by formative assessment  
          ~ READ 180  
          ~ Guided reading  
          • Each group had a different task related to the topic of the chapter in the text | • Literacy Workstations  
          • Students worked in small groups based on their fluency rates and abilities as found in the weekly assessments, to practice and perform a Reader’s Theatre of their choice based on their ability levels | |
| Becky   | • Students who passed a prespelling test with a 100% who were able to choose new words to work with that week based on their interests and readiness  
          • Centers for guided reading and individual conferences to work on strategies | • Learning Centers  
          • Interactive Bulletin Boards | |
Discussion

Breaking the data into the three themes of differentiating instruction through the content, process, and product assisted the researchers with data analysis and conclusions. When reviewing the collected data from each teacher, we found that teachers were using a variety of activities to teach all students in a way that motivated, challenged, and excited the students at the same time. These three teachers are taking the time to differentiate their instruction in order to meet the needs of each student, while still focusing on the standards and skills that need to be taught.

The researchers were impressed by how two of the teachers used the students’ interests and readiness to differentiate the content. All three used different grouping methods and provided additional scaffolding, including content frames, multiple levels of questioning, work stations, and centers to differentiate the process. Although the teachers did not directly identify Multiple Intelligences theory, they each provided students with multiple methods of reaching state benchmarks for their grade level.

Need For Further Study

As the researchers analyzed the data further, it was identified that the observed teachers did not formulate activities to differentiate the product, as the researchers projected. According to Tomlinson (2001), products should cause students to think about, apply and expand what they understand about what they have learned. There are multiple ways to differentiate the product that will challenge, create structure, or clarify the purpose for the learning.

Further studies are needed in examining practical ways teachers are differentiating the product, as it will be a beneficial addition to the current literacy research. There is also a desire to examine how universities are preparing preservice teachers to differentiate instruction. Further examination needs to determine what classroom factors hinder or stop teachers from using differentiating instruction in the classroom. A limitation of this study was the sample size. Future research should include a wider sample of teachers in different regions of the country.
References


Appendix A. Teacher’s Perception on Differentiated Instruction

1. Grade level:
2. School Type (public, private, magnet . . .):
3. Years of teaching:
4. How do you define differentiated instruction?
5. How do you differentiate instruction in your classroom?
6. How do teachers in your school differentiate instruction?
7. How receptive are students to you differentiating instruction?
8. How receptive are parents to you differentiating instruction?
9. How receptive are teachers in your school to differentiating instruction?
10. Does your principal support you differentiating instruction in your classroom?
    How do you know he/she supports you?
11. Do you feel differentiated instruction should only be incorporated for gifted and talented students? Why or why not?
12. How do you assess and assign grades with differentiation in mind?

Appendix B.

Name: _______________________________________________________________

Date: __________________________ Period: ______________________________

Mystery Monday

Title: ________________________________________________________________

<table>
<thead>
<tr>
<th>VICTIM</th>
<th>INFORMATION ABOUT VICTIM</th>
<th>INFORMATION ABOUT CRIME</th>
</tr>
</thead>
</table>

<table>
<thead>
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<th>NAME</th>
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<th>MOTIVE</th>
<th>ALIBI</th>
<th>CLUES</th>
</tr>
</thead>
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<td>Suspect 2:</td>
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Abstract

In the two-phase case study described here, we explore the application of embedded audio commenting technology for feedback on graduate-level literacy assignments. Research questions focused on the characteristics and benefits of using audio feedback compared to traditional text-based (written) feedback and, additionally, how students would perceive the attributes and benefits of both forms. Findings suggest that audio feedback may be a promising technique. Benefits were seen in detailed responses characterized by more attention to assignment content and subject matter. Additional exploration revealed that the audio feedback examples contained not only more information but richer language. However, there are indications that the use of audio may require a slight paradigmatic shift on the part of both students and instructors. Discussion focuses on the characteristics of the feedback examples and on student responses. Implications and directions for further research are also addressed.

As public and private elementary, secondary, and higher education institutions continue to invest large sums of money in technology—computer hardware, networks, and software—the pressure on educators to utilize the technology in support of effective education is mounting (Dziuban,
Shea & Arbaugh, 2005; Leu, Kinzer, Coiro & Cammack, 2004). Consequently, educators are constantly searching for innovative ways to use technology wisely and productively. Before employing any new technology, however, nagging questions remain. We must ask ourselves the following questions and feel comfortable with the answers: How will the use of this technology enhance the educational experience of my students? How will I gain the skills necessary to implement these new technologies? How will I assess and measure success of the technology?

Further complicating the integration of technology in education is the paradigmatic transition required of educators. Berliner (1988) notes that when interacting with technology many faculty experience conflicts with traditional teaching styles and revert to the equivalent of a novice instructor. In turn, this may lead to uncertainty about what constitutes effective practice and doubts about the effectiveness of technology-mediated learning (Bennett & Lockyer, 2004). Therefore, it is essential that the introduction of new technologies be a purpose-driven act with clear-cut assessment potential, but also be perceived by teachers as being easily integrated with existing teaching practices.

The objective of this article is to share our experience piloting the use of asynchronous audio commenting, a software-moderated technique which we believed would provide more effective feedback to our graduate students thereby enhance their learning experience. Our use of the technique was prompted both by interest and necessity. All four authors have developed courses and taught using online technologies. Moreover, as our department prepares to offer an entire graduate program online, we realize the demand on our time, with a growing number of students enrolled, will require us to look at new options for providing effective and meaningful feedback. A search for effective ways to deliver feedback led us to consider technology-enhanced alternatives that might be available and adaptable across instructional contexts. Further, we viewed this as an opportunity to observe the integration of technology-moderated tools into traditional face-to-face teaching.

**Theoretical Framework**

When faced with the challenge of providing effective feedback to their students, educators frequently struggle with questions such as: How much feedback should be given? What do I focus on—mechanics and grammar, content, style? How much is too much and how little is not enough? Some guidance can be gleaned from Willingham’s (1990) suggestion that the goal of feedback on papers is assumed to be the improvement of future drafts and the improvement of the writing ability of the student. Comments on student papers should be “specific enough to guide students when editing their work, but not so specific that they simply implement the instructor’s sugges-
tions” (p. 10). However, in following this prescription, instructors may find themselves conflicted between providing specific enough feedback to facilitate students becoming their own editors and injecting so much feedback that the students’ voices become marginalized.

So how are instructors supposed to know where to draw the line with providing effective feedback? Stern and Solomon (2006) identified three principles for effective feedback that appeared to be consistent across the literature:

- provide positive comments in addition to corrections; provide feedback that is only on a few select areas that are deemed important for that particular assignment—those tied to the learning goals for the assignment; and provide comments that identify patterns of weaknesses, errors, and strengths (p. 25-26).

In an effort to assess the type of feedback higher education faculty are giving on graded papers and to determine if the feedback is consistent with the above mentioned principles, Stern and Solomon (2006) collected 598 graded papers (not including quizzes, exams, homework, etc.) from a wide range of content areas and course sections. Instructor comments were coded using a 23-category hierarchy and subsequently categorized as being positive, negative, or neutral. Analysis revealed that the feedback given during the grading process was not consistent with the principles of effectiveness. Providing more positive comments to students and tying feedback to learning goals were both underutilized. Identifying patterns of strengths and weaknesses were almost absent; there were no instances of where the instructor explicitly showed the student how to correct the pattern. In conclusion, Stern and Solomon suggest, “If we believe that student learning is ongoing and incremental, then providing effective feedback at every opportunity is the best way to encourage and promote learning” (p. 38).

Straub (2000) conducted qualitative case study research in a first year college writing course to examine the relationship between teacher response theory and its practical classroom based application. As a guiding framework for this study, he presented seven principles for effective teacher response to student writing. These tenets included: (a) craft comments as informal conversations, (b) avoid taking control of the content of student writing, (c) focus more on content, context and organization and less on style and mechanical problems, (d) limit the scope and number of comments, (e) respond differently based on the maturity and stage of the writing, (f) gear feedback to the individual, and (g) use praise often. Straub concludes there is no one way best way to offer feedback and applying the tenets should be contextually situated and tailored to meet the specific need of the course goals, professor and students.
Traditionally, when feedback is provided to students it is presented in the form of written comments. A major criticism with this type of feedback is that it is typically too vague and inconsistent across courses and instructors (Beach & Friedrich, 2006). Moreover, some professors are simply inclined to write more—and others less, regardless of student ability, content/subject matter or motivation (Straub, 2000). Contemporary research on teacher response suggests students prefer detailed explanations of feedback and follow-up conferences for clarification and elaboration (Bardine, Bardine & Deegan, 2000).

When investigating feedback types, students report benefiting most from comments on ways to improve their writing and feedback that elaborates on “why” something was deemed acceptable or not. In order to meet students’ need for more detailed and focused feedback, the use of audio tape recording has also been used in some settings (Mellen & Sommers, 2003). When using the audio tape recording, professors are able to provide more feedback and expand on their comment in greater detail. Using this one-way communication mode in most instances can take no more time then using written comments. However, by utilizing computer technology and tools, there are other options for providing such detailed audio feedback.

Recently, colleagues of ours (including one of the authors of this paper) conducted promising research in which a technology-based alternative to traditional text-based feedback was explored. Specifically, they utilized Adobe Acrobat Professional© v. 7 to provide embedded audio feedback to students in online courses. Their findings revealed extremely high student satisfaction with asynchronous audio feedback as compared to asynchronous text only feedback. Four themes emerged from this research: (1) audio feedback was perceived to be more effective than text-based feedback for conveying nuance, (2) audio feedback was associated with feelings of increased involvement and enhanced learning community interactions, (3) audio feedback was associated with increased retention of content, and (4) audio feedback was associated with the perception that the instructor cared more about the student. Document analysis revealed that students were three times more likely to apply content for which audio commenting was provided in class projects than was the case for content for which text based commenting was provided (Ice, Curtis, Phillips & Wells, 2007).

Based on these findings we decided to conduct a pilot study in which we would provide both text-based (written) and audio feedback for student assignments in a traditional, face-to-face classroom setting. This study was conducted in two phases, which are described below. The primary objective was to answer the following questions: (1) How will the use of this audio commenting technology be perceived by my students? (2) Are there any differences in the type of feedback provided when using the audio applica-
tion? (3) Is embedded audio commenting an effective alternative to traditional feedback and grading mechanisms?

**Methodology**

**Phase 1**

In this phase, three of the four authors of this manuscript, a full, assistant, and visiting assistant professor, all used audio commenting for one assignment in literacy courses taught over the spring and summer of 2006. Students \( n = 68 \) receiving audio feedback were enrolled in courses that were components of our college’s Reading Specialist program. Demographically the population consisted of part-time and full-time students, both on-campus and off-campus, with varying levels of previous teaching experience.

Students submitted the target assignment formatted as a Word© document, via email. Adobe Acrobat Professional© v. 7 software (AP7) was used to convert assignments to PDF format. Using noise-canceling microphones, to ensure clarity, audio comments were embedded in the students’ assignment using the audio commenting feature in AP7. Graded assignments, with audio comments embedded, were then returned to students via email as PDF files. Students viewed the assignments and listened to instructor comments using Adobe’s free Acrobat Reader©.

During the semester, two surveys were administered to the students, before and after receiving audio feedback. The surveys, consisting of ten Likert and seven open-ended items, were based on an existing instrument developed by Sipple (2005). Likert response choices were: strongly agree (5), agree (4), undecided (3), disagree (2), and strongly disagree (1). The pre-survey focused on students’ general perceptions of grading and feedback. The post survey focused on perceptions of audio commenting. Data were collected and entered into an Excel© spreadsheet to facilitate analysis of means and frequency counts of student responses to both the Likert and open-ended items. Based on suggestions by Miles and Huberman (1984), an iterative, interpretive approach was used for: (1) data reduction, (2) data display, and (3) conclusion drawing/verification.

Findings from the first self-report questionnaire indicated students were primarily pleased with feedback they received. Four of the ten items that were representative of student responses are presented below with corresponding means:

- My professors usually provide me with written feedback on my assignments [3.9]
- If written feedback is provided, it is usually positive in nature [3.5]
- Written feedback on assignments are helpful for completing future assignments because it shows me what the professor is looking for [4.1]
Sometimes I ask for clarification of the written feedback that I receive on assignments [3.4]

The findings from the self-report questionnaire focusing on the students’ perception of the audio feedback indicated the students were positive and very interested in the audio feedback format. Open-ended responses revealed students believed audio feedback to be more detailed, personal, in-depth, specific, and constructive than text-based feedback. Four of the ten items that were representative of student responses are presented below with corresponding means:

- I like audio recorded comments better than written comments [3.2]
- The audio recorded comments “sink into my head better” than written ones [3.8]
- Hearing the expression and emotion in the professor’s voice on the audio recording helped me understand feedback better than reading the comments [3.9]
- The audio recorded comment made me feel I had a more personal and human relationship with my professor [3.8]

In the open-ended section of each survey, students were asked to indicate their perceptions of quantity of feedback across five categories: (a) content/subject matter of assignment, (b) style and formatting, (c) mechanics and grammar, (d) adherence to guidelines, and (e) flow of writing. Analysis of the general grading/feedback survey indicated that students believed they received the greatest amount of feedback in the area of content/subject matter of assignment and the least amount of feedback in the area of style and formatting (e.g., margins, APA). Analysis of the post-audio feedback survey indicated that students believed they received the greatest amount of audio feedback in the area of mechanics and grammar and the least amount of feedback on adherence to guidelines. Interestingly, in both surveys, when asked which criteria they would like to receive most feedback, students overwhelmingly indicated content and subject matter of the assignment.

These intriguing findings lead to a refined research framework for the next phase of the study. Primary consideration was given to analysis of student perceptions revealed through responses to the categorical prompt. Students were asked to indicate their perceptions of actual feedback by area, as well as which area they perceived feedback as being the most beneficial. Specifically, students placed the highest value on content and subject matter feedback and believed instructors gave more weight to this in text-based grading. However, when prompted to reflect on the embedded audio comments, students indicated they received the greatest amount of feedback in the area of mechanics and grammar. Yet, despite the difference in percep-
tions, quantitative analysis had revealed that students were just as or slightly more satisfied with audio feedback than they were with text-based feedback. To develop more insight into what was actually transpiring when instructors provided audio feedback, a second phase to this research was added.

**Phase 2**

The second phase, utilized a two-part, modified quasi-experimental research design to further explore actual and perceived uses of audio feedback by two instructors in the fall semester 2006. The first component consisted of analyzing differences in the type and quantity of feedback provided to students. The second component of the study consisted of surveying students to determine what, if any, differences they perceived between text-based and audio feedback.

To reduce the potential for bias, we removed ourselves as participants and recruited two colleagues to provide both text-based and audio feedback in their courses. Beth (pseudonym), an associate professor with ten years experience at the university, and Kelly (pseudonym), a first year assistant professor, new to the university, were both inexperienced in the use of the audio commenting feature in the AP7© software. However, both were interested in learning and applying the new technology in their face-to-face courses.

The associate professor, Beth, who was teaching an undergraduate course, required students to observe in an elementary classroom and compile a written synthesis of observations and best practices in literacy. The average length of this assignment was four to five pages. The assistant professor, Kelly, was teaching a mixture of undergraduate and graduate students and decided to use a written reflections assignment. Her students were asked to enter a new social setting to examine language discourse and cultural customs. The average length of the students’ written reflection of this experience was two to three pages.

Both Beth and Kelly followed the same protocol for grading. Each was asked to grade half of the class assignments using a different feedback modality. In other words, one half of the class received traditional text-based (written) feedback while the other half received embedded audio feedback. Each professor randomly assigned students to each of these two groups. Students in the text-based feedback group submitted assignments and the corresponding feedback in a traditional paper-based form. Students in the audio feedback group submitted assignments as a Word© document and received feedback in the form of a PDF with audio comments embedded. Each group of students completed the same student self-report questionnaire used in the spring/summer pilot described in phase 1. At the end of the data collection phase, each professor participated in a semi-structured interview (Appendix A) with at least one of the authors. This data is presented after the triangulation process to provide an overview of how these instructors viewed
the process. While brief and informal in nature, this section helps contextualize and inform practice.

A total of 46 documents were analyzed in this study. Kelly submitted 9 text-based and 12 audio graded assignments while Beth submitted 13 text-based and 12 audio graded assignments. Once all data had been received from both participants, we transcribed the audio comments to facilitate the initial coding. One author, using speech recognition software, transcribed both Beth and Kelly’s audio feedback files (n = 24). The additional data set, graded assignments with text-based feedback (n = 22) was also copied and included in the analysis. Due to the relatively small sample size, we felt that data analysis using aggregate data would be more informative than if we were to compare means that would lack adequate statistical power.

In order to code the feedback provided by our peers, we referenced the list of feedback criteria included in the student questionnaire survey. To this list we also added a category called positive affirmation/rapport building. The decision to include this category was based on findings by Ice et al. (2007) of the importance students place on instructor caring and support; a finding that was also present in phase 1 of this study. For clarity purposes, we combined these criteria into the following categories: Assignment Content/Subject Matter (ACSM); Clarity and Flow of Writing (CFW); Mechanics, Grammar and Style (MGS); and Rapport Building/Positive Affirmation (RBPA). To ensure reliability in coding, each of the 46 graded student assignments was coded individually by at least two of the four authors.

A nesting design utilizing both sequential and concurrent elements was applied (Creswell, Plano, Clark, Gutmann, & Hanson, 2003) in which quantitative data were embedded within qualitative findings from document analysis. The first step in this procedure was to conduct a count of instances of feedback categories present in each document. Data were then divided into two sets based on whether feedback provided was text or audio. Secondly, using the same data set, a word count was conducted and recorded by type and modality. In instances of text-based markings (e.g., inserted commas, cross-outs), we counted these as one word. Descriptive statistics and regression analysis were then utilized to determine if any significant differences existed between instances of feedback type/modality and word count/modality.

Finally, we analyzed both text-based feedback and transcripts of audio feedback to explore richness. We decided to use a pragmatic approach in which what is known about content richness is applied to feedback. Specifically, we decided that if adjectives were viewed as enhancing descriptions, it would be logical to assume that their inclusion in feedback would be useful in conveying greater meaning and emphasis to students. For comparative purposes, the number of adjectives used in feedback was counted by feedback type and regression analysis applied to the data.
The second component of this mixed methods study consisted of analyzing student perceptions of feedback across modalities. Using the categorical prompt from phase 1, students were asked to rank order the feedback type for which they typically receive the greatest number of comments for both modalities. Descriptive statistics and regression analysis were used to analyze the data. Due to the slight imbalance in the number of documents in which students received text-based and audio feedback, a weighted means approach (Cohen, Cohen, West, & Aiken, 2003) was used for analysis of data.

In an attempt to acquire a deeper understanding of actual versus perceived uses of audio feedback, triangulation was applied to both data sets to address possible causative effects. In accordance with suggestions made by Ryan and Bernard (2003), interpretive conclusions were formed in the triangulation process. These observations are presented at the end of the findings section and are elaborated on in the concluding remarks.

Findings

Feedback Type and Modality

The first question we hoped to answer was: Would there be differences between type or categories of feedback provided when using each of the two modalities—text-based versus audio commenting? Based on the student results from phase 1, we also questioned, for example, would audio feedback focus more on mechanics and grammar, as students reported or would greater feedback come from one of the other three categories? Again, the four coding categories included: Assignment Content/Subject Matter (ACSM); Clarity and Flow of Writing (CFW); Mechanics, Grammar and Style (MGS); and Rapport Building/Positive Affirmation (RBPA). Table 1 (below) displays mean instances of instructor feedback per paper graded, for these categories, across all documents and by feedback technique.

<table>
<thead>
<tr>
<th></th>
<th>ACSM</th>
<th>CFW</th>
<th>MGS</th>
<th>RBPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>4.23 (SD=3.61)</td>
<td>4.91 (SD=4.95)</td>
<td>7.05 (SD=6.11)</td>
<td>0.82 (SD=1.10)</td>
</tr>
<tr>
<td>Audio</td>
<td>5.33 (SD=3.81)</td>
<td>2.17 (SD=2.81)</td>
<td>6.42 (SD=7.05)</td>
<td>1.54 (SD=1.44)</td>
</tr>
<tr>
<td>Total</td>
<td>4.80 (SD=3.72)</td>
<td>3.48 (SD=4.16)</td>
<td>6.72 (SD=6.55)</td>
<td>1.20 (SD=1.32)</td>
</tr>
</tbody>
</table>

Regression analysis revealed modality was a significant predictor of type of feedback provided (sig = .017). However, only Assignment Content/Subject Matter (sig = .042) and Clarity and Flow of Writing (sig = .013) were significantly effected. Mechanics, Grammar and Style (sig = .266) and Rapport Building/Positive Affirmation (sig = .198) were not significantly influenced by feedback modality.
Though the type of feedback provided was significantly influenced in the case of Assignment Content/Subject Matter and Clarity and Flow of Writing, it is interesting to note that the standardized ≤ was .307 for ACSM and -.482 for CFW. Stated another way, with respect to Assignment Content/Subject Matter feedback, students received an average of 30.7% more instances of feedback when the instructor used the audio modality. Conversely, on average, 48.2% fewer instances of Clarity and Flow of Writing feedback were provided when the instructor used audio feedback as opposed to text-based feedback. Instances of Mechanics, Grammar and Style and Rapport Building/Positive Affirmation were not significantly influenced by the feedback modality.

**Quantity of Feedback Type and Modality**

As discussed in the methods section, we became interested in determining how quantity of feedback differed with respect to modality utilized. Table 2 (below) depicts the mean quantity of feedback (as measured by number of words) that was provided by type as a function of modality.

**Table 2. Feedback Word Count and Modality**

<table>
<thead>
<tr>
<th></th>
<th>ACSM</th>
<th>CFW</th>
<th>MGS</th>
<th>RBPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>9.21 (SD=7.53)</td>
<td>6.71 (SD=7.94)</td>
<td>3.01 (SD=3.44)</td>
<td>8.38 (SD=3.19)</td>
</tr>
<tr>
<td>Audio</td>
<td>19.31 (SD=8.32)</td>
<td>17.38 (SD=12.37)</td>
<td>17.18 (SD=4.86)</td>
<td>16.24 (SD=5.71)</td>
</tr>
</tbody>
</table>

As a simple visual inspection reveals, the word count total across all four categories was double, triple or greater when comparing the means between audio and text-based feedback. Quantitative analysis confirmed the significance (sig = .010, s) suggested by visual inspection. Across the four feedback types, modality was found to be a significant predictor of quantity at the .05 level.

**Text Richness and Modality**

Overall, the ratio of adjective usage was approximately 14:1 across modalities when audio was used rather than text-based feedback. However, the highly directive and symbolic nature of text-based feedback, both Clarity and Flow of Writing (e.g., arrows, cross outs) and Mechanics, Grammar and Style (e.g., insertions) allow for very little adjective usage, thus skewing the overall numbers. In the other two categories, Assignment Content/Subject Matter and Rapport Building/Positive Affirmation, the instructor was more descriptive in both modalities; however, the use of audio was a significant predictor of feedback richness at the .05 level. When using the audio feedback, the ratio for Assignment Content//Subject Matter was ≈ 8:1 and ≈ 4:1 for Rapport Building/Positive Affirmation.
Student Perceptions of Feedback Instances and Modality

Analysis of the self-report questionnaires revealed that students believed most instances of text-based feedback occurred in the area of Assignment Content/Subject Matter and the fewest instances in the area Mechanics, Grammar and Style. When surveyed on their perception of the embedded audio feedback received, the findings were identical. Student identified Assignment Content/Subject Matter as the area in which they received the most feedback and Mechanics, Grammar and Style as the area in which the least amount of feedback was provided. Document analysis revealed there was however a slight, but non-significant (sig=.068) decrease in the number of commenting instances for Mechanics, Grammar and Style, yet students believed that instances had actually increased (sig=.031) when audio feedback was provided.

Triangulation of Data

During the triangulation process, interpretive analysis of all four of the data sets presented in Phase 2 revealed two discrepancies between perceived and actual instances of feedback types by modality. Students believed that instances of Assignment Content/Subject Matter feedback decreased and Mechanics, Grammar and Style feedback increased when the instructor used audio rather than text-based feedback. In actuality, instances of Assignment Content/Subject Matter feedback increased by approximately 31% when the instructor used embedded audio comments. Further, no significant change in instances of Mechanics, Grammar and Style was found. To explain this discrepancy, we hypothesize that the perception of increased instances of Mechanics, Grammar and Style may be due to the fact that audio feedback provided in this area was more extensive; a greater amount of words per instance was used. In fact, when text-based feedback was provided an average of 3 words/symbols were used per instance compared to 17 words per instance with the audio commenting. Perhaps students may have confused the volume of words per instance with actual instances of feedback in the area of Mechanics, Grammar and Style. However, more research is needed to validate this hypothesis.

Instructor Perceptions

After all student data was collected, we were able to informally interview the colleagues we recruited to participate in the audio grading pilot. Both indicated an overall positive response to the use of the audio tool and plan to continue using the technology. Both said they were able to offer more detailed comments and feedback using the new tool. However, neither felt they offered less, in the way of feedback, to the half of the class who received the written comments. Finally, both had experienced problems with the technology (e.g., file size, microphone quality) but believed with greater exposure and practice, the process would become more natural and less time consuming.
Discussion and Conclusions

Inquiry into pedagogical applications of technology impacts multiple stakeholders, settings, and purposes. The importance of using research to inform best practices in technology enhanced learning environments and the cognitive impact on students cannot be understated. Based on the findings of this study, we believe the use of embedded audio commenting to be an effective and promising pedagogical application of technology. As our results indicate, students “can hear us” and our feedback; however, they may perceive it differently when audio commenting is used. By providing audio comments, both the quantity and richness of the feedback provided were influenced. As the findings indicate, more attention was to given to the category students value most—Assignment Content/Subject Matter. Overall, the impact of providing audio feedback appears to be highly positive. Although we surveyed students who received audio feedback on their perceptions of the process, questions still remain regarding how they applied what they learned from the detailed feedback in this course and others in which they were enrolled.

We do, however, have concerns related to the impetus for this line of research. Initially, our exploration was designed to help us acquire a working knowledge of how a new technology could be used to facilitate delivery of feedback. While our findings indicate that this new delivery mechanism appears promising, we feel it is imperative that we remain cognizant of the fact that it not a panacea or singular solution for affecting best practices in providing feedback. Using the audio commenting is simply a method—a tool. Those providing feedback must still look to the research on response theories (Stern & Solomon, 2006; Straub, 2000) for guiding principles related to best practice and tailor feedback to meet the needs of the students.

When providing audio feedback, those of us using the software for the first time still struggled with issues of quantity and quality, time and impact, just as if we were delivering traditional paper/pencil grading feedback. We do, however, believe that the conversational tone (e.g., pace, intonation) is well received by students; and the use of audio feedback comes close to replicating that of an informal conference or student’s office visit, although unfortunately, it is only a one way transmission of information.

From an instructional perspective, audio may provide an opportunity to establish more meaningful relationships with students; however, there are some hurdles that must be faced. During this study, we encountered some issues with hardware performance, production of overly large file sizes and conflicts with the MAC operating system. With technical support, each of these areas were addressed, but some instructor frustration was noted. Additionally, we did not feel this was a time saver and in many instances actually took more time to grade each paper. However, this later observation conflicts with find-
ings by Ice, Curtis, Phillips, and Wells (2007) in which instructors realized a substantial decrease in the amount of time required to provide feedback to students while realizing a significant increase in the quantity of feedback. Perhaps, the participants in our colleagues’ study were more adept with the use of technology, as they have a history of teaching online courses.

In conclusion, we believe that using Adobe Acrobat Professional© to provide embedded audio comments offers extremely effective means for grading and providing feedback in both online and face-to-face learning environments. By providing students with more meaningful and detailed feedback, we believe audio commenting has the potential to enhance retention and allow students to more effectively construct knowledge. Further, it is our opinion that audio commenting can effectively serve as a conduit for providing richer and more extensive asynchronous instructor/student interactions. In the process we have the ability to provide an enhanced learning experience and meet the demands of the students in contemporary educational settings.

**Limitations and Directions for Further Research**

As previously noted, the findings of this study were quite encouraging; however, the sample size was small, making generalizability rather limited. We believe that future research related to this technique should be conducted with larger sample sizes. In doing so, the statistical power of quantitative findings would increase, and crosschecking for prevalence of existing and emergence of new themes in qualitative data could be conducted.

In addition, the participants in this study included only literacy instructors and students in literacy courses. Further, the two professors graded only one assignment using the audio grading technique. Future studies should seek to work with colleagues in other disciplines, over the course of an entire semester to compare the technique’s effectiveness across groups over time. A suitable approach for such a study might include the collection of quantitative data and reduction/transformation of qualitative data to be used in hierarchical linear modeling, for purposes of examining differences between nested data sets.

Finally it is, in our opinion, imperative that future research examines the impact of this technique on the quality of students’ future writing assignments and other artifacts; a concern noted by both of the instructors who delivered audio feedback in phase two of this study. While the high degree of student satisfaction is encouraging, it is not necessarily indicative of enhanced performance or application across course assignments. Future research addressing both of these variables, and possible correlations, is essential.
References
Appendix A. Faculty Interview Protocol Guide

Good morning/afternoon/evening. The goal of this study is to examine some of your observations related to the use of auditory feedback. The information generated by the study will be used in a research project that is designed to benefit both students and faculty with respect to the use of this medium. With your permission, I would like to audiotape this interview.

Before we begin, I would like to notify you of the following:

- Your participation is entirely voluntary. You may halt the interview at any time and/or choose not to answer certain questions.
- Your responses will remain anonymous. Complete confidentiality will be maintained. At no time will your identity be revealed either by the procedures of the study or during reporting of the results.
- No negative consequence will result for choosing not to participate.

Please feel free to tell us what you really think and feel; this will be the most helpful in trying to find out how to improve things for students and faculty members in the future.

Thank you for your participation in this research.

[Note code number and start recording.]

1. What was your overall impression of using audio feedback? (probe as needed)
2. Did you have any technical problems when providing audio feedback? (probe as needed)
3. Do you believe you will use this technique again? (probe as needed)
4. Did you receive any feedback from your students regarding audio feedback?
NAVIGATING
TEACHER
EDUCATION
CONFRONTING TEACHER EDUCATION ISSUES HEAD-ON: INCREASING OUR KNOWLEDGE AND CHOOSING OUR OPTIONS FOR STRENGTHENING TEACHER EDUCATION PROGRAMS

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Western Illinois University

Francine Falk-Ross
Northern Illinois University

Linda Gambrell
Clemson University

Richard Long
International Reading Association

Mary Beth Sampson
Texas A&M University-Commerce

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University of Massachusetts Boston

Abstract
At the CRA annual conference in Pittsburgh, Pennsylvania, the Teacher Education Division focused on the significant legislative issues that drive policy initiatives in reading education. Two key speakers explored the topic in depth. Practical suggestions were shared on ways for educators to become involved and influence policy. Then division members joined one of three focus groups, small sessions which addressed specific aspects of teacher education. Thus, this meeting continued the emphasis of informing the membership of recent events in the political arena and the importance of taking a proactive stance.
The increasing moves to align our reading education programs with state and national standards and to address local and national policy initiatives require teacher educators to maintain a high level of metapolitical awareness. Our responsibilities within teaching forums and to the larger education community depend on our knowing the most updated information and reasonable, practical applications for action. Discussions among colleagues in the field of reading education regarding general concerns and specific levels of focus benefit the forward movement of clear initiatives for change.

Members of the College Reading Association’s (CRA) Teacher Education Division (TED) gathered in Pittsburgh, Pennsylvania, for the 2006 annual conference and considered serious issues facing the profession, issues identified by members as significant. Members had voiced a strong interest in future sessions providing information regarding political issues and ways to practively gain knowledge and have a positive impact. Thus the main speakers focused on the legislation that drives reading program development.

The first whole group address by Linda Gambrell provided a broad overview of the field and the importance of being professional activists. Dr. Gambrell emphasized that professional educators must not shrink from communication with policy makers and engagement in the political arena. The second speaker, Richard Long, brought an in-depth update on current legislation perspectives on teacher education issues. Following the two key speakers, small groups formed under leaders who shared their expertise at the elementary, middle/secondary, or post-secondary levels. Division members chose one of the three focus groups to join: (1) Issues in Elementary Education, (2) Issues in Middle and Secondary Education, or (3) Issues in Teacher Education. This paper shares the insights from both the whole group and focus group sessions with the intent of providing information about critical areas in the political arena, the importance of taking a proactive stance, and ways to do so.

Teacher Education: Why Your Voice Matters!

Linda Gambrell

Reading education is important to individuals, communities, nations and the global world in which we live. People who are literate have a greater ability to learn and thus, can participate more fully and contribute to society. At the national and global levels, literacy is a key factor in democracy. For these reasons literacy is the centerpiece of education.

As literacy educators, we generally agree that our students need better reading services, they need to spend more time on reading, and funds need to be better spent in order to meet their literacy needs. Improving reading proficiency will create a more stable, safe, democratic world; increase respect for minority rights; and result in students who are more personally responsible and skilled problem-solvers.
As teacher educators, we have a responsibility to be involved in the political process and to work with legislators to improve literacy education. We need to let political leaders know about literacy issues and concerns so they can more effectively shape policy and vote for appropriate funding.

Key issues that need to be clearly communicated to political leaders and the public are that literacy in general, and reading specifically, deeply affect the nation’s well-being on several levels. On a personal level, people who read simply have a greater ability to learn and see relationships. They are able to become aware and knowledgeable about issues that affect their neighbors, their schools, and their country. At the community level, people who read can communicate together to support and strengthen the larger group of members who provide resources for cultural, political, and citywide organizations. They are able to access necessities, provide directives, educate, and lead groups of families and potential voters. At the national level, literacy is a key factor in a democracy. Through reading, our nation can learn and understand our laws, voice their opinions, and share in the forward movement of our country. Without strong reading programs, the democratic principle is undermined. Programs such as Reading First, Title I, state based programs, and high stakes assessment are all to be considered carefully by teacher educators.

You Can Make A Difference

Tell your International Reading Association (IRA) members to be respectful, but not to be awed, by the process of working with legislators. In most ways, they are just like us. They want their children to be well-educated. They understand that it is in their best interest to be sure that ALL children in our country and beyond are well educated.

As reading teacher educators, we need to participate fully in the process of developing the reading programs and the reading services of the country in general and the schools with which we communicate. Proficient reading ability for all children will create a more stable, safe, literate, democratic world; respect for minority rights; and more personally responsible students and skilled problem-solvers.

As a member of professional organizations such as the IRA and CRA, you have knowledge and perspective to offer our political leaders. In fact, you can get involved with a minimal time commitment. You already have a natural connection with community members, elected officials, and policy makers. As a teacher educator and a professional, you have stories to share—some involve success, some failure. Political leaders need to know your stories, so that they can better shape policy and vote more effectively on funding for reading instruction.

The mandate that is set before us involves three parts. Learn more about reading policy and legislation. Study and stay up to date on current legisla-
tive actions. Read, share, and use IRA’s monthly advocacy updates. Meet and make personal contacts with legislators and their staff. A phone call and a personal visit to the appropriate staff person go a long way.

You can obtain more information via e-mail and websites sponsored by the International Reading Association through their website (http://www.reading.org) or the organization’s blog (http://latadvisory.blogspot.com), or through e-mail (irawash@reading.org).

Legislative Issues and Teacher Education
Richard Long

The reality is that while many are aware of how important literacy education and teacher education are for the future, few follow and participate in the debates that make those policies. During the new Congress, many of policies that impact teacher education will be discussed and some will become law.

In the No Child Left Behind Act (2002), there is a requirement that teachers be “highly qualified,” the acronym is HQT. In its simplest terms, it means that teachers who teach a subject should be certified in that area. This has resulted in some confusion, especially in areas such as a special education teacher who teaches English. Do they have to be certified in both? While this is an indication that teachers and their professional background is important, the next step being discussed is for “highly effective teachers” or HET. What would this mean? It would mean that teachers would be evaluated on a very different score card, one that is very hard to define.

Another area of interest to teacher educators is the Higher Education Act, specifically its sections on support for schools and colleges of teacher education. While it is a small program (most of the Higher Education Act is about student loans and grants), it does provide some support. This is also true of the efforts to support preservice teacher education in special education and vocational education. In addition, the U.S. government provides support for teacher education programs in the mathematics and science areas. The U.S. Department of Education, the National Science Foundation, and the U.S. Department of Energy do this.

What is missing is something specific for reading education. There are programs for special education, vocational education, math and science but not specifically for reading. A case needs to be made that we need more teachers with a wider background in reading to help more children with specific needs—English Language Learners (ELLs), learning disabilities and other areas that are part of every classroom in America.

IRA is making several proposals on literacy education and teachers as No Child Left Behind, the Higher Education Act and Head Start are debated in Congress. We hope that you will work with us to make a difference. In a
nation of over 300 million people, small groups of people who care can make a difference!

**Issues in Elementary Education**

*Mary Beth Sampson*

The elementary education group’s initial discussion focused on concerns for and ways to meet the needs of the individual child. Within that context, meeting the needs of English Language Learners (ELLs) quickly surfaced as vital.

Upon reflection, the combining of the two concerns should not be surprising. According to Cummins (2003), “(1) appropriate ways of teaching reading to both English first language (LI) and ELL students, and (2) appropriate ways of promoting academic achievement among bilingual/ELL students” (p. 2) are viewed by many as the two most controversial and hotly debated educational topics.

There are many reasons for these concerns. From 1992-2002, in grades K-12 the number of ELLs increased by 72% (U.S. Department of Education, Office of Civil Rights, 2003) representing more than 440 languages (Zehler et al., 2003). In 2006, approximately 5.5 million ELL students were attending U.S. public schools (McCardle & Chhabra, 2006). As discussed by the group, there has been an increased emphasis and dependence on the scores from high stakes testing as the indicator of both student success and teacher accountability. Teachers are often expected to bring all students to predetermined reading proficiency by certain grade levels, regardless of whether or not English is the student’s first language.

Research has indicated a positive impact on the achievement of ELLs when they have instructional support for the development of their first language in programs such as bilingual education, sheltered English, or two-way immersion (e.g., August & Shanahan, 2006; Freeman & Freeman, 2000; Genesse, Lindholm-Leary, Saunders, & Christian, 2005; Howard & Sugarman, 2007; Thomas & Collier, 2002). However, a concern voiced by the group was that policy changes have occurred within recent years that endanger programs that maintain, much less value, support, and enhance the first language of ELLs. In addition, participants also noted the shortage of teachers who were fluent in a language other than English and who could even teach in bilingual, sheltered English, or two-way immersion programs. Most of the ELL students that members of our group came in contact with in public schools spent the majority of their instructional time in mainstream classrooms with English speaking teachers. Therefore, consensus was reached recognizing the reality that it was our responsibility as teacher educators to provide support for both preservice and inservice teachers to help them meet the needs of all learners, including ELLs.
Several of the participants noted there seemed to be a great deal of overlap between effective instruction for ELL students and at-risk students. However, authorities have voiced concern that educators do not adopt the simplistic view that “just good teaching” will meet the needs of all ELLs (Bear, Helman, Templeton, Invernizzi, & Johnston, 2007; Harper & de Jong, 2004). This view was shared in our group as participants discussed the diversity of ELL students entering the public school at all grade levels. Some ELLs enter public school highly proficient both in their native oral and written language, while others do not have adequate oral language development in their first language. In addition, the group acknowledged this diversity of language development was also true for native English speakers entering the public school. Therefore, effective teachers have a depth and breadth of knowledge of best practices, which include a core of strategies that research has indicated support the learning of both native and ELL students. However, large segments of ELL and at-risk students attend underfunded, low achieving schools and are taught by underprepared teachers (Mercado, 2001). Therefore, the focus turned to the need for enhanced teacher preparation.

Participants emphasized the need to incorporate ELL training into teacher preparation programs and provide it for inservice teachers. Several focus group members shared ways in which their institutions were beginning to explore this concept through partnerships with public schools. Examples included collaboration on grants for the implementation and development of research-based programs such as dual immersion in public schools and field-based programs that provide opportunities for shared professional development and enhanced communication between public schools and universities.

The consensus was that there was a lack of visibility of the need for enhanced support for ELL and/or at-risk learners, and in many ways, we as educators shouldered some of the responsibility. As educators, we often “make do” with the resources we have, and as a result, do not become advocates for students who are ELL, at-risk, or both. As a result, these students remain “invisible.” Participants discussed the need to invite elected representatives to schools where the “real world” was visible. In addition, the need for writing to public forums, such as “Letters to the Editor,” and to elected officials was also discussed.

We left the group reminded of the multiple opportunities and challenges we have as educators. Our roles include more than instruction. We must also be advocates—especially for those students whose voices are the least likely to be heard.
In order to initiate the group discussion of middle and secondary-level literacy issues, a portion of a current job description for an open position at a leading university was shared. According to this position announcement, a qualified candidate with expertise in middle and secondary school literacy would have experience and interest in the following:

- a well-recognized active and applied program of research focused on adolescent literacy
- evidence of innovative, middle-school or secondary classroom instruction
- understanding of technology designed to enhance literacy
- background knowledge of literacy development in urban settings
- experience in instructional strategies designed to increase and improve the literacy competencies of adolescents
- knowledge and experience of diverse readers, especially those who are experiencing difficulties in school settings
- potential to secure external research funding and develop research collaborations within and beyond the department.

Participants readily acknowledged that current post-secondary positions expect highly qualified applicants who can address and ameliorate the needs of middle and secondary readers. The session participants were asked to comment on the above expectations and the current issues faced by teacher educators focusing on middle and secondary students. The opening questions included identifying descriptors that characterize contemporary issues in literacy and which are of greatest concern. This was a difficult task to address in a brief conversation, but participants stressed that it can be debilitating to view adolescents as problem readers. For example, is the term, “struggling reader” an accurate or helpful label? Many feel that “remediation” and “intervention” now carry negative connotations. What perceptions are associated with such terms? These educators encouraged a more positive view, so that the students are supported in more constructive, respectful ways.

In this context, there was general appreciation that attention is now being given to middle school readers. For example, as reported in the Washington Post on July 13, 2006, by Lori Aratani:

Teaching reading has long been considered the job of primary grade teachers. But some educators are calling for more attention to be paid to the reading needs of middle and high school students, many of whom are struggling to master this critical skill. (p. B01)

In addition, adolescent literacy ranks as the hottest topic in the 11th annual survey conducted by Cassidy and Cassidy (2007). As stated in the sum-
mary article in *Reading Today*, “The 2007 list contains one extremely hot issue—adolescent literacy. Not only did all our respondents agree that this was a hot issue, but they also agreed that it should be a hot issue” (p.1). Later in the article, the authors note, “Since we added the ‘should be hot/should not be hot’ columns in 2000, this is the first time everyone has agreed that a topic is ‘hot’ and ‘should be hot’” (p. 10). A subsequent article, on page 12 in the same issue, explains the justified attention now being given to adolescent literacy. The range of reading ability in middle and high-school classrooms can be overwhelmingly large. The article also notes that secondary teachers are now teaching a higher percentage of English language learners, and recreational reading is not often a priority among adolescents. Another issue is that the size of many schools reduces opportunities for a well-integrated curriculum and strong teacher-student relationships, which also play a role in reading achievement.

Recognizing that the time is right for a focus on adolescents, participants asked about successful programs and the kinds of programs that are receiving funding. Helen Perkins briefly described the Striving Readers (U.S. Department of Education) grant that she and her colleagues were initiating at the University of Memphis. Their efforts were just beginning, but hopefully this kind of research will help educators better understand how to work with older readers. Time will witness if the focus on adolescent literacy will make a sufficient impact. Certainly, the attention to adolescents needs to enlighten and support teaching that is more sophisticated and shared across disciplines and between home and school. Readers seeking more information are encouraged to consult the Alliance for Excellent Education’s report *Reading Next—A Vision for Action and Research in Middle and High School Literacy*.

Mary Roe helped to summarize the CRA session, noting the need to work with middle school teachers in their early years of teaching and to work as advocates for adolescent readers and their teachers. The challenge for new and ongoing teacher educators focusing on middle school students is to take advantage of the current interest in middle school literacy. Systematically exploring effective practice and appropriate ways to support the ongoing reading achievement of middle school students must now move forward. Teacher education programs are similarly challenged to support preservice and inservice teachers with research findings and classroom applications that engage and challenge middle school and secondary readers.

**Issues in Teacher Education**

*Rona F. Flippo*

There are many issues that teacher educators are facing and addressing in the current No Child Left Behind (NCLB) (2001) environment. One of them that is of great concern to many teacher educators and their colleges is the issue
of the NCLB mandated high-stakes testing of our students seeking licensure. While we would not argue that our teacher education graduates should meet standards, how they are being assessed and evaluated, on a state-by-state basis, is of great concern to all of us. The NCLB legislation has left these decisions to each respective state. While, on the surface, it would seem that this is the most appropriate way for these decisions to be reached, apparently all states did not equally consider the consequences of their particular assessment and evaluation decisions. Participants in the teacher education focus group had an opportunity to look at data from Massachusetts and learn about some of the results in that state, share what has been happening in their own states and universities/colleges of education, and discuss the current problems.

The data presented to this group consisted of demographic data from the Commonwealth of Massachusetts' first year of testing prospective teachers for teacher licensure (1997-1998). Although many have requested these data for years, the Massachusetts Department of Education (DOE) had not been willing to provide it (Flippo & Riccards, 2000) until the prospect of litigation ensued in August 2007. Then this state produced some more recent data; however, these data (from 1997-1998, the first year of the testing, as well as for two recent years) show consistent disparate passing rates among the various racial, ethnic, and language-diverse teacher candidates who have taken these tests (Jan, 2007). The implications are obvious, and the problems are equally predictable to the universities, colleges, and teacher educators. Our group discussed some of these; but by far, the most serious result of all is that less diverse teachers are being licensed in the Commonwealth of Massachusetts. Many Black, Hispanic, and language diverse new teacher applicants are being screened out and denied licenses in this particular state (Flippo, 2003). For example, the passing rate for Black teacher applicants ranged from 24% to 40%, for Hispanic applicants from 40% to 43%, for Asian applicants from 53% to 64%, while the passing rate for White applicants was as high as 80%. Although there are various reasons for this, which are discussed in the cited publications, the most heinous and problematic is that the testing instrument being used to evaluate the teacher candidates may not be valid or fair. Although this test has been used for 10 years, it has not undergone outside validity reviews, even though many educators within Massachusetts have repeatedly asked for them. Also, because use of these tests are the law in Massachusetts, schools of education are not allowing those who fail them to complete their teacher education programs (Flippo, 2007). Some of the teacher educators taking part in our teacher education discussion group reported similar observations from their states.

Time during the session did not allow more than an overview of this urgent problem and national teacher education issue; however, it is suggested that if the high-stakes testing of our students is to continue, each state must at a minimum be held accountable for following the wisdom of the Ameri-
can Educational Research Association (AERA, 2000). Although this AERA position paper is directed toward the evaluation of PreK-12 students, not their teachers, the message is still obvious: AERA clearly indicates that use of any one single test or evaluation to make high-stakes decisions is inappropriate.

Discussion

The Teacher Education Division addressed serious issues in the field of teacher education. In so doing, a wide representation of perspectives was presented. In a call to action, the first speaker laid the gauntlet at our feet. We heard a strong rationale of why it is so important that our voice be heard. As professional teachers, we have the knowledge and perspective to offer to political leaders; we are models of literacy in action. Literate competence is vital for personal, community, and national well-being; while functional literacy is the centerpiece of a democracy. Practical suggestions as to how to obtain and dispense information followed. The second speaker highlighted key legislation and articulated the concerns and uncertainties that these acts create. In addition, he emphasized the need for national support for teacher education programs specific to reading and noted that this support would parallel that already provided to mathematics and science.

The three focus groups that followed addressed aspects of current teacher education issues. The elementary education focus group explored issues dealing with meeting the needs of our diverse student population and the responsibility of serving as advocates for all learners. A second group, in examining issues in middle and secondary literacy education, acknowledged the benefit—long overdue—of a focus on this level. Recognizing the need for appropriately positive terminology for older children, the goal was clearly reiterated, that reading achievement for all students is paramount. Third, an overview of state licensure testing revealed validity, fairness, and diversity issues.

Thus, the message to TED members in Pittsburgh was clear. As educators, we cannot ignore the challenge, nor the responsibility. We must proactively and intelligently engage in the political system in order to ensure the best in literacy education for our children, our children’s children, and the democratic system.

References


Navigating the Literacy Waters: Research, Praxis, and Advocacy


USING MULTICULTURAL LITERATURE TO TEACH CULTURALLY RESPONSIVE INSTRUCTIONAL APPROACHES

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La Salle University

Abstract

As instructors of literacy methods courses, the authors of this study wanted their students to overcome insecurities about teaching diverse populations, to face uncomfortable issues surrounding race and class, and to become familiar with multicultural literature. The design of this study was twofold: (1) to create and implement a curriculum around children’s literature which allowed for critical and responsive exploration of issues related to diversity, and (2) to analyze preservice teachers’ responses to this curriculum for changes in their dispositions toward working with diverse students. The findings indicated students felt less sure of their understandings of the impact of culture on learning as a result of this curriculum focus, but they felt more prepared to teach diverse students.

In the research on diversity in education, teachers have often been criticized for not taking sociocultural and multicultural research into consideration when planning their curriculum or in evaluating their students (Ball, 2000; Ball & Farr, 2003; Delpit, 2003; Levine-Rasky, 1998). Although an extensive research base exists describing the impact of culture on learning (Ogbu, 1999), researchers contend that this information is not being translated into everyday classroom practice (Heath, 2000).

The sociocultural awareness of teachers regarding their own practice, and for the needs and behaviors of their diverse students, may be one reason for this gap between research and practice. As a population, preservice
teachers are overwhelmingly female, young, suburban, middle-class, and European-American (Ball, 2000; Cowhey, 2006). As a result, they maintain a mainstream orientation toward education as an institution and process. They have not had experiences living life as a minority in this country. They may not fully grasp that sociocultural influences differ according to background, and they may not understand that sociocultural influences work to advantage some students while disabling others (Ball & Muhammad, 2003; Delpit, 1995; Heath, 1983; Hymes, 1972; Kelder, 1996; Seidl, 2007).

This preservice teacher population sharply contrasts that in current classrooms, the latter of which are increasingly diverse in terms of the students' cultural, racial, ethnic, and economic backgrounds (Ball & Farr, 2003; Cooper, 2007; U.S. Department of Education, 2003). The cultural disparity, or “mismatch,” between these teacher and student populations can result in misunderstandings in the classroom which are often detrimental to minority students’ success (Cazden, 2001; Ladson-Billings, 2000; Ogbu, 1994, 1999). Minority and disadvantaged students often do not find themselves represented in the curriculum or in the classroom. They engage in classroom practices via teacher directives that they may not grasp in terms of process, product, or rationale, and they grapple with negotiating a learning context where they may not be represented, supported, or judged favorably (Ball & Farr, 2003; Cazden, 2001; Delpit, 1988, 1995; Gee, 1988; Michaels & Sohmer, 2000).

Are teachers really as critical or unaware of their minority students as the research indicates? The authors of this article are not anxious to label teachers as “culturally unresponsive,” as most teachers do want to aid all students in learning, regardless of their cultural backgrounds. Thus, the purposes of this study were twofold. First, we wanted to explore why the research depicts a less than complementary view of classroom teachers. Second, we wanted to learn how to assist preservice teachers bridge the gap between research and practice in order to enable and educate all of their students.

The study began by examining the research behind teachers' beliefs about culture, diversity, and education. Teacher beliefs have been cited as a prevalent factor in the ability to build culturally responsive classrooms (Ball, 2002; Pajares, 1992). Next, the authors looked at how research and instructional practices aligned with culturally-responsive teaching. Finally, the utility of children's literature as a catalyst for challenging teachers' sociocultural predispositions was explored. The research question was: Does the use of multicultural children's literature in modeling culturally responsive instructional approaches assist preservice teachers to become more sensitive to the impact of culture on learning?

The authors designed a curriculum to address the research question and collected data while implementing this curriculum with a group of undergraduate and graduate preservice teachers. The curriculum focused primarily on the
exploration and use of multicultural children and adolescent literature in the classroom as a catalyst for increasing preservice teachers’ cultural awareness. The response of the preservice teachers to this curriculum was measured in a pre/post design via a qualitative KWL activity (Ogle, 1986) and a survey titled Degree of Readiness for Teaching Questionnaire, an instrument designed to measure teacher readiness for work in diverse classrooms (adapted from Powell, Zehm, & Garcia, 1996). A KWL is an instructional tool designed to help learners think about what they already know about a topic (K), deciding on what they want to learn from their classroom interactions (W), and summarizing what they learned (L) at the conclusion of the class.

Current Practice in Preservice Teacher Programs and the Impact of Teacher Beliefs

Teacher education programs often do not require courses on sociocultural and linguistic influences on classroom culture (Heath, 2000). Those programs that do expose students to the research into culture and education have had a negligible impact on teachers once they enter the classroom (Ball & Farr, 2003; Ball & Muhammad, 2003; Levine-Rasky, 1998).

Teachers’ inability or unwillingness to consider their students’ diversity may be due to their preexisting and socioculturally based beliefs about teaching, learning, and cultural diversity, built through significant time spent as a student in a mainstream aligned educational system (Watson, Charner-Laird, Kirkpatrick, Szczesiul, & Gordon, 2006). Emergent teachers are already “insiders” to the system and carry with them strong ideas and beliefs about what it is to “be” a teacher, how education “works,” and how diversity is handled in mainstream educational contexts (Gee, 2001; Gomez, 1993; Lortie, 1975; Seidl, 2007). As a result, many teachers carry negative biases toward student diversity that impact their ability and willingness to truly attend to the research (Ball & Farr, 2003; Ball & Muhammad, 2003; Cooper, 2007; Heath, 1989). Put simply, these emergent teachers do not see or believe that the backgrounds of minority and poor students differ significantly from their own, and they do not see that these differences have an impact on experiences in the classroom (Ball & Farr, 2003; Ladson-Billings, 2000; Seidl, 2007; Whitcomb, Borko, & Liston, 2006).

Based on the strength of these pre-existing beliefs, Ball (2000) recommends that teacher educators must start with what preservice teachers know and believe when they enter their programs in order to explore the impact of culture on teaching and learning, the role of the teacher in social relation to their students, and options for addressing differences in the classroom.
Critical Literacy and Reader Response

Teachers should address cultural biases and assumptions through literature and literacy instruction that reflects the diversity of today’s classrooms and asks readers to approach texts critically. While literacy enables students to make meaning from text, critical literacy enables them to view how texts are socially situated and how texts can help us understand social contexts. Critical literacy asks that readers challenge the status quo; examine underlying contexts; rethink self, text and world; find multiple interpretations; and learn to read the world, as well as learn to read the word (Freire, 2005; Kasten, Kristo, & McClure, 2005; Shor, 1999).

Critical literacy can aid teachers and students in examining cultural issues. Students start with personal reactions to text and then move into more analytical, reflective, social, and critical responses. This approach dovetails nicely with the reader response method, a transactional experience where the reader makes meaning based on their individual and social experiences (Rosenblatt, 1938/1983). Readers first respond to text based on their prior knowledge and then build meaning through individual and social exchanges with the text.

Using Multicultural Literature as Vehicle for Cultural Exploration

The vehicle of quality, multicultural literature provides a substantial starting point for exploring issues of culture and education via critical literacy and reader-response approaches. Dong (2005) and Kasten et al. (2005) argue that students are more willing to participate in multicultural literature reading and discussion if the teacher moves beyond a New Critical approach (which defines meaning as residing solely in the text) and uses reader response and culturally responsive approaches in their literary discussion. Dong recommends that teachers encourage their students to actively observe racial and cultural differences represented in the texts and to read from different perspectives.

Students are able to explore different worlds, cultures, and uses of language when they read literature. This approach encourages students to explore the cultural contexts of texts, fosters cross-cultural understandings, and opens dialogue between students allowing them to explore racial and cultural differences (Au, 1993; Cochran-Smith, 2000; Dong, 2005; Kasten et al., 2005; Modla & Wake, 2007b).

The researchers postulate that reading children’s literature may also break barriers for preservice teachers who perceive children’s literature to be less threatening and initially more interesting and comprehensible than expository college textbooks. The curriculum should start with the culture and language
of the students in the classroom, and then move to considerations of other cultures, capitalizing on differences that already exist in the classroom. This design is aligned with culturally responsive educational models (Au, 1993; Brown, 2002; Cochran-Smith, 2000; Guilliland, 1988; Modla and Wake, 2007a). The curriculum ideas presented in this study represent the authors’ attempt to critically read multicultural texts with each other, and with experts in the field, as they examined the sociocultural biases and assumptions teachers bring to texts and to their classrooms.

The Study Design

As instructors of literacy methods courses, the researchers wanted their students to overcome the insecurities they felt about teaching diverse populations, to confront uncomfortable issues surrounding race and class, and to become more familiar with multicultural literature. The design of the study was twofold: to create and implement a curriculum focused on children’s literature which allowed for critical and responsive exploration and to analyze preservice teachers’ responses, based on this curriculum, for any changes in their dispositions toward working with diverse students.

The curriculum was designed in reference to recommendations made by the several governing specific professional organizations (SPAs) including the International Reading Organization (IRA) (2003), the National Council for Teachers of English (NCTE) (1996), and the National Association for the Education of Young Children (NAEYC) (2001). These standards call for teacher candidates to learn and use a wide range of instructional approaches including reader response, inquiry and critical inquiry methods to support reading and writing (IRA Standard 2; NCTE Standard 3). These standards also recommend that teachers and students read a range of texts in order to respond to the needs and demands of society (NCTE Standard 1). Finally, these standards recommend that teachers create literate environments in order to build learning communities that foster reading and writing, honor and support all students, and respect diversity in language use across cultures and social roles (IRA Standard 4; NCTE standard 9; NAEYC Standard 2).

Students taking part in this study were enrolled in three separate sections (two undergraduate and one graduate) of a developmental reading and literature class conducted in the Spring 2006 semester. The setting for all sections was a mid-sized university in the urban Northeast. The class was a required reading foundation course for the degree and licensure in elementary education (K - 6). Students taking this course were more than half way through their programs.

Modla taught one undergraduate section \((n = 12)\) and one graduate section \((n = 7)\). Wake taught one undergraduate section \((n = 15)\). As expected, the student population in all sections was predominantly young, female,
suburban, and middle-class with only two men, four African American students, and two Asian American students among the population. Demographic information was self-reported by the students and collected on the first day of class.

On the first day of each section, students were told that the instructors had developed a new curriculum designed to focus on multicultural literature. They wanted to measure the efficacy of the curriculum through the use of a KWL and a survey, both of which were administered at the beginning and end of the semester. All students consented to take part in the study. Attrition of students from the beginning to end was high, with three students dropping from the study over the term.

Students were asked to work individually on a modified KWL chart provided in class, which asked them what they knew about the term “literacy” and what they wanted to know about it. After working individually, students created a class KWL on the board, which served as an impetus for further discussion. At the end of the class session, students were asked to complete an adapted version of the Degree of Readiness for Teaching Questionnaire (adapted from Powell, Zehm, & Garcia, 1996). All KWL charts and surveys were marked with a unique identification marker in order to provide confidentiality, and then they were submitted to the instructors for safe-keeping.

Students then took part in the semester long curriculum designed by the two instructors and described below. On the last day of class, students were given another KWL form, with “L” question prompts asking them what information they had learned regarding the topic of teaching reading and language arts to diverse students, and where they think they acquired that information. Again, students worked individually first and then created a class version of the KWL. Students also completed a post-administration of the Degree of Readiness for Teaching Questionnaire (adapted from Powell, Zehm, & Garcia, 1996). Students affixed their same unique personal marker to these forms and submitted them to the instructors.

The Degree of Readiness for Teaching Questionnaire was designed to measure teacher readiness for work in diverse classrooms (adapted from Powell, Zehm, & Garcia, 1996). The original Degree of Readiness for Teaching Questionnaire includes 34 questions to which students are asked to respond by indicating “yes,” “no,” or “unsure.” In the adapted version used in the study, the 34 questions were pared down to 22 questions; the formatting was changed to a table grid; while the yes/no/unsure option was maintained. The questionnaire responses were analyzed via simple t-test comparisons of the pre- and post-administration responses.

The KWL chart and question prompts were developed by the instructors after consulting the research and with other experts in the field. Qualitative comments created in response to a KWL activity were gathered and analyzed
using the Glaser-Strauss Constant Comparative Analysis (1967) to identify the topic-based patterns. Initial themes emerging from students’ comments on their KWL charts were first listed and then placed into overarching categories defined by the researchers. Themes included recognizing and acting on students' interests, designing engaging lessons, bringing students' cultures into the lesson, and selecting culturally appropriate materials.

**The Curriculum**

The authors used a culturally responsive approach to reading multicultural literature with the goal of teaching preservice teachers to do the same with their own students. The hope was that the preservice teachers in the classrooms would understand effective literacy teaching in multicultural, multiracial, multiethnic, and multieconomic classrooms. This design allowed the professors to expose preservice teachers to a range of high quality, multicultural literature and to explore the sociocultural values embedded in literature. The design also exposed the preservice teachers to inquiry-based and culturally sensitive instructional models and activities for their own consideration and potential future adoption, including critical literacy and reader response methods.

Class discussions were focused on the importance of culture as a central theme to what teachers decide to read, write, and say. The researchers assisted preservice teachers in understanding the sociocultural values embedded in the literature that was read and in the responses to that literature. They also discussed the impact of various instructional practices, specifically comparing transmission or behavioral instructional modes with inquiry or generative models of instructions. Preservice teachers were asked to become active participants and producers of literature and curriculum themselves as they researched and explored the ideas discussed in class.

The curriculum began with individual, and then whole class exploration of what “literacy” meant to each person and what each person wanted to know about literacy. This activity established the value of student response and provided an opportunity for multiple-perspective taking. Students were then asked to write their own literacy autobiographical reflections (as a prelude to the memoir strategy discussed below) with particular attention paid to the culture of their home and school lives (Cooper, 2007). These autobiographies were used for discussion in the second class session. Next, students took part in five projects, or strategies, presented consecutively throughout the 14 weeks remaining in the semester. Finally, students were asked to develop their own curriculum, lessons, and activities based on multicultural literature, and to implement their curriculum with their students in order to discover and explore the intersection of literature and culture.
The Strategies and Student-Teacher Responses

**Strategy 1: Enhancing understanding of cultural values and beliefs**

*Oral History Project.* To enhance their understanding of cultural values and beliefs, students created a triptych (a three-paneled display, resembling a collage) portraying a person’s life experiences and his/her culture. This project involved several parts:

1. Students worked in teams to explore one culture, by reading two books related to that culture, and then developing a graphic organizer to communicate what they learned. For example, they read Eve Bunting’s (1998) *So Far From the Sea* and Ken Mochizuki’s (1993) *Baseball Saved Us* to examine Japanese-American culture during World War II.

2. Each team then interviewed a cultural insider using selected questions adapted by Dong (2005) from Brooks (1964). They used the information gathered during the interview to write a narrative of their findings. For example, they interviewed a Japanese-American who spent time in an American internment camp during World War II or interviewed someone who knew about Japanese-American family values and traditions.

3. Students took pictures of their interviewee and collected artifacts to represent one aspect of the life of their interviewee. Students then wrote a reflection focusing on one cultural practice or tradition depicted in the books and discussed the cultural norms, values, and traditions behind it with the interviewee.

4. Students wrote a news article to pull together information they learned about their interviewee and his/her culture.

5. Finally, students assembled a triptych to display their exploration (see diagram).

**Components of the Triptych**

<table>
<thead>
<tr>
<th>On Panel 1 Place:</th>
<th>On Panel 2 Place:</th>
<th>On Panel 3 Place:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic organizer communicating what was learned about the culture in two books</td>
<td>Picture of interviewee</td>
<td>Reflection focusing on one cultural practice or tradition</td>
</tr>
<tr>
<td>Interview Narrative</td>
<td>Artifacts</td>
<td>Article with information about interviewee and his/her culture</td>
</tr>
</tbody>
</table>

**Strategy 2: Learning about Cultures from Memoirs**

Students read and discussed the memoir *Hole in My Life* (2002) by Jack Gantos using a cooperative learning strategy called “jigsaw.” The groups explored characteristics of the memoir genre in “base” groups, and then
recorded ideas they generated on a larger class graphic organizer. Afterward, students joined a second “expert” group, read an excerpt from a second memoir (see below), and discussed what they read in comparison to their first base group discussions.

- *Bad Boy: a Memoir* (Myers, 2001)
- *ME, ME, ME, ME, ME: Not a Novel* (Kerr, 1983)
- *My Life in Dog Years* (Paulsen, 1997)

Students returned to their original base group and shared their expert group discussions. The whole class then revisited and refined the class graphic organizer listing the characteristics of a memoir. Particular attention was paid to the cultural issues embedded in the texts. Using this refined list, students next read a brief memoir called “The Pie” by Gary Soto (2002) and searched that text for the qualities of a memoir they had listed. Students were then given the assignment to read a memoir independently and to create an organizer relating this text to the characteristics of a memoir identified by the class to share in a subsequent class session (King-Shaver, 2005). Finally, students revisited their own literacy autobiographies written in week one and revised them according to their findings in these class sessions.

**Strategy 3: Responding to Multicultural Children’s Books**

After selecting and reading a multicultural children’s book of their choice, students wrote a review of the book and a paragraph about themselves, as the author of the review. The draft reviews and author paragraphs were edited by a peer in class. Students then prepared a polished copy of their work and designed a WebCT page with the name of their multicultural children’s books, a copy of the book jacket, their book review, illustrations from the book, a paragraph about themselves as the author of the book review, and a picture of themselves. Students shared their WebCT pages with the class. Next, students developed a lesson based on the content of the WebCT page and the original book. They implemented their lesson with children in a classroom and wrote a reflection on the experience.

**Strategy 4: Reading from Different Perspectives**

Students responded to the book *Nappy Hair* (Herron, 1998) and the controversy generated when a White teacher used this book in a diverse, urban, New York City school. This strategy entailed several steps:

1. Students read *Nappy Hair* individually and wrote a brief response to the book.
2. Students were assigned one of five roles and met in “role” groups to discuss the concerns someone with their assigned perspective
might have about the book. Discussion was captured on a group chart. Roles included: the White teacher who used *Nappy Hair* with her class, one of the students in the classroom, one of the Black parents of a student in the class, the author of the book, and the principal of the teacher’s school.

3. Groups read an article detailing the “*Nappy Hair* Debate” (Clemetson, 1998) and then formulated a position statement to the article based on their role. As these students were training preservice teachers, their first inclination was to sympathize with the teacher in this story. Students were asked to discuss that initial empathy and then move beyond that to truly consider the feelings of others involved in the debate.

4. Next, students regrouped and met with a second “jigsaw” group containing one member from each role. The groups discussed the book and article from their role group perspective. They were then asked to come up with a “solution” (one or multiple) to the debate. Solutions could range from what should have been done to avoid the conflict to how to solve the current situation. Students shared their discussion and results after several intense hours of discussion.

5. Students completed an individual reflection with insights they gained from looking at *Nappy Hair* from a variety of viewpoints.

6. Finally, students were asked to find information on censured or banned books in various local school districts, to research the debate surrounding these books, and to present their findings informally at the beginning of the next class session.

**Strategy 5: Curriculum Planning with Multicultural Text Sets**

This strategy was designed to provide the preservice teachers with practice developing unit instruction around cultural text sets and included both individual work and group collaboration as follows:

1. Students were placed into groups and allowed to choose a culture to research and use as the group’s focus.

2. Independently, each student was asked to: (a) find three books from/about the group’s chosen culture; (b) develop semantic organizers to explore important cultural connections and potential teaching topics with the books serving as a center point; (c) research and write a reflection on one cultural practice or tradition depicted in one of their chosen texts; (d) choose one author, illustrator, or poet to research in depth; and (e) conduct research to explore existing curricula for presenting the specific culture and/or texts. The author study included the author’s biography, an annotated bibliogra-
phy, quotes, reviews, and explicit cultural connections for that author and his/her work. The curriculum study included writing a “do’s” and “don’ts” list as a curriculum guideline for teaching that culture.

3. In groups, students (a) combined their research and texts to create a cultural text set; (b) created a group semantic map connecting their text set to subject areas other than English/language arts; (c) created visual presentation displays and an accompanying PowerPoint; and (d) created a teacher curriculum resource handout to showcase the text set, the author/illustrator information, the culture, and their curriculum ideas. The visual displays and handouts were used by the students in a statewide teachers’ conference (the first conference ever for these students.)

4. Finally, each student individually wrote and implemented three literacy-based lessons with local K-8 students using the groups’ books and author studies. At the conclusion of their teaching experience, students completed reflections, with particular attention paid to cultural aspects of the experience.

The Results

The first measure used to collect data for this study was the Degree of Readiness for Teaching Questionnaire (adapted from Powell, Zehm, & Garcia, 1996). This tool was used by the preservice teachers to indicate whether they agreed, disagreed, or were unsure about each statement provided. Accordingly, rank scores were assigned for each category with 1 = no or disagree, 2 = unsure, and 3 = yes or agree. The higher the mean score of the item response, the more strongly the students agreed with the statement. The lower the mean score of the item response, the more strongly the students disagreed with the statement. The use of these scores also provided for comparative analysis of pre and post-data using a simple t test comparison.

Only four questions yielded statistical significance in the data analysis comparison of pre and post-administration responses. The undergraduate sample showed statistical significance on three items. The graduate sample showed statistical significance on two items. However, only one item yielded statistical significance in both samples (See Table 1). In the undergraduate sample three items yielded statistical significance: items 4, 10, and 18. Item 4 stated, “I’m unsure how biases and stereotypes that I might have for other cultural groups could unintentionally influence my classroom instruction.” In the pretest administration of the instrument, the mean score for the undergraduate sample was $M = 1.42$, and in the post-administration the mean score was $M = 2.82$ indicating that the undergraduate students felt much more unsure about the how their biases and stereotypes for other cultural groups could influence their classroom practice ($p < .0001$).
<table>
<thead>
<tr>
<th>Table 1. Degree Of Readiness For Teaching Questionnaire</th>
<th>Graduate</th>
<th>Undergraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>1. I can explain how my autobiography influences the values and beliefs I hold for making classroom decisions about curriculum instruction.</td>
<td>2.83</td>
<td>2.75</td>
</tr>
<tr>
<td>2. I believe that more problems than assets surround cultural diversity at school.</td>
<td>2.17</td>
<td>1.91</td>
</tr>
<tr>
<td>3. I can develop strategies that engage all students in instruction and that help them express themselves confidently in school.</td>
<td>2.83</td>
<td>2.73</td>
</tr>
<tr>
<td>4. I’m unsure how biases and stereotypes that I might have for other cultural groups could unintentionally influence my classroom instruction.</td>
<td>1.42</td>
<td>2.82</td>
</tr>
<tr>
<td>5. I can identify subtle forms of racism including unintended cultural bias that might influence my teaching.</td>
<td>2.91</td>
<td>2.73</td>
</tr>
<tr>
<td>6. I have limited cross-cultural experiences.</td>
<td>1.5</td>
<td>1.18</td>
</tr>
<tr>
<td>7. I accept and affirm students’ usage of nonstandard English.</td>
<td>1.83</td>
<td>1.45</td>
</tr>
<tr>
<td>8. I am comfortable conferencing with parents of diverse cultures.</td>
<td>2.5</td>
<td>2.73</td>
</tr>
<tr>
<td>9. I have a limited understanding if how sociocultural and/or cognitive factors related to students diversity could influence my personal and academic relationship with students.</td>
<td>1.33</td>
<td>1.27</td>
</tr>
<tr>
<td>10. I believe that limited-English-proficiency (LEP) students need lower-level work.</td>
<td>1.08</td>
<td>2.91</td>
</tr>
<tr>
<td>11. I can explain how culture enhances students’ learning of academic content.</td>
<td>2.75</td>
<td>2.8</td>
</tr>
<tr>
<td>12. I know how to design and implement lessons that are instructionally appropriate and academically challenging for all students.</td>
<td>2.67</td>
<td>3</td>
</tr>
<tr>
<td>13. I have limited understanding of the complex relationship among society, schools, and ethnicity.</td>
<td>1.08</td>
<td>1.09</td>
</tr>
<tr>
<td>14. I would rather teach in monocultural settings.</td>
<td>1.5</td>
<td>1.73</td>
</tr>
<tr>
<td>15. I’m unsure about the cultural qualities of social groups other than my own.</td>
<td>1.33</td>
<td>1.27</td>
</tr>
<tr>
<td>16. I am able to describe the relationship between local communities and schools in all economic and social areas, especially urban public schools where students are frequently disadvantaged.</td>
<td>2.58</td>
<td>2.27</td>
</tr>
<tr>
<td>17. I am comfortable teaching in culturally diverse classrooms with students who share different value systems.</td>
<td>2.67</td>
<td>3</td>
</tr>
</tbody>
</table>
Item 10 stated, “I believe that limited-English-proficiency (LEP) students need lower-level work.” On this item the undergraduate pretest mean was \( M = 1.08 \), and the posttest mean score was \( M = 2.91 \), indicating that undergraduate students agreed more strongly than before the course that LEP students need lower level work loads in classroom contexts \((p < .0001)\). Finally, item 18 stated, “I am comfortable teaching in culturally diverse classrooms with students who share different value systems.” On this item the undergraduate pretest mean was \( M = 2.67 \), and the posttest mean score was \( M = 3 \) indicating that undergraduate students felt more comfortable after experiencing the semester’s curriculum teaching in culturally diverse classrooms \((p < .04)\).

In the graduate sample two items yielded statistical significance: items 9 and 10. Item 9 stated, “I have a limited understanding of how sociocultural and/or cognitive factors related to students’ diversity could influence my personal and academic relationship with students.” In the pretest administration of the instrument, the mean score for the graduate sample was \( M = 1.29 \), and in the post-administration the mean score was \( M = 2.4 \) indicating that the graduate students felt more unsure about their understanding of sociocultural and/or cognitive factors related to how student diversity might affect their relationship with students \((p < .04)\). Again, item 10 stated, “I believe that limited-English-proficiency (LEP) students need lower-level work.” This item yielded statistical significance in both samples. On this item the undergraduate pretest mean was \( M = 1.0 \), and the posttest mean score was \( M = 3.0 \), indicating that graduate students agreed more strongly than before the course that LEP students need lower level work loads in classroom contexts.

The remaining (and majority of) items did not yield statistical significance. In relation to question 1, students indicated that they were not able to use their own autobiography to understand the impact of culture on learning. This finding aligned with previous research (Cooper, 2007; Seidl, 2007), which noted that preservice teachers were unable to recognize that culture impacts behavior and language and were unable to see themselves as coming from a “culture.” Indeed, these preservice teachers identified the term culture with

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Pretest Mean</th>
<th>Pretest SD</th>
<th>Posttest Mean</th>
<th>Posttest SD</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>I am able to tailor instruction to the needs of all my students.</td>
<td>2.81</td>
<td>3</td>
<td>.152</td>
<td>2.71</td>
<td>.763</td>
</tr>
<tr>
<td>19</td>
<td>I believe that some minority groups, such as Blacks and Hispanics, may not be as capable of learning as other minority groups.</td>
<td>1</td>
<td>1</td>
<td>NaN</td>
<td>2.71</td>
<td>.226</td>
</tr>
<tr>
<td>20</td>
<td>I can describe the historical antecedents to the marginalization of Black and Hispanic students at school.</td>
<td>2.17</td>
<td>2.45</td>
<td>.338</td>
<td>1.83</td>
<td>.213</td>
</tr>
<tr>
<td>21</td>
<td>I prefer teaching students who share my social class cultural background.</td>
<td>1.42</td>
<td>1.64</td>
<td>.516</td>
<td>1.29</td>
<td>.815</td>
</tr>
</tbody>
</table>

*p<.05.  **p<.01.  *** p<.001
factors like race and ethnicity. Since they did not identify with a race other than “White,” they felt that they did not have a unique sociocultural background.

In response to questions 3, 12, and 19, the preservice teachers also indicated that they felt unprepared to develop strategies to engage all students in instruction and to help students express themselves confidently in school. This was discouraging, considering the explicit modeling of critical inquiry and reader response instructional approaches presented in the class context. The researchers had hoped they would find a positive and significant change in this area. The fact that they did not indicated a gap for the students in their ability to transfer what they had experienced in the course to using these methods in their own classroom instruction; another finding supported in the research (see Ball & Farr, 2003; Ball & Muhammad, 2003; Heath, 2000).

The use of multicultural literature and the discussion of cultural influences in education did not yield a positive significant change as the researchers had hoped. The preservice teachers did not change their views on the benefits that accompany cultural diversity in school settings (question 2). They did not believe they could more definitely identify racism and cultural bias in their own teaching practice (question 5), and they did not feel differently about their ability to explain how culture enhances students’ learning of academic content (question 11). Furthermore, they did not feel better about their ability to understand the relationship of society, school, and ethnicity (questions 13, 16, and 19).

The second assessment measure in the study design was the qualitative KWL chart. Data from these charts were analyzed using the Glaser-Strauss Constant Comparative Analysis (1967). In terms of the responses completed at the beginning of the semester, the following themes emerged from the analysis (see Table 2).

Table 2: KWL Emergent Themes: Pretest Administration

<table>
<thead>
<tr>
<th>UNDERGRADUATE PRESERVICE TEACHER</th>
<th>GRADUATE PRESERVICE TEACHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading/language arts should be students' interests and needs.</td>
<td>Use a variety of multicultural materials in your classroom.</td>
</tr>
<tr>
<td>Be mindful of students' language abilities.</td>
<td>Plan instruction to accommodate the various needs and diversity of cultures in your classroom.</td>
</tr>
<tr>
<td>Differentiated instruction is very important.</td>
<td>Provide opportunities for students to learn a variety of cultures to prepare them to adapt to a more diverse population.</td>
</tr>
<tr>
<td>Respect students’ culture and provide a warm atmosphere.</td>
<td></td>
</tr>
</tbody>
</table>

In terms of the responses completed at the end of the semester, the following themes emerged from the analysis (See Table 3).
Table 3: KWL Emergent Themes: Posttest Administration

<table>
<thead>
<tr>
<th>UNDERGRADUATE PRESERVICE TEACHER</th>
<th>GRADUATE PRESERVICE TEACHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important that reading/language arts lessons be culturally relevant and based on students' interests and needs in order to engage them.</td>
<td>Use a variety of multicultural literature that your students can relate to.</td>
</tr>
<tr>
<td>Select interesting and relevant material for lessons.</td>
<td>Teachers must differentiate instruction because of the range of students' backgrounds, experiences, and cultures.</td>
</tr>
<tr>
<td>Parents have an important role in their child's education.</td>
<td>Encourage students to promote and share their culture with other students.</td>
</tr>
<tr>
<td>Students, regardless of color, learn at different rates and in different ways.</td>
<td></td>
</tr>
<tr>
<td>Respect students who speak nonstandard English and English Language Learners. Teach them standard English and English-language facility.</td>
<td></td>
</tr>
</tbody>
</table>

**Discussion and Interpretation**

The qualitative data in this study yielded more encouraging results on first glance than did the quantitative data. In the quantitative data set, statistical significance was found on only four items and did not represent the results hoped for by the instructors/researchers. However, these results were in keeping with the research describing preservice teachers as disengaged from the topic of sociocultural influences on language, teaching, and learning (Ball, 2000; Ball & Muhammad, 2003).

Certainly the responses from the students regarding limited-English proficiency (LEP) students needing lower-level work was intensely discouraging (survey item 10). During discussions with the preservice teachers, it became clear they felt LEP students needed more seatwork and remedial worksheets and that these students were not yet ready for engagement with the texts used in the course. This response opposed established research and was not something that was “taught” within the curriculum valuing the use of multicultural literature and inquiry and process models. Clearly this topic should be included in future revisions of this curriculum.

Beyond the first glance however, a few glimmers of light did shine through to the researchers and teacher educators. While at first glance the outcomes of the study seemed quite negative, the researchers concluded some of these results were ultimately positive. For example, the undergraduate students indicated that they were more unsure of how their biases and stereotypes could influence their instructional practice as a result of their experiences
with this curriculum (survey item 4). This result was the opposite of the initial goal of the curriculum. Similarly, the graduate students felt they had a more limited understanding of how sociocultural factors related to diversity influenced their relationship with students (survey item 9).

So how could the researchers conclude that this increased uncertainty on the part of the students was actually a positive outcome? We concluded that in an increasingly diverse and complex educational environment, perhaps educators should all feel a bit more uncertain about their ability to fully understand their own biases, stereotypes, and sociocultural predispositions and how these biases influence the educators’ actions. In addition, perhaps we should all be a little less sure of our understandings of the impact of culture on the behaviors of our students. In short, uncertainty may allow us to be more open to hearing the other, to asking questions, and to halting our own assumptions and judgments as we consider the relationship of culture, behavior, and learning.

The degree of uncertainty expressed by the students signaled a growing sense of awareness, cautiousness, and humility on the parts of the students, as they truly began to consider their students’ sociocultural and multicultural backgrounds. They were beginning to grasp the complexity and importance of these issues. As part of this learning process they had become more aware that their experiences in the world were unique, and that their perspectives were both valuable and limiting at the same time, as they sought to work with students from very different backgrounds.

Finally, the researchers were encouraged by the students’ responses indicating an increased comfort in teaching in a culturally diverse classroom, even as they were more aware of their limitations in this environment (survey item 18). This rise in comfort level may be attributed to the fact that they had an opportunity to read high quality multicultural children’s literature, and that they had experienced some powerful and effective inquiry-based approaches to these texts, which they could adopt and modify for their own instructional practice.

While the research is clear that preservice teachers may devalue or ignore multicultural and sociocultural influences, the KWL thematic analysis indicated that the preservice teachers in this study were indeed thinking about these influences as important to their future instructional practice. Based on this outcome, the instructors were able to postulate that the students were aware of the influence of culture in classroom contexts, but were uncertain how to handle this dynamic.

The undergraduates in this study began the semester already feeling that language arts instruction should be culturally relevant, that students’ language abilities were critical to understand in order to scaffold learning, that differentiated instruction was important, and that students’ cultures should be
respected and supported. The graduate students echoed these sentiments. They also felt that language arts materials should be varied and available and that students should be exposed to a variety of cultures reflective of a larger, diverse population.

The results of the post-administration of the KWL measure showed that teachers were able to move from surface-level platitudes about respecting all students and the need to differentiate instruction to more instructionally specific ideas. This was very exciting. The undergraduate students in particular seemed much more enthusiastic and produced more written text than they had in the pre-administration of this measure.

All teachers indicated that instruction should be interactive and of high motivation and interest. This indicated a move from transmission to inquiry models of teaching and learning. Interestingly, the teachers also felt that they had a responsibility to honor their students’ home languages while also ensuring that their students learned Standard English. This was in line with Delpit’s (1995) assertion that students should consider language resources as a repertoire, with students’ home language representing only one part of their overall language facility. Finally, they also felt it was the responsibility of the teacher to select interesting and relevant materials and to involve the parents of the children whenever possible.

**Conclusion**

In review, this study was designed to extend the current research base into culturally responsive models of education. The goal was to build a curriculum that would assist preservice teachers in seriously considering the influence of culture on language, literacy, teaching, and learning. The researchers built and tested an instructional model based on the goals of assisting preservice teachers uncover and challenge the sociocultural assumptions and biases they brought into the classroom as part of their early professional development.

Based on this study, work must start with the the consideration of the beliefs of preservice teachers engaged in teacher education programs, a finding that is consistent with this theme in previous research studies (Ball, 2000; Ball & Lardner, 1997; Ball & Muhammad, 2003; Pajares, 1992). Professors must help preservice teachers unpack their knowledge, beliefs, and evaluations of student cultural diversity. With information in hand about preservice teachers’ conceptions of their diverse students, teacher educators can build models to help preservice teachers explore their own role in cultural relation to their students.

While this study yielded mixed results, there were reasons for optimism and guidance for the field. There was clearly a gap that must be filled be-
tween teacher awareness of sociocultural influences and teacher understanding of what to do with this awareness. Many of these preservice teachers were aware of the interplay of culture and education; however, they did not have a framework for understanding this dynamic or for working with diverse students. By the end of this curriculum, these teachers were more aware of their limitations in working with diverse students and more aware of their lack of framework for understanding this dynamic. Ultimately this was a positive finding to the researchers, who felt increased humility goes a long way to breaking down barriers between teachers and students.

This study only begins to examine this gap, by studying one small group of preservice teachers, which was a limitation of the study. This study should be replicated with other schools and other populations of teachers. A follow-up for this study should also include tracking these teachers after they leave the program to see where they chose to find employment (urban, suburban) and how they are doing in their work with culturally diverse students.

Teacher education curricula for culturally responsive approaches must continue to include information on how culture works, both inside and outside the classroom. Current researchers in the field of education have urged teacher educators to rethink curriculum around issues of culture (Ball, 2000; Heath, 2000; Reagan, 1997). This was what the researchers sought to accomplish with this study. Preservice teachers can come to see the classroom as an active site of cultural negotiation that must inevitably impact students’ experiences with learning (Heath, 2000; Reagan, 1997). If teachers are appropriately armed with information on student diversity and knowledgeable of their own sociocultural orientations and beliefs, then perhaps they can work to break the negative cycle experienced by so many nonmainstream students.

Notes


References


Ball, A. F. (2002). Three decades of research on classroom life: Illuminating the class-


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USING DRAWINGS BY SECONDARY PRESERVICE TEACHERS TO STUDY THEIR WRITING PROCESS AND APPREHENSION

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Eastern Michigan University

Abstract

Drawings by 115 secondary preservice teachers of their writing process for a typical term paper and a nontraditional “how-to” book (which describes how to do something) were contrasted. Revision was the focus of the typical papers; whereas, ownership and book-making were the focus of “how-to” book sketches. Preservice teachers’ writing apprehension was reduced after writing a “how-to” book. Drawings and survey answers of preservice teachers who increased or decreased their writing apprehension by one standard deviation after writing a “how-to” book were compared. Preservice teachers who reduced their writing apprehension reported enjoying the “how-to” book writing more in comparison to past writing, had more ownership, and were more likely to ask their future students to write a “how-to” book.

Teachers are encouraged to be enthusiastic writing role models and to provide authentic reasons for students to write. As models, teachers pass on their attitudes about writing to students (Graves & Kittle, 2005). Some teachers, however, are not comfortable with writing activities. Teachers who do not like to write, compared to teachers with positive attitudes toward writing, ask their students to write less, focus on grammatical correctness of writing rather than on the process of writing, and shun conferencing with students about writing. Moreover, they avoid conversations with students about their own writing experience (Lane, 1993). Daly, Vangelisti and Witte (1988) found that mathematic and science teachers had the highest writing apprehension of any subject area, and they suggested that mathematics and science teachers not
teach writing. Rasberry (2001) found that some of his secondary preservice teachers took pleasure in writing, but others were apprehensive or doubtful about it. He observed that preservice teachers' attitudes about writing did not align predictably with their content area either before or after his course. The capacity of a teacher to include writing-to-learn activities in a classroom with confidence and effectiveness rests upon the teacher's beliefs and attitudes toward writing and ability to develop instructional activities (Pajares, 2002). Lortie (1975) concluded that “unless teachers-to-be are aware of their preconceptions, the varieties of instructional methods they study may be wasted” (p. 231). The intent of this study was to afford a means to look behind the scenes at preservice teachers' writing process; so that intervention points might be revealed to promote motivation, ownership, and quality of writing.

Theoretical Framework

Drawing offers a window into an individual’s thinking. Psychologists (Goodenough, 1926; Machover, 1949) and art therapists (Malchiodi, 1994) recognized and valued the power and insights afforded by their clients' drawings. Researchers explored stereotypes and limited images students had by asking them to draw (Chambers, 1983; Daisey & Jose-Kampfner, 2002). In addition, they asked elementary students (Triplett & Barksdale, 2005), as well as middle and high school students (Wheelock, Bebell & Haney, 2002), to draw their perceptions of high-stakes testing. Coughlin (2001) invited student teachers to “draw a teacher at work” before and after student teaching to investigate their development as teachers. Black (1991) asked her college English composition students at the beginning of the semester to draw pictures to illustrate what they did when they wrote a paper. She noted the anxiety that some students revealed in their sketches.

There are several areas of research that support this study. Previous findings create an informational baseline for understanding the nature of writing apprehension and how preservice teachers respond to interventions. These research areas include writing apprehension, what writers need, what preservice teachers need to consider about writing instruction, and research on “how-to” book writing.

Writing Apprehension

Writing apprehension is a construct that characterizes whether a person enjoys or avoids writing (Daly, Vangelisti, & Witte, 1988). The amount of writing apprehension a person possesses ranges from negligible to immense. Writing apprehension is exacerbated or diminished during a writer's schooling and other writing experiences, depending on whether the instructional environment is punishing or encouraging (Smith, 1982). Wachholz and Etheridge (1996) observed that individuals with high writing apprehension
believed that writing was an innate talent rather than a practiced process. They found that persons with high writing apprehension depended on teachers for affirmation, felt isolated with their difficulties, and had little motivation to write.

According to Reeves (1997), individuals with high writing apprehension have definable characteristics such as lower self-esteem. They typically experienced discouragement in school writing assignments and negative comments from teachers about writing. Persons with high writing apprehension have trouble generating ideas, write shorter pieces, do not develop ideas fully, and have difficulty with usage and grammar. They tend to select courses and careers that they think require little writing, seldom write for themselves, have few writing role models, and score lower on the verbal section of the SAT. Yet, Pajares (as cited in Blasingame & Bashmand, 2004) found that writing apprehension did not predict writing achievement. This may be because negative self-talk, rather than writing capability, worsens writing apprehension (Madigan, Linton, & Johnston, 1996).

What Writers Need

Proponents of the writing process believe that writers have practiced a series of skills that are available to all who wish to write (Fletcher, 1993). Writers speak of the discipline needed to write. According to Mary Heaton Vorse, “the art of writing is the art of applying the seat of the pants to the seat of the chair” (cited in Bettmann, 1987, p. 55). Hidi (1990) found that personal interest in a subject promotes recall and cognitive organization of information. Csikszentmihalyi, Rathunde, Whalen, and Wong (1997) found that motivation causes teenagers to expend more time and energy, which enhances their knowledge and ability. Energy is derived when an individual believes that his or her creativity and discovery are unique (Graves, 2001).

Moreover, McClanahan (2001) believes that “writing offers rewards that few other activities can offer” (p. 11). Writing offers a sense of accomplishment. Writers wish to be read. Yet, a greater reward for writers is often to write for their own education (Hackett, 2002) or their own entertainment (Keyes, 2003).

What Preservice Teachers Need to Consider about Writing Instruction

Writing becomes accessible when respect, ownership and relevancy, as well as rule-breaking, are part of the lesson (Romano, 2004). According to Staw (2003), “Hope often lies in taking a different route, or at least an unexpected turn . . . Interrupting our habitual series of behaviors and responses toward writing gives us a chance to open ourselves to new reactions and attitudes” (p. 30-31). Maxwell (1996) recommends the use of diverse forms of writing. Book-making promotes motivation, ownership, and creativity (Ada & Campoy, 2004; Zemelman, Daniels, & Hyde, 1998).
Preservice teachers need an opportunity to rethink and criticize the status quo of traditional writing forms used in a particular subject area (Hildebrand, 1998), as well as challenge the form of writing honored in school (Ivanic, 2004). In addition, since stereotypes envelope writers (Staw, 2003), preservice teachers would benefit from reflecting upon and criticizing unexamined assumptions about themselves as writers (Graham, 1999-2000). Social interaction enhances learning (Vygotsky, 1978); hence, future teachers need a way to promote conversation about writing, while bringing together the academic discourse of school and the vernacular language of students (Gee, 2004). Preservice teachers require a method to help their students build on their passion for a topic to enhance their identity as researcher and writer (Williams, 2006). They also must provide students with opportunities to manipulate ideas and go public with their ideas (Giacobbe, as cited in Rief, 1992). Ultimately, opportunities to envision the possibilities of writing in school and to reflect upon the effect of their own attitude toward writing provides a compelling rationale to walk preservice teachers through positive writing experiences (Soven, 1996).

**Research on “How-to” Book Writing**

One example of a nontraditional writing-to-learn activity that is helping to meet these needs is writing a “how-to” book. A “how-to” book describes a process or explains how to do a variety of tasks, such as “How-to Travel the Oregon Trail,” “How-to Live a Healthy Life Style,” “How to Use a Graphing Calculator,” or “How NOT to Change a Tire.” “How-to” books have a real-world connection. Students are asked to become experts. “How-to” books offer students an avenue to share with others their expertise in a creative way. The benefits of authoring a “how-to” book include providing students a motivating purpose for writing, building students’ construction of knowledge, using personal interest to enhance identity as a writer, practicing research and writing skills, developing learning communities, as well as promoting ownership and achievement of curricular objectives with secondary preservice teachers (Daisey, 2000, 2003) and high school students (Huntley-Johnston, Merritt, & Huffman, 1997; Merritt, Shajira, & Daisey, 2003).

**Research Questions**

The research questions that guided this study were the following:

1. Does writing a “how-to” book reduce the writing apprehension of secondary preservice teachers?

2. What steps of the writing process are the focus for preservice teachers for their “how-to” books in comparison to a term paper?

3. What steps of the “how-to” book writing process are the focus for
secondary preservice teachers whose writing apprehension decreased in contrast to those whose writing apprehension increased?

4. How do attitudes toward writing, and predictions about future inclusion of instructional content area writing, compare for those secondary preservice teachers whose writing apprehension decreased versus those that increased after writing a “how-to” book?

**Methodology**

Repeated measures of matched subjects were used in the design of this quasi-experimental study. This study took place at a midwestern university that educates a large number of teachers.

**Participants**

As part of a required secondary content area literacy course, 115 preservice teachers of diverse content areas were asked to write a “how-to” book. These preservice teachers included undergraduates, as well as those who were post-bachelor degree students. There were 57 males and 58 females. There were five African American and two Latina students.

**Procedures**

For the purpose of this study, “how-to” books contained 500 words, written over 20 pages including graphics, and a back cover photograph of the preservice teacher with autobiographical information (Daisey, 2000, 2003). Prewriting activities included looking at lists of titles, “how-to” books by former preservice teachers, and “how-to” books at bookstores, as well as practice writing directions. Preservice teachers submitted a rough draft, revisions, their cover, biography and resource page as part of the writing process. For class peer reviews, preservice teachers were asked to talk to their classmates throughout the semester about their “how-to” book authoring progress. When the “how-to” books were due, the preservice teachers chatted informally with their classmates while looking at their “how-to” books.

**Data Collection**

On the first day survey, preservice teachers were asked to draw a set of sketches of the procedure they follow when they write a term paper and to note next to each sketch what they were doing. Preservice teachers were asked to draw another series of stick figure drawings about the process they followed to write their “how-to” book when the rough draft was due. The following prompt was used:

Now that you have written your 500-word rough draft of your “how-to” book, please draw a set of sketches showing the process that you went through from when you first heard about the assignment until today. Write a little note next to each sketch.
Preservice teachers also were asked to draw stick figures of their writing process when their entire “how-to” books were submitted. The prompt was, “Now that you have written a ‘how-to’ book, please draw a series of sketches of the process that you went through to write the book from the moment it was assigned until today.”

Preservice teachers completed four anonymous surveys during the semester: the first day (pre-intervention), the day their rough draft was due (mid-semester), the day their “how-to” book was due (post-intervention), and the day they received their “how-to” book score (follow-up). These surveys contained Likert-like statements and open-ended questions about their writing experiences and attitudes. They also completed a pre and post-writing apprehension survey. Preservice teachers were asked to think only about writing their “how-to” book when completing the post survey (see Lenski & Pardieck, 1999, for this survey). The survey was adapted from the Daly-Miller Writing Apprehension Survey (1975). The original Daly-Miller survey, a self-reporting instrument of 26 items regarding attitudes toward writing, was normed on college English composition class students from diverse socioeconomic and subject-area backgrounds. Daly, Vangelisti, and Witte (1988) also administered this scale to inservice elementary and secondary teachers. It used a five-point Likert scale ranging from “strongly disagree” to “strongly agree.” The survey had robust internal and external validity and reliability. In the adopted version, Lenski and Pardieck reversed the scoring of the survey from 1 (strongly agree) to 5 (strongly disagree) to make the survey “more compatible with students’ expectations of surveys” (p. 272-273). Thus, scores on the adapted Writing Apprehension Survey range from 130 (low apprehension) to 26 (high writing apprehension).

**Data Analysis**

Both the writing apprehension survey and Likert-like survey questions were analyzed using dependent sample $t$-tests. Quotes from preservice teachers provided further insights into their thinking about writing. Stick figure drawings of preservice teachers’ writing process were analyzed by looking through the drawings several times using constant comparison analysis (Strauss & Corbin, 1990). Categories were made of the steps represented in the stick figure drawings (for example, “thinking and brainstorming topic”). The “thinking and brainstorming topic” category consisted of stick figure drawings of preservice teachers with question marks over their heads, lightning pictured inside their heads, or thinking caps on their heads. Other drawings in this category showed preservice teachers scratching their head or chin, as well as sitting and drumming their fingers. A count was taken for each category of how many preservice teachers drew a stick figure drawing for their first day drawing of their process for writing a term paper. Another count was taken for each
category for preservice teachers' “how-to” book stick figure drawings. There were a total of 44 categories, which included categories that only appeared for term paper drawings, such as running to class to turn in paper; and categories that only appeared for the “how-to” book, such as binding the book or happiness at the beginning and middle point of the assignment. Depending on whether or not a sketch was drawn for each of the 44 categories, either a “1” or a “0” was entered in a spreadsheet. For example, a preservice teacher might have drawn for his or her first day drawings, a series of stick figure drawings that included getting the assignment, researching at the library, outlining the information, writing the paper, revising, and turning in the paper. So, this preservice teacher would have received a “1” in the categories getting the assignment, researching at the library, outlining the information, writing the paper, revising, and turning in the paper, but would have received a “0” in the other 38 categories. This process was repeated for the “how-to” book drawings.

Because the data was dichotomous, a McNemar Chi-square analysis was used to determine if there were significant differences in the number of stick figure drawings (for example, of “thinking and brainstorm topic”) in the first day drawings for a term paper versus “how-to” book stick figure drawings for all 115 preservice teachers. Then, the “how-to” book stick figure drawings were contrasted for the 16 preservice teachers (of the 115) whose writing apprehension increased by 10 points or more versus the stick figure drawings of the 38 preservice teachers (of the 115) whose writing apprehension decreased by 10 points or more (approximately one standard deviation, 9.89).

Results

Results for All 115 PreserviceTeachers

The pre and post means for preservice teachers’ writing apprehension were 93.97 and 101.28 ($t = 5.044$, $df = 114$, $p < .0001$). Preservice teachers drew more stick figure drawings for writing a term paper than for their “how-to” book for revising, revising more than once, peer reviewing, and proof reading. Revision seemed to be the focus of term papers, since there were more drawings for revision-related categories. Preservice teachers explained that this was because term papers were longer than the “how-to” book, and thus required more revising.

In contrast, preservice teachers drew more stick figure drawings for their “how-to” book than for term papers for happiness at the beginning and midpoint, thinking and brainstorming, talking about topic ideas with others, getting a topic idea, thinking about the audience, celebrating and relief, as well as putting the book together. For the “how-to” book, the focus for preservice teachers seemed to be on making the book their own through choice of topic and then producing the book.
Table 1. A Sampling of Term Paper Writing versus “How-to” Book Writing Stick Figure Drawings

<table>
<thead>
<tr>
<th>Shown In Drawing</th>
<th>Term Paper worth 20% of Grade</th>
<th>“How-to” Book</th>
<th>McNemar Test Results</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 115)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revising</td>
<td>59 (51%)</td>
<td>40 (35%)</td>
<td>-.165 (1)</td>
<td>.0055</td>
</tr>
<tr>
<td>Revising more than once</td>
<td>23 (20%)</td>
<td>5 (4%)</td>
<td>-.157 (1)</td>
<td>.0003</td>
</tr>
<tr>
<td>Peer reviewing</td>
<td>31 (27%)</td>
<td>5 (4%)</td>
<td>.226 (1)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Proof reading</td>
<td>25 (22%)</td>
<td>10 (9%)</td>
<td>-.130 (1)</td>
<td>&lt;.0041</td>
</tr>
<tr>
<td>Happiness at the beginning &amp; midpoint</td>
<td>0 (0%)</td>
<td>31 (27%)</td>
<td>.274 (1)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Thinking/brainstorming</td>
<td>61 (53%)</td>
<td>88 (77%)</td>
<td>.235 (1)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Talking about topic</td>
<td>0 (0%)</td>
<td>19 (17%)</td>
<td>.548 (1)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Thinking about audience</td>
<td>0 (0%)</td>
<td>16 (14%)</td>
<td>.139 (1)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Putting book together</td>
<td>0 (0%)</td>
<td>64 (56%)</td>
<td>.557 (1)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Celebrating &amp; relief</td>
<td>3 (3%)</td>
<td>28 (24%)</td>
<td>.191 (1)</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Results for Preservice Teachers Who Decreased or Increased Their Writing Apprehension

Some of the 38 preservice teachers whose writing apprehension decreased were quite apprehensive at the beginning of the semester. The writing apprehension scores for this group ranged from 47 to 118. The mean score was 77.68. After authoring a “how-to” book, the mean was 101.82. This difference was statistically significant ($t = 11.43$, $df = 37$, $p < .0001$). The average point decrease was 24; the range of points lost was 10 to 56 points. The 38 preservice teachers whose writing apprehension decreased by 10 or more points, in contrast to the 16 preservice teachers whose writing apprehension increased by 10 or more points, drew more stick figure drawings for their “how-to” book writing process of stressing at the beginning, freaking out at the midpoint, as well as celebrating at the end. However, these differences were not statistically significant.

The group of preservice teachers whose writing apprehension decreased explained that they worried initially whether they could write a successful “how-to” book, since they had never written one before. Ultimately, they were pleased with their accomplishment. One preservice teacher wrote in the follow-up survey at the end of the semester, “I found I enjoyed the ‘how-to’ book more than I thought and my comfort level increased.” This feeling is evident in a series of drawings by a Latina preservice teacher who majored in Spanish and wrote “How-to Make Cascarones” (decorated eggs made at Easter) and talked about her drawings.
Table 2. A Sampling of “How-to” Book Writing Stick Figure Drawings for Preservice Teachers Whose Writing Apprehension Decreased or Increased

<table>
<thead>
<tr>
<th>SHOWN IN DRAWING</th>
<th>WRITING APPREHENSION DECREASED 10 OR MORE POINTS</th>
<th>WRITING APPREHENSION INCREASED 10 OR MORE POINTS</th>
<th>McNemar Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 38</td>
<td>N = 16</td>
<td>S (df)</td>
</tr>
<tr>
<td>Stressing at the beginning</td>
<td>10 (26%)</td>
<td>2 (13%)</td>
<td>0.57 (1)</td>
</tr>
<tr>
<td>Freaking out at the midpoint</td>
<td>10 (26%)</td>
<td>2 (13%)</td>
<td>0.57 (1)</td>
</tr>
<tr>
<td>Celebrating at the end</td>
<td>10 (26%)</td>
<td>2 (13%)</td>
<td>0.57 (1)</td>
</tr>
<tr>
<td>Procrastinating</td>
<td>3 (8%)</td>
<td>3 (19%)</td>
<td>0.47 (1)</td>
</tr>
<tr>
<td>Researching at the library</td>
<td>14 (37%)</td>
<td>8 (50%)</td>
<td>.35 (1)</td>
</tr>
<tr>
<td>Getting in the mind set to write</td>
<td>2 (5%)</td>
<td>4 (25%)</td>
<td>.07 (1)</td>
</tr>
<tr>
<td>Getting comfortable to write</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>2.05 (1)</td>
</tr>
<tr>
<td>Taking breaks</td>
<td>2 (5%)</td>
<td>3 (19%)</td>
<td>2.24 (1)</td>
</tr>
</tbody>
</table>

Figure 1. How-To Book.

Now that you have written a “how-to” book, please draw a series of sketches of the process that you went through to write the book from the moment it was assigned until today.

Please note your feelings along the way.
Preservice teachers had different reasons for their decrease in writing apprehension. In some cases, the “how-to” book writing experienced enhanced preservice teachers’ belief in their writing efficacy, as indicated in their post semester sketches. For example, one sketch by a preservice marketing teacher, who wrote “How-to Dress for a Job Interview” in the shape of a shirt, noted in her sketch, “I can do this.” A sketch by a preservice technology teacher with relatively high writing apprehension (74), who wrote “How to Change Your Car’s Oil” in the shape of an motor oil bottle, revealed that a prewriting direction-writing activity completed in class increased his confidence. He wrote “just put it in steps like when we wrote the peanut butter and jelly sandwich making steps.” Some preservice teachers concluded that the content area literacy course had helped them to rediscover writing. In the follow-up survey, a preservice teacher noted that writing the “how-to” book was reminiscent of a childhood writing experience. “I loved writing and making books in elementary school (young author), but I haven’t had a chance to do that since then.” Preservice teachers said that they looked at writing in a new way. For instance, one preservice teacher, who lost 18 points of writing apprehension explained, “We did some different writing from what
Table 3. Survey Results for Preservice Teachers Who Increased or Decreased Their Writing Apprehension

<table>
<thead>
<tr>
<th></th>
<th>Writing Apprehension Decreased 10 or More Points</th>
<th>Writing Apprehension Increased 10 or More Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>38</td>
<td>16</td>
</tr>
<tr>
<td>Enjoyed authoring a “how-to” book</td>
<td>8.79</td>
<td>8.06</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>1.99</td>
<td>.029</td>
</tr>
<tr>
<td>Enjoyed it in comparison to other past writing</td>
<td>9.03</td>
<td>7.94</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-3.46</td>
<td>.0005</td>
</tr>
<tr>
<td>Ownership in “how-to” book</td>
<td>9.26</td>
<td>8.38</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-2.17</td>
<td>.0195</td>
</tr>
<tr>
<td>Lost ownership through revisions</td>
<td>1.47</td>
<td>2.63</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>1.99</td>
<td>.0257</td>
</tr>
<tr>
<td>Likelihood of asking future students to author “how-to” books</td>
<td>8.21</td>
<td>6.75</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-2.39</td>
<td>.01</td>
</tr>
<tr>
<td>Extent preservice teachers thought of audience</td>
<td>8.42</td>
<td>6.63</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-2.53</td>
<td>.007</td>
</tr>
<tr>
<td>Prior knowledge of “how-to” book topic</td>
<td>8.18</td>
<td>7.63</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>.813</td>
<td>.209</td>
</tr>
<tr>
<td>Enjoyment for presentation format</td>
<td>8.33</td>
<td>8.43</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-0.158</td>
<td>.437</td>
</tr>
<tr>
<td>Handing in draft early was helpful</td>
<td>9.31</td>
<td>9.39</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-.279</td>
<td>.390</td>
</tr>
<tr>
<td>Handing in cover early was helpful</td>
<td>8.06</td>
<td>9.03</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-1.76</td>
<td>.04</td>
</tr>
<tr>
<td>Peer-editing was helpful</td>
<td>7.66</td>
<td>5.94</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-2.43</td>
<td>.009</td>
</tr>
<tr>
<td>Likelihood of asking future students to author some sort of book</td>
<td>8.12</td>
<td>8.62</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-.098</td>
<td>.138</td>
</tr>
<tr>
<td>Likelihood of using what learned in content area literacy course in student teaching</td>
<td>8.75</td>
<td>9.03</td>
</tr>
<tr>
<td></td>
<td><strong>t (df)</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td></td>
<td>-1.18</td>
<td>.12</td>
</tr>
</tbody>
</table>

I was used to such as 10-page papers.” There was evidence that preservice teachers expanded their repertoire of writing genres. One preservice teacher, who lost 10 points wrote, “I think I may have become more open.” A preservice teacher whose writing apprehension was reduced by 56 points wrote, “This course has opened my eyes to different reading and writing and showed me it can be fun.” Authoring a “how-to” book was a positive and relevant writing experience for preservice teachers. A physical educa-
tion teacher, who lost 20 points of writing apprehension explained, “You showed me different ways we can use writing in physical education.”

Preservice teachers whose writing apprehension decreased, in contrast to those whose writing apprehension increased, enjoyed writing the “how-to” book more, enjoyed it more in comparison to other writing in their past, had more ownership in their “how-to” book, and were more likely to ask their future students to write a “how-to” book. This group of preservice teachers felt that peer editing was more helpful than preservice teachers whose writing apprehension increased by 10 or more points. They indicated that they thought of their audience for their “how-to” book more than preservice teachers whose writing apprehension increased.

In contrast, most of the 16 preservice teachers whose writing apprehension increased by 10 or more points had relatively low writing apprehension on the first day of class, ranging from 71 to 119. The mean was 105.8. After authoring a “how-to” book, the mean was 91.81. This difference was statistically significant \( t = 12.92, \ df = 15, \ p = <.0001 \). The average increase was 14 points; the range of points gained was 10 to 26. These preservice teachers drew more stick figure drawings for their “how-to” book of procrastinating, researching at the library, getting in the mindset to write, getting comfortable to write, and taking breaks. These results were not statistically significant. These preservice teachers did not seem overly concerned about the increase in their writing apprehension. For example, a preservice teacher, whose writing apprehension increased by 14 points dismissed the change as a “bad day.” These preservice teachers reported that handing in the “how-to” book cover early was more helpful than preservice teachers whose writing apprehension decreased by 10 or more points. They also lost more ownership (or perception of control) when asked to turn in their revisions than preservice teachers whose writing apprehension decreased, although the means for both groups were quite low. More preservice teachers, whose writing apprehension increased by 10 points or more, talked to others about their “how-to” book topic than preservice teachers whose writing apprehension increased by 10 points (63 % vs. 42 %). However, this difference was not statistically significant. This group of preservice teachers seemed to have more of a challenge getting into and staying with the “how-to” book project. Perhaps their plight was similar to published writers who describe waiting for their muse (Joselow, 1999) finding a writing place that inspired them (Miller & Kenedi, 2003), and mustering the discipline to keep writing (Staw, 2003).

There were no statistically significant differences for survey responses between either group of preservice teachers who decreased or increased their writing apprehension by 10 or more points for their prior knowledge of their “how-to” book topic or their enjoyment for the presentation format. Both groups thought that handing in the 500-word draft was very helpful. Both
groups of preservice teachers rated the likelihood of asking their future students to write some form of book similarly. These means were high, even though relatively few preservice teachers of either group remembered ever seeing a teacher of any subject area ask students to write a book (32% vs. 31%). Both groups rated highly the likelihood of using what they had learned in the content area literacy course in their student teaching. Both groups of preservice teachers reported spending a similar percent of their time revising their “how-to” books (28% vs. 38%). Both groups noted that a similar percent of former instructors asked them for a rough draft for the last paper they wrote (40% vs. 50%). Similar percentages of both groups of preservice teachers said at the beginning of the course that they had shared their writing with friends and relatives (82% vs. 94%), as well as middle and high school students (34% vs. 44%). When asked, at the end of the semester to check which part of the writing process they enjoyed, there were no statistically significant differences, except for “gathering information,” which approached significance at the .05 level. In this case, more preservice teachers whose writing apprehension decreased by 10 or more points checked this activity. Although there was not a statistically significant difference in the number of stick figure drawings that preservice teachers drew for researching online for the “how-to” book, a greater percentage of preservice teachers whose writing apprehension decreased by 10 points or more, researched online, perhaps because it is easier than going to a library, which reduced stress.

At the end of the semester, when all the surveys were returned to the preservice teachers, their scores and the concept of writing apprehension were explained to them. Preservice teachers were asked for their thoughts about writing apprehension and its effect on a teacher’s instruction. They were asked why it would be valuable for teachers with a score of 26 (very high writing apprehension) to talk to their students about their own past negative writing experiences. Preservice teachers believed that by doing so, the teacher could relate to struggling students and suggest to students that they are not alone. When asked how a student with a score of 26 might fare in the class of a teacher who had a score of 130 (very low writing apprehension), the preservice teachers were divided in their opinions. Some believed that the teacher could not relate or understand the student and would make the student’s apprehension worse by piling on lots of writing. In contrast, others explained that a teacher, who had a score of 130, had experienced many fun writing activities and would wish to pass that on to his or her students. Finally, preservice teachers were shown the pre and postwriting apprehension mean scores for all 115 preservice teachers (93.97 and 101.28). They were asked for their explanation for the overall reduction of their writing apprehension. Preservice teachers suggested that providing choice of topic, requiring drafts, as well as encouraging creativity and ownership made the difference.
Discussion

In this study, authoring a “how-to” book promoted preservice teachers’ ownership, while reducing their writing apprehension. Preservice teachers who reduced their writing apprehension, in comparison to those who increased their writing apprehension, enjoyed the “how-to” book writing experience and had more ownership in their book. Preservice teachers’ stick figure drawings suggested how this occurred. The focus in preservice teachers’ drawings for their “how-to” book was finding a topic to make the book their own and then producing the book.

In this study, some preservice teachers entered the content area literacy course with high levels of writing apprehension. Preservice teachers, whose writing apprehension decreased, rated highly their enjoyment for the “how-to” book writing experience in comparison to other writing in their past. The stick figure drawings by the Latina preservice teacher illustrated the dramatic change that was experienced. This result repeats a finding in an early study, where Daisey (2003) found that mathematic and science preservice teachers (Latinas and African Americans) reduced their writing apprehension while writing “how-to” books.

In this study, preservice teachers whose writing apprehension decreased explained that the “how-to” book writing experience was better than they initially thought. The number of stick figure drawings of stress at the beginning and midpoints, which changed to celebration at the end also suggested this conversion. These preservice teachers may have been similar to individuals with high writing apprehension in Reeves’ (1997) study who typically have had negative school writing assignments and negative comments from teachers about writing. Perhaps, the “how-to” book experience provided these preservice teachers with a similar experience to that of teenagers in the Csikszentmihalyi, Rathunde, Whalen, and Wong (1997) study, who were able to transform meaningless or threatening tasks into enjoyable ones when motivated. “How-to” books provided a means to pursue preservice teachers’ love of their topic through research while enhancing their writing identity, as Williams (2006) recommends. Moreover, the “how-to” book writing experience promoted writing quality through respect, ownership, relevancy, and rule-breaking, which is consistent with Romano’s (2004) writing instruction advice.

Thus, through positive writing experiences, preservice teachers had an opportunity to reexamine their negative self-talk and school writing experiences, as well as their identity as writers. Drawings by preservice teachers who reduced their writing apprehension provided evidence that their belief in their ability to write was enhanced. Specifically, preservice teachers’ stick figure drawings suggested that prewriting activities were helpful in promoting direction and efficacy. The Latinas’ stick figure drawings provided evi-
idence that through the “how-to” book writing experience, preservice teachers found self-confirming affirmation. Wachholz and Etheridge (1996) found that individuals with high writing apprehension depended on teachers for affirmation and thought that writing was an innate talent rather than a practiced process. However, these beliefs can be open to change. Similar to Hanrahan’s (1999) findings, writing proved to be an avenue to empower writers, which lead to the motivation to construct knowledge.

In this study, preservice teachers who reduced their writing apprehension rated the likelihood of asking their future students to write “how-to” books more highly than preservice teachers who increased their writing apprehension. Both groups of preservice teachers rated highly their plans to ask their future students to write some form of book and to use what they had learned in the content area literacy course in their student teaching. Preservice teachers noted that the “how-to” book writing experience helped them to be more open to writing, look at it in a new way, or rediscover the pleasures of writing. They had their eyes opened by the experience to the potential of writing to promote thinking and creativity. This result is consistent with Daisey’s (2003) finding of a positive correlation between secondary preservice teachers’ enjoyment rating for their “how-to” book writing experience and their rating for the likelihood that they would ask their future students to author “how-to” books. The benefits of writing in secondary instruction to clarify thinking and empower will not be offered without teachers who enjoy writing and recognize its potential (Augsburger, 1998; McLane, 1990). In this study, “how-to” book writing provided a means of providing preservice teachers with a positive writing experience.

In addition, the preservice teachers’ drawings made the writing process visible for study. Much of the behind-the-scenes feelings and activities that preservice teachers experienced became obvious. Through their drawings, preservice teachers made clearer what teacher educators could do to help reduce their writing apprehension.

Preservice teachers whose writing apprehension increased while writing a “how-to” book began the semester with relatively low writing apprehension. Perhaps these preservice teachers were not passionate about their topic or maybe “how-to” was not their genre. Thus, samples of former preservice teachers’ “how-to” books will be brought to class more often at the beginning of the semester, in order to help preservice teachers find a topic. More talk about approaches to write “how-to” books, such as how not to do something or how to do something the wrong way, will be stressed. Preservice teachers will be encouraged more often to consider different size and shape books to promote engagement and ownership. The drawings afforded the researcher ideas for course pedagogy; to challenge negative or limited perceptions of writing and create a new space that allows future teachers to see writing less
as an add-on in an already over-packed curriculum, and more as a means for creating personally meaningful learning for students.

**Limitations and Future Research**

The results of this study are limited because they are self-reported. Future researchers are encouraged to examine points where student ownership is enhanced or reduced by studying students’ drawings of their writing process. Studying student drawings could also reveal where students need teacher support or suggest where deadlines or other requirements constrain the quality of work or student motivation. In addition, future researchers might ask preservice teachers in their student teaching and first years of teaching to draw their perceptions of the writing activities in their instruction. These drawings could be compared to drawings by middle and high school students of their process and feelings during instructional writing activities. These insights provide direction for pedagogical changes.

**References**


Navigating Professional Development
Abstract

The purpose of this paper was to explore the effects of professional development on middle school teachers’ understanding and application of literacy strategies that support and enhance instruction across the curriculum. This study investigated the extent to which reading and writing strategies, along with sound instructional design, were implemented by middle school teachers in their content areas based on data collected from self-reports and authors’ classroom observations. Results suggest that the sampled middle school teachers used a wide variety of instructional strategies and instructional designs throughout their teaching. While certain instructional designs (whole class discussion) and strategies (note-taking and graphic organizers) were used universally throughout the school, others were selected more or less frequently across different content areas.
The foremost factor in effective instruction has been consistently identified as the teacher (Allington & Cunningham, 2002; Blair, Rupley, & Nichols, 2007; Villaume & Brabham, 2003) and the critically important role that teachers’ expertise has upon student learning (Darling-Hammond, 1997). In addition, regardless of the instructional program, the teacher is the most important variable in students’ reading and writing development (Flippo, 2001; Foorman, Francis, Fletcher, & Schatschneider, 1998; National Reading Panel, 2000; Pitcher, 2003; Snow, Burns, & Griffin, 1998). Effective teachers respond to students’ learning needs by varying their instructional procedures and methodologies in relation to desired learning outcomes and their students’ capabilities. In their daily practice, these effective teachers make informed and purposeful decisions about their classroom practices, because they recognize the impact that their instructional design and related instructional strategy selection can have on the learning of individual students (Heilman, Blair, & Rupley, 2002; Nichols, Jones, & Hancock, 2003; Nichols, Young, & Rickelman, 2007).

Under the broad umbrella of effective teaching, it is important to examine how reading strategies can be taught explicitly and used in meaningful practice while students are assigned increasingly more difficult texts. Explicit strategy instruction for students is beneficial because, for the most part, they need scaffolded guidance and supervised practice. Research-based reading strategies can provide this necessary scaffolding (Dole, Duffy, Roehler, & Pearson, 1991; Willson & Rupley, 1997). In this approach, effective teachers demonstrate for students how to apply a variety of strategies before, during, and after reading. The use of such strategies are woven throughout the instructional day, which has the potential to facilitate further reading development and enhance students’ learning (Jacobs, 2002; Nichols, Rupley, & Mergen, 1998). Related research findings (e.g., Grimes, 2004; National Middle School Association, 2006; Pressley & McDonald-Wharton, 1997) are clear. To insure that instructional strategies are understood, practiced, and applied effectively by students, teachers must help students understand how beneficial such strategies are to their learning from text. In essence, students need to be explicitly taught when and under what circumstances they should apply particular instructional strategies (Nichols, et al., 2007).

Both prior and strategic knowledge are essential components of understanding and learning from texts; however, not all students realize the importance of these types of knowledge or are able to draw upon them during reading (Barton & Sawyer, 2004). Struggling readers often have difficulty with text processing strategies because of their inability to monitor their own understanding of text (Paris, Lipson, & Wixson, 1994; Pressley, 2000; Willson & Rupley, 1997). These readers often give too much attention to decoding and determining individual word meanings rather than relying on multiple strat-
egies that focus on both word identification and comprehension (Pressley, 2000). Moreover, struggling readers may have trouble learning from text because their knowledge about learning reflects incomplete concepts about the nature and purpose of learning (Nichols, et al., 1998; Pressley, 2000; Stahl, 2004).

Reading to learn from texts in a strategic manner is not something that students naturally move into once they enter middle school, or when it is assumed they have become proficient at decoding. As reported by DeLeon (2002), almost half of the students entering ninth grade are reading several years below grade level. Additional research results reported even higher numbers of students who are struggling with reading. Biancarosa and Snow (2004) reported that 70 percent of ninth graders nationwide could be considered to be reading below grade level. For students to succeed in using reading as a tool for learning in the content areas, teachers must explicitly teach strategies for learning from text.

Researchers have examined specific strategies readers use to comprehend informational text and have determined that successful reading comprehension relies on automaticity in decoding, prior knowledge understanding core and related concepts, and use of appropriate processing strategies (e.g., Jetton, Rupley, & Willson, 1995; Kletzien, 1991; Weaver & Kintsch, 1991). Strategies include the understanding of varying one’s approach to reading depending upon one’s learning goal. Reading in the content areas is seen as a process in which comprehension occurs by the interaction of knowledge stored by the reader and the textual information that the reader encounters (Nichols, et al., 2007). Competent readers construct mental models of the text by using their existing knowledge along with implementing flexible learning strategies (Heilman, et al., 2002). When comprehension breaks down, good readers have the awareness necessary to monitor and change these learning strategies so that comprehension is enhanced (Dole, et al., 1991; Pressley, 2000).

Even though comprehension acquisition requires prior and strategic knowledge, real world implementation is often difficult for students. This is partially due to their lack of consciousness about a suitable means for evaluating their own comprehension (Paris, et al., 1994; Willson & Rupley, 1997). It is crucial that teachers make known to their students explicit reading strategies in order to better prepare them to implement comprehension strategies effectively in their reading of informational texts. By improving teachers’ knowledge of instructional strategies and methods for reading informational texts, teachers will have a better understanding of the value of these when teaching in their classrooms and a stronger impetus for sharing them with their students.

Traditionally, informational texts are conceptually dense (Blachowicz & Fisher, 2000). Harmon, Hedrick, and Wood (2005) concluded that in such texts
it is essential that students possess the requisite knowledge base for the concepts that the words represent and subsequent learning strategies for gaining that knowledge if it is lacking. The value of reading strategy instruction for students has been supported by the fact that by learning and using such strategies, students make significant gains in their reading comprehension (Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989; Rosenshine & Meister, 1994; Rosenshine, Meister, & Chapman, 1996). One way to infuse reading strategy instruction into the content areas for the grades beyond the elementary years is through advancement and delivery of strong professional development programs for teachers in the middle school (Nichols, et al., 2007). Logic would support that the middle school years are the most crucial because it is typically fourth grade where students transition into using reading of informational texts to learn (Chall, 1983). However, reading instructional strategies appropriate for middle school science teachers to teach their students may not be those best suited for middle school social studies teachers (Nichols, et al., 2007). In other words, student learning may be enhanced through the implementation of different instructional strategies depending on the subject matter to be learned. In a previous study, Nichols et al. (2007) concluded that professional development activities need to be geared more toward individual teacher/student needs rather than a “one size fits all” model. Their previous study found that certain strategies, such as graphic organizers, note taking and brainstorming, were commonly selected by teachers; however, teachers of different content subjects tended to differentially choose and implement different strategies (Nichols, et al., 2007). This current study builds on this previous work and focuses on determining if content teachers report using a variety of unique strategies dependent upon their subject area.

While there has been some federal response to this middle/secondary literacy crisis [e.g., Alliance for Excellent Education; No Child Left Behind Act (U.S. Department of Education, 2002); Perie, Grigg, & Donahue, 2005], we felt that professional development at the school level that explicitly focused on a variety of instructional strategies had the potential to make a much more immediate impact upon teachers’ practices. If more is known about what middle school teachers presently know and do, then professional development to meet the needs of these teachers will better assure a tailored fit, rather the one size fits all model.

**Purpose/Rationale**

In preparing students to become more strategic, competent readers, teachers need to be able to encourage their students to systematically use appropriate instructional strategies when interacting with text (Nichols, et al., 1998; Pressley, 2000; Rupley, Willson, & Mergen, 2005). Such multi-strategy ap-

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approaches to teaching are further supported by Langer (2000), who found that teachers in higher performing schools taught a skill or strategy based upon students’ needs and provided practice and application in simulated activities and situations. The teachers used the instructional strategies to instruct the students and then transferred the responsibility for strategy application to the students through meaningful activities.

Given that less than one percent of the research studies on reading education published since 1965 address preservice or inservice reading teacher education (Anders, Hoffman, & Duffy, 2000), this study took a focused look at the potential that organized professional development has in affecting teachers’ use of reading instructional strategies in their daily instruction. A general weakness of the typical inservice model is that the inservice provider presents information to teachers and then leaves, often with no follow-up. A primary purpose of this study was to identify what instructional strategies middle school teachers actually used in their instruction at the conclusion of staff development opportunities, and then determine whether the strategies that were chosen for implementation by the teachers varied by content areas. Specifically, we wanted to discover if middle school teachers within specific content areas tend to choose certain strategies over others. Our past research (Nichols, Zellner, Rupley, Willson, Kim, Mergen, & Young, 2006; Nichols, et al., 2007) indicated that the instructional strategies teachers frequently use are those with which they are most familiar. If this holds to be true, then the issue becomes how can effective professional development be provided that builds on what the teachers are currently using.

**Methodology**

**Subjects**

The sample consisted of 45 teachers from an urban school district in southwestern Virginia. The teachers taught at one of two Title I middle schools, and the study took place from the fall of 2004 to the spring of 2005. Title I is a federally funded program that serves students who score below grade level in reading. Teaching experience of the participants ranged from first year classroom teachers to teachers with 30 years or more of teaching experience.

In order to analyze the teachers’ familiarity with reading instructional strategies and to examine the frequency with which the strategies were used, teachers were administered the Reading Language Arts Instructional Features Questionnaire (RLAIFQ) (Nichols, et al., 2007) at the beginning of the study. The RLAIFQ was delivered to the teachers during a faculty meeting and picked up by the lead researcher at a subsequent team meeting 2 weeks later.
**Instruments**

The RLAIFQ, modified by Nichols and Young in 2004, is an adaptation of the Reading Instruction Features Questionnaire (RIFQ) (Mergen, 2000; Nichols, et al., 1998; Nichols et al., 2006), which was developed in order to sample classroom teachers’ knowledge and use of reading instructional procedures and strategies. The first part of the instrument collected demographic information. The second part of the questionnaire is divided into eight parts that examine the extent to which teachers report using: (a) instructional methods; (b) grouping practices; (c) learning and study strategies in the content areas of science, social studies, math and language arts; (d) trade books; (e) paper marking strategies; (f) technology; (g) an examination of beliefs; and (h) an examination of instructional practices in regards to beliefs.

The instructional strategies in the RLAIFQ were compiled after a comprehensive review of related literature, which included a search of ERIC citations, reading and English language arts methods textbooks, and *The Literacy Dictionary: The Vocabulary of Reading and Writing* (Harris & Hodges, 1995). The reading and writing strategies that were identified from this review were included as items in the questionnaire. The original RIFQ was field-tested using a sample of 30 teachers who made suggestions for improvement (See Nichols, et al., 1998, for complete RIFQ). Mergen (2000) and Rupley, et al., (2005) found that the RIFQ is a valid and reliable instrument for teachers’ self-reports of classroom use of reading instructional strategies, demonstrating reliability coefficients greater than .80 in all instances. Teacher and researcher suggestions were incorporated into the modified RLAIFQ. While teachers responded to all items on the RLAIFQ, the primary focus of the data analysis for this study was on the 62 reading instructional strategies (See Appendix A). Concerns for teachers reliably reporting what instructional strategies they did use were addressed by the use of teacher completed checklist and classroom observations. Participating teachers at both schools were required to keep a monthly checklist of those instructional strategies that they had used during that time period (see Appendix B). These checklists were collected by the school principal at the end of each month for four months. The researchers also observed teachers at both schools and used the checklist of instructional strategies as an observation guide to validate the teachers’ self-reports and RLAIFQ responses as well as track the use of reported strategies by content area. Mergen (2000) found a strong correlation between teachers’ self reports and classroom observations by trained observers (alpha coefficient 0.85), which supports the fidelity of teachers’ self reports about their knowledge of and use of identified reading instructional strategies as well as provide additional information about which strategies individual teachers are utilizing.

The data were analyzed using descriptive statistics. Mean scores of reported use were sorted by descending order to determine the most frequently
reported use of instructional strategies. The checklists simply recorded which strategies were used each month. How often the strategy was selected by that teacher each month was not recorded, and is a limitation of the study.

**Results**

The question that we set out to answer was: What reading instructional strategies are middle school content area teachers familiar with and which ones do they use? In addition, we wanted to find out if there was any difference in which specific strategies were used by teachers across different subject areas. The results indicated that content area teachers from the selected middle schools were familiar with and reported using many of the instructional strategies (See Table 1).

**Table 1. RALIFQ Learning Strategies**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Number</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>45</td>
<td>3.8</td>
<td>0.944</td>
<td>Note-Taking</td>
</tr>
<tr>
<td>84</td>
<td>45</td>
<td>3.622</td>
<td>1.134</td>
<td>Study Guides</td>
</tr>
<tr>
<td>48</td>
<td>45</td>
<td>3.6</td>
<td>1.009</td>
<td>Test-Taking strategies</td>
</tr>
<tr>
<td>73</td>
<td>44</td>
<td>3.568</td>
<td>1.208</td>
<td>Predictions</td>
</tr>
<tr>
<td>33</td>
<td>44</td>
<td>3.528</td>
<td>1.229</td>
<td>Guided Reading</td>
</tr>
<tr>
<td>47</td>
<td>44</td>
<td>3.523</td>
<td>1.191</td>
<td>Graphic Organizers</td>
</tr>
<tr>
<td>58</td>
<td>45</td>
<td>3.378</td>
<td>1.114</td>
<td>Brainstorming</td>
</tr>
<tr>
<td>32</td>
<td>44</td>
<td>3.227</td>
<td>1.583</td>
<td>Setting Purpose</td>
</tr>
<tr>
<td>88</td>
<td>44</td>
<td>3.159</td>
<td>1.238</td>
<td>Underline-Highlighter</td>
</tr>
<tr>
<td>29</td>
<td>43</td>
<td>3.14</td>
<td>1.424</td>
<td>Directed Reading Thinking Activity</td>
</tr>
<tr>
<td>30</td>
<td>43</td>
<td>3.14</td>
<td>1.104</td>
<td>KWL</td>
</tr>
<tr>
<td>85</td>
<td>44</td>
<td>3.136</td>
<td>1.212</td>
<td>Text-Preview</td>
</tr>
<tr>
<td>28</td>
<td>44</td>
<td>3.114</td>
<td>1.298</td>
<td>Directed Reading Activity</td>
</tr>
<tr>
<td>78</td>
<td>44</td>
<td>3.091</td>
<td>1.235</td>
<td>Re-Read</td>
</tr>
<tr>
<td>80</td>
<td>44</td>
<td>3.068</td>
<td>1.283</td>
<td>Retelling</td>
</tr>
<tr>
<td>79</td>
<td>44</td>
<td>3.045</td>
<td>1.257</td>
<td>Restate Problem</td>
</tr>
<tr>
<td>70</td>
<td>42</td>
<td>3.024</td>
<td>1.179</td>
<td>Mnemonics</td>
</tr>
<tr>
<td>36</td>
<td>43</td>
<td>3.023</td>
<td>0.913</td>
<td>Venn Diagram</td>
</tr>
<tr>
<td>41</td>
<td>44</td>
<td>3.023</td>
<td>1.089</td>
<td>Anticipation Guides</td>
</tr>
</tbody>
</table>

The results presented in Table 1 were responses to the prompt: “To what extent do you use the following learning and study strategies in your content area (English, social studies, science, math, etc.)?” Teachers selected from a 5 point Likert scale ranging from Never to All or almost all the time (See Appendix A). The data in Table 1 are the aggregated responses for the 45 teachers who completed the RLAIFQ. While the teachers were presented with 62 learning and study strategies from which to choose, only items that had a mean score of 3.0 (Sometimes used) or greater (Often and Almost all the time) were included in Table 1.
As can be seen when comparing Table 1 to the strategies in Appendix A, many strategies that were included on the questionnaire were either never or rarely selected for classroom use. However, there were also a wide number of strategies that were selected on a frequent basis and indicated that these were the strategies that the sampled teachers found most familiar. The top eight strategies reported based on familiarity and self-reports of use were: Note Taking, Study Guides, Test Taking Strategies, Predictions, Guided Reading, Graphic Organizers, Brainstorming, and Setting Purpose, in that order.

We also analyzed the data from the strategy checklist and the observations in order to see if teachers of different subject areas prefer to use different strategies. Teachers reported note taking, graphic organizers, brainstorming, guided reading, 3-minute pause/reflection, predictions, test taking strategies, and word lists as the most frequently used strategies (see Table 2). Contrasting this with the teachers’ reports of familiarity (see Table 1) it is interesting to note that note taking, graphic organizers, brainstorming, guided reading, predictions and test taking strategies were also reported as the most often used. The teachers’ self-reports and observations indicated that a grand total of 60 strategies were reported over a 4 month period; however, only the top five are presented in Table 2. While note taking, was selected as a frequent strategy in all 5 of the content areas and graphic organizers and brainstorming were also frequently selected strategies in 4 of the 5 content areas, each group of content teachers also reported using their own unique strategies. While note-taking was the most frequently reported strategy being used in the core content areas of math, social studies and others (not considered core content areas), each of these groups also selected unique strategies when compared to other content subjects. For instance, the number two strategy selected by the math teachers was 3 minute pause and reflection, the number two strategy selected by social studies teachers was test-taking, and the number two strategy of the remaining teachers was word lists. English teachers reported their number one strategy was guided reading and the number one strategy selected by the science teachers was brainstorming.

In addition, some subject teachers reported using strategies with some frequency while other subject area teachers used the same strategies less frequently. For instance, English teachers were the only group to select the writing process, free writes, and prewriting as their top strategies. While the math teachers were the only ones to select reciprocal teaching, the science teachers were the only ones to select concept maps and Venn diagrams, the social studies teachers were the only ones to utilize underlining and word walls, and the remaining teachers at the school were the only ones to select think-pair-share as one of their top selected strategies. While teachers at these middle schools selected some unique strategies when compared to the Nichols et al. (2007) study, the results of this study continue to demonstrate that teach-
Table 2: Content Area Comparisons Using Teachers’ Reports Based on Four Monthly Checklist Reports and Observations

Note: Table does not reflect every single strategy reported—only the top 4 to 7 reported by teachers. For definitions of all strategies see the adapted RLAIFQ in Appendix B.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>ENGLISH n = 16 total respondents</th>
<th>MATH n = 17 total respondents</th>
<th>SCIENCE n = 11 total respondents</th>
<th>SOCIAL STUDIES n = 11 total respondents</th>
<th>OTHER n = 14 total respondents</th>
<th>ALL n = 69</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = 15</td>
<td>n = 11</td>
<td>n = 5</td>
<td>n = 8</td>
<td>n = 10</td>
<td>n = 40</td>
<td></td>
</tr>
<tr>
<td>n = 12</td>
<td>n = 10</td>
<td>n = 4</td>
<td>n = 7</td>
<td>n = 5</td>
<td>n = 33</td>
<td></td>
</tr>
<tr>
<td>n = 11</td>
<td>n = 9</td>
<td>n = 4</td>
<td>n = 7</td>
<td>n = 4</td>
<td>n = 29</td>
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<tr>
<td>n = 10</td>
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<td>n = 7</td>
<td>n = 3</td>
<td>n = 29</td>
<td></td>
</tr>
<tr>
<td>n = 9</td>
<td>n = 7</td>
<td>n = 3</td>
<td>n = 5</td>
<td>n = 3</td>
<td>n = 25</td>
<td></td>
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<td>n = 8</td>
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<td>n = 8</td>
<td>n = 8</td>
<td>n = 21</td>
<td></td>
</tr>
<tr>
<td>6. 3-minute reflect*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6. Word lists*</td>
<td></td>
</tr>
<tr>
<td>n = 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n = 21</td>
<td></td>
</tr>
</tbody>
</table>

*Note 2: The asterisks indicate that these strategies were also observed by the authors.
ers tend to select strategies differentially based on the content they teach. If professional development is based on school wide presentations, it may not accurately convey the instructional strategies most prevalent for each of the content areas.

**Limitations**

While this study indicates that strategy selection preferences by content subject is more complex and diverse than when examining strategy selection as a whole school, it is still limited in what we can generalize. The sample of teachers who participated in the study is small and the findings can be viewed more in terms of a small case sample as opposed to generalizing which strategies are most commonly selected by content. By no means does this study conclude that all middle school math teachers use reciprocal teaching as a frequently selected strategy. Instead we simply find that this sample of teachers indicated that they selected that strategy more frequently than other subject teachers. We also have no way of indicating how frequently the selected strategies were selected by the individual teachers. For example, during the month of October one science teacher indicated that she/he selected note-taking and KWL organizers, but we have no way of telling how often she/he used those strategies. Obviously, if she/he used the strategy every day, it would present more compelling evidence than if she/he just tried it one time. It could be that the teacher used note taking on a daily basis and only used KWL once during the month; however, in this study they are treated as the same. Our recommendation for future studies would be to measure the frequency of use during each month. Another recommendation for future studies would be to examine the research base to determine the effectiveness of the strategies selected. In other words, are the reading instructional strategies that the teachers report familiarity and use, research-based, and have these selected strategies shown to contribute to enhanced achievement in processing and understanding content area texts? If the strategies lack the research-based support for enhanced learning in a given content area, then the question becomes how do providers of professional development encourage and support change in teachers’ instructional practices?

**Conclusions**

A major purpose of our conducting research on teachers’ knowledge and instruction was to identify professional development that would facilitate the integration of current research into the pedagogical practices of these classroom teachers. The present day emphasis on scripted curriculum, intended to provide “teacher-proof” programs for teaching, place quality professional development and professional decision making at the forefront in
assisting teachers in striving for continued growth in their teaching effectiveness. Obviously, when teachers feel pressure to follow scripted lessons, professional development needed to make significant change is complex and difficult at best (Pitcher, 2003). When change does not occur, teacher resistance is frequently blamed. However, research suggests that rather than teacher resistance, it is the lack of quality professional development that is the more likely culprit (Darling-Hammond & McLaughlin, 1995; Duffy, 2002; Morrow & Casey, 2004). However, little to no direction is available on how districts or schools could better identify professional development that would establish an environment where effective teaching can occur (Lipson, Mosenthal, Mekkelsen, & Russ, 2004).

Professional development that presents important research-tested practices and ideas in creative manners that are sensible to the practicing teacher have a greater opportunity of being implemented (Shanahan & Neuman, 1997). For lasting instructional change to occur, teachers need to appraise their current classroom practices and be provided with instructional strategies and instructional designs that build on their competencies and meet their needs (Richardson & Hamilton, 1994). Teachers must examine their teaching to make sure that they are providing a viable framework for reaching their learning goals. In order for teachers to reach this level of professional understanding, they must have opportunities to assess and critically think about their instructional practices (Perkins, 1993). Understanding what teachers know and helping them make connections between their previous knowledge and their perceived comfort level in teaching what is being assessed by states is crucial if changes in their instruction are to occur (Fenstermacher, 1994; Richardson & Hamilton, 1994).

Classrooms that create a community of learners, facilitate discussion, vary instructional design, incorporate instructional strategies, and guide students to their own critical understanding of the learning goals cannot be brought about by a one-shot inservice session (Santa, 2006). Instead, a commitment to professional development that focuses teachers’ attention on their own critical analysis of what they do and helps them make connections between current research findings and their own classroom practices has the greatest potential in making the most out of professional development opportunities. In addition, when developing a responsive school community, it is important to recognize that each teacher within the school is different and has different strengths and different needs as well as teaching different grade levels and content (Learning First Alliance, 2000; Lipson, et al., 2004). Our findings, similar to what is referenced in Every Child Reading: A Professional Development Guide (Learning First Alliance), also argue for professional development activities that meet the individual needs of the teachers rather than a one size fits all approach. Teachers should be fostered in becoming thought-
ful decision makers who use their knowledge of learning goals and state curriculum guidelines to design instruction and select strategies that best enable students to reach proficiency across all subjects. In order to do this, they must be knowledgeable about strategy selection and implementation. Providers of professional development should also recognize that instructional strategy selection is dependent on content goals, the context of individual schools, teachers’ knowledge of the strategies, and students’ needs.

References


Appendix A. RLAIFQ (Items Reported on for this Study)

**Purposes:**
1. To determine how middle school teachers implement districts instructional plans and curriculum.
2. To provide diagnostic and summative information useful in planning and evaluating professional development activities for the future in the content areas.
3. To better understand the status of paper marking practices and technology applications.

**To what extent do you use the following learning and study strategies in your content area (English, social studies, science, math, etc.)?**

| (1) Never (e.g., a few times a year) | (2) Rarely (e.g., once or twice a month) | (3) Sometimes (e.g., once or twice a week) | (4) Often (e.g., once or twice a week) | (5) All or almost all the time |

28. Directed-Reading-Activity (DRA)  
29. Directed-Reading-Thinking-Activity (DRTA)  
30. Know-Want to Know-Learned (KWL)  
31. Story Impressions  
32. Setting Purposes  
33. Guided Reading  
34. Fix-up Strategies  
35. Story Maps  
36. Venn Diagram  
37. Reader’s Theater  
38. Semantic Maps  
39. Skim/scan  
40. Survey, Question, Read, Recite, Review (SQ3R)  
41. Anticipation Guide  
42. Reciprocal Teaching  
43. Outlining  
44. Note taking  
45. Learning Logs  
46. Webbing  
47. Graphic Organizers  
48. Test taking strategies  
49. Sketch to Stretch  
50. Writing Process  
51. Free Writing  
52. Process Drama  
53. Questions Answer Relationship (QAR)  
54. Cubing  
55. Word sorts  
56. Word walls
To what extent do you use the following learning and study strategies in your content area (English, social studies, science, math, etc.)? Continued

<p>| | | | | |</p>
<table>
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<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>All or almost</td>
</tr>
<tr>
<td>(e.g., a few times a year)</td>
<td>(e.g., once or twice a month)</td>
<td>(e.g., once or twice a week)</td>
<td>all the time</td>
<td></td>
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</table>

57. 3 Minute Pause (Reflect)
58. Brainstorming
59. Choral Response Reading
60. Cloze
61. Concept Map
62. Concept Wheels
63. Contextual Redefinition
64. Dialogue Journals
65. Diary Entry
66. Guided Reading Procedure (GRP)
67. Induced Imagery
68. Inquest
69. Language Experience Approach (LEA)
70. Mnemonics
71. Point Counterpoint
72. Possible Sentences
73. Predictions
74. PreReading Plan (PReP) Technique
75. Probable Passages
76. Radio Reading
77. Reciprocal Questioning (ReQuest) Procedure
78. Re-read
79. Restate Problem
80. Retelling
81. Self-Question
82. Semantic Feature Analysis (SFA)
83. Story Telling
84. Study Guides
85. Text Preview
86. Text Structure Strategy
87. Think Alouds
88. Underline/Highlighter
89. Word Maps

Thank you for your time and effort in completing this survey. Your responses will be most helpful!
# Appendix B. Instructional Design and Strategy Checklist

(Items Used with this Study)

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>3 minute pause (Reflect)</td>
<td>Process Drama</td>
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<td>Anticipation Guide</td>
<td>QAR Radio Reading</td>
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<tr>
<td>Brainstorming</td>
<td>Reciprocal Teaching</td>
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<td>Choral Response</td>
<td>ReQuest Procedure</td>
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<tr>
<td>Concept Map</td>
<td>Reread</td>
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<td>Concept Wheels</td>
<td>Reader's Theatre</td>
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<td>Contextual Redefinition</td>
<td>Restate Problem</td>
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<td>Cloze</td>
<td>Retelling</td>
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<tr>
<td>Cubing</td>
<td>Self-Question</td>
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<td>Diary Entry</td>
<td>Semantic Maps</td>
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<tr>
<td>DRA</td>
<td>Semantic Webs</td>
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<td>Setting Purposes</td>
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<td>Fix-up strategies</td>
<td>Sketch to Stretch</td>
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<td>Free Writing</td>
<td>Skim-scan</td>
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<td>Graphic Organizers</td>
<td>SQ3R</td>
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<td>Guided Reading</td>
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<td>Guided Reading Procedure</td>
<td>Story Maps</td>
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<td>Inquest</td>
<td>Study Guides</td>
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<td>Journal Writing</td>
<td>Test Taking Strategies</td>
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<td>KWLLLEA</td>
<td>Text Preview</td>
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<td>Learning Logs</td>
<td>Text Structure Strategy</td>
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<td>Mnemonics</td>
<td>Think-Alouds</td>
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<td>Note taking</td>
<td>Think/Pair/Share</td>
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<tr>
<td>Outlining</td>
<td>Underline/Highlighter</td>
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<td>Personal Journals</td>
<td>Venn Diagrams</td>
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<td>Point, Counterpoint</td>
<td>Word Lists</td>
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<td>Possible Sentences</td>
<td>Word Maps</td>
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<td>Predictions</td>
<td>Word Sorts</td>
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<td>PReP Technique</td>
<td>Word Walls</td>
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<td>Prewriting activities</td>
<td>Writing Process</td>
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<td>Probable Passages</td>
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*Navigating the Literacy Waters: Research, Praxis, and Advocacy*
HELPING LITERACY CENTERS COME ALIVE FOR TEACHERS: TRANSITIONS INTO USE OF INTERACTIVE SMALL GROUP READING STATIONS

Francine Falk-Ross

Abstract

Teachers unfamiliar with the development of interactive and engaging small-group reading stations, or literacy centers, were introduced to new approaches in this six-month partnership project. Information was focused on independent reading, library and resource systems, and self-monitoring activities. Transitions were categorized in terms of stages for more comfortable movement between levels of implementation. All teachers moved at least one level up as they observed models by the researcher, engaged in reading, and collaborated during grade level meetings. A checklist of steps is provided in the article for more specific reference by preservice and practicing teachers.

The functions of interactive small-group reading stations, or literacy centers, are many. They are used for practicing with reading elements, experimenting with reading strategies, activating independent monitoring and problem solving, providing extended time for reading, initiating reader response through writing, and allowing time for peer conferencing. In all cases, literacy centers provide supportive activities for development of students’ independent learning habits and new thinking about reading. Yet, many teachers still find it difficult to open the independent work activities to more than contrived worksheet completion as they struggle with considerations of classroom management (Morrow, 1996). Supporting teachers’ small steps toward developing creative stations of inquiry related to all elements of the reading process can become transforming in their perspectives and practices in elementary and middle-level classrooms. Examples of methods to increase teachers’ own development of their practice can help teacher educators to guide preservice and practicing teachers in new learning.
The purpose of this paper is to report a professional development study and share information related to helping teachers develop interactive literacy centers that fit their reading instruction needs. The inquiry questions that were addressed focused on: How much movement toward interactive reading stations is possible in one year’s time? What is the nature of those changes that occur? A list of stages for implementation was developed to help them transition slowly into using literacy centers, and to provide each teacher with goals and options to move forward from whatever level he or she was familiar with the approach. The progress of the teachers was tracked each week throughout the school year.

The Framework for Literacy Centers

Interactive literacy centers empower students to learn in a shared environment of inquiry (Holdaway, 1982), provide a hands-on approach to literacy learning (Neuman & Roskos, 1997), provide for students to make use of their various learning styles (Banks, 1994), and create quantitative changes in students’ reading comprehension (Morrow, 1996). Literacy centers also promote models of balanced literacy in that they provide for developing each of the five essential reading elements (i.e., phonemic awareness, phonics, vocabulary, fluency, comprehension), a goal specified by the National Reading Panel (NICHD, 2000). Literacy centers enhance cooperative learning skills (Slavin, 1987) while allowing for individual and small-group learning. They focus learning in meaningful ways for the students (Morrow, 1990) and build upon guided reading instruction through extension activities for young students (Fountas & Pinnell, 1996) and young adolescents (Fountas & Pinnell, 2001). The extension activities through which reading and learning are facilitated so effectively include experimentation with reading strategies in situated contexts, independent learning triggered by self-monitoring and problem solving, reading rehearsal through extended time for reading, collaborative learning using peer conferencing, and reader response through writing. Reference to and models of these activities were threaded throughout the professional-development activities with the elementary and middle grade teachers in this school district.

In this professional development study, the teachers in one school district, composed of four elementary schools and one middle school, were introduced to the theoretical and practical aspects of implementing literacy centers to accompany a new guided reading approach to reading. Teachers and their students in grades 3-6 were part of the project. Twenty-one teachers were introduced to the use of literacy centers to provide alternatives to the individual paper-based applications students were accustomed to using following flexible grouping for leveled reading instruction, although only 16
remained in the study for the whole school semester. These teachers completed surveys based on their knowledge of developing and using literacy centers in their classrooms. Professional development activities that followed included reading material for background knowledge by notable experts on guided reading and literacy center applications (e.g., Allen & Perry, 2000; Diller, 2003; Fountas & Pinnell, 2001; Morrow, 2002; Owocki, 2005). Examples of the support given these teachers included providing lists of activities for students’ small group work to follow guided reading instruction, classroom modeling by the researcher, and observation/critique of one another’s practice.

**Organization of Literacy Centers**

In each case, the classrooms observed in this professional development study of literacy centers were organized into quiet reading stations requiring limited movement around the room and paper-based activities requiring focused discussion, such as worksheets, journal activities, or extended reading assignments. Teachers were informed that effective literacy centers could take several forms and be at different levels of learning. Types presented included manipulative-based activities, which have been shown to be effective for prompting deeper understanding based on the tactile component and game-like characteristics. The advantages of using manipulative items are that they provide multimodal input of new information and involve active participation of students in learning. Examples of manipulatives that were presented to the teachers were activities to build words using plastic or cardboard letters with pocket charts, beans, blocks, containers, and tape recorders. Language and reading games, motivational boards or electronic devices involve manipulation and movement, as well. Another form involved open discussion, such as literature or inquiry circles, which represented leveled reading extension activities such as thinking and application work. The use of focus group discussions and video presentations allowed teachers to view and question various models of literacy centers. Modeling in the classroom by the teacher-researcher allowed teachers to view literacy center management and revisions.

In each class, literacy areas for silent reading or worksheet completion to complement guided reading periods consisted of the students’ own desks or the classroom library section. Materials were distributed by the teacher for that purpose and were not in a labeled area, except for the classroom library shelves. Books in the library were not leveled nor marked for different genres or topics. To address the issue of more effective preparation of materials, the topic was discussed during grade-level meetings and models of organization were provided. It was explained that preparation for students’
easy access to materials and ease of use consists of clear labels and signs that specify the activity’s focus and a laminated instruction sheet to guide the sequence of activities. Students need to know the rules for use of materials. Teachers were shown packages or containers for storage and easy access within designated areas of the classroom, and spaces for working were cleared for students to concentrate and organize reading activities.

In the original literacy activities, students remained in the same groups that were for guided reading meetings. Although useful for leveled activities, changes in student pairing would open up the conversations and challenge students to work together for learning purposes. Teachers learned that students may be assigned to different groups or may be given choices (within limits) of literacy centers that are visited during the assigned time periods. In some cases, the use of the same leveled groups with students having reading abilities that are matched was an easy move from the flexible groups. When given choice, the heterogeneous makeup allowed for peer tutoring and engaged conversations. A third choice was to have reading resource support staff, such as the reading specialist, language specialist, classroom aides, or special education teachers, provide individual attention to the needs of struggling readers through modification of literacy activities as the students participated in literacy centers.

Planning for Instructional Transition

Initially, the teachers experimented with various materials and models for literacy center activities that were provided by the researcher for the students for one day’s lessons; however, their interests focused on development of consistent organizations for continued use on their own. It was suggested that some of the first steps for generic organization of literacy centers include sign-in sheets, materials in one location, and rules for conduct at each center. The researcher demonstrated the need for specific instructions to accompany each focus activity and for computer-based files of these be kept in order to provide for quick and efficient access and revision of a basic set of protocols be available for classroom use. The core organizational elements that all teachers agreed would work in their classrooms included the following basic activities: interactive discussion, reading activities, connections and reader response, and independent work. This protocol would unfold in the classrooms according to the needs of the students using some of the following activities:
**For K-3 Classrooms:**

1. Interactive Discussion/Parallel Play with reading materials
2. Reading Elements in recent lessons
   - Word play—making words (e.g., concepts about print, letter-sound associations, word building with onsets and rimes)
   - Fluency through extended reading experiences (e.g., labeled information books, narrative picture books, magazines)
   - Listening & phonological awareness (e.g., audiotapes with headphones, rhyming games)
   - Vocabulary (e.g., word sorts, matching games)
3. Connections and Reader Response (e.g., pictures, letters, postcards, lists, new ideas)
4. Independent work (self-monitoring) by each student

**For 4-6 Classrooms:**

1. Interactive Discussion about reading elements, strategies, and/or genre.
2. Reading Elements in recent lessons
   - Word identification (word study)
   - Reading comprehension (literal, inferential, critical)
   - Fluency (pace, expression and volume, phrasing and intonation, smoothness)
   - Listening (phonological awareness)
   - Vocabulary (depth of meaning and morphemes)
3. Connections, Comparisons, and Critical Review of topics for thinking and writing (i.e., reader response) that emphasize “text to text,” “text to self,” and “text to world” connections.
4. Independent work (self-monitoring) by each student

In focus groups composed of each grade level’s teachers, it was agreed that the most comfortable method for developing these centers would be to have student assistance in setting up one at a time (i.e., to encourage student ownership), and to involve student-teacher collaboration and sharing. Each teacher at a grade level prepared one model per week to share orally with others. In some cases, each center was identified as an area of focus, such as vocabulary, word identification, comprehension, fluency, and listening activities, and each would be labeled as such with signs. In other cases, each center could be focused on a separate different disciplinary topic, such as a science theme, and offer an integrated series of skills to master in a specific context. In addition, charts could be used to account for use of materials and options for selection; e.g., students’ choices or jigsaw collaboration.

Portfolios were available to collect students’ artifacts and written summary sheets for students. A checklist for these essential elements was provided. As
a part of literacy center activities, teachers were encouraged to seek various forms of student self-evaluation as these can be as powerful, if not more powerful, than critical feedback from instructors. For example, students’ self-reflection contributes to self-monitoring practices and builds self-esteem, increasing motivation and goal-setting in reading activities (Tierney, Carter, & Desai, 1991).

Using field notes from classroom participant observations, interviews with teachers during focus groups during grade level meetings, and results of the teachers’ own descriptions of the progress they made moving through the stages of literacy center use, coded themes were developed and reconsidered using grounded theory (Glaser, 1992). This information was used to chart their final classroom applications and to consider the effectiveness of this one set of interventions as part of a set of larger introductory measures set forward by the school district administrators to transition teachers into an updated reading program.

Stages in Teachers’ Use of Literacy Centers

In order to provide a comfort level for teachers to transition into the use of literacy centers for independent reading activities, a series of stages were identified that would allow teachers to see the progressive steps and set specific goals for themselves. The stages were (a) exploration and study, experimentation, (b) beginning implementation, and (c) full implementation. The descriptions of each stage were developed from program elements as discussed in Fountas and Pinnell’s organizational components (1996) and Morrow’s explanations (2002), as well as through discussions with district administrators and teachers’ focus meetings. These benchmarks were then developed to identify forward movement in implementation that approached full and effective literacy center development. The listed activities were in the areas of Independent Reading, Library and Resource Systems, and Self-Monitoring Activities, as follows:

Stage 1: Exploration and Study

The nature of Independent Reading activities is introduced to teachers for study as occurring at identified levels of reading competency (i.e., ~98% word identification and ~90% reading comprehension). Informational packets are explored through verbal discussions in focus groups and grade-level meetings. The nature of library and resource systems is investigated in the classroom by both teachers and coaches/specialists for an in-depth needs assessment and to identify rationale for organization. The nature of self-monitoring activities is evaluated in classrooms by teachers’ observations, collegial feedback, and resource staff members’ coaching. Informational packets for suggestions and theory will be supportive.
Stage 2: Experimentation

Independent Reading consists of two types of reading events at separate times: (a) instructional periods for students to read without interruption for at least 5 minutes prior to teacher questioning, and (b) when the teacher directs students to engage in 20 minute uninterrupted self-selected reading during reading periods, twice per week. Library and Resource Systems contain books and reading material at all levels within the students’ reading range, although the books are not labeled or organized by reading levels for students to independently consider. Self-monitoring activities consist of completion of prepared worksheets composed of tasks for reading and writing activities related to the reading material in the class or to topics similar to those recently covered in class. Students usually work individually, requesting help from peers or the teacher when necessary. Students may access resource materials, such as dictionaries and encyclopedias, or use computers to complement their work.

Stage 3: Beginning Implementation

Independent Reading consists of two limited types of reading events at separate times: instructional periods for students to read without interruption for 10-15 minutes prior to teacher questioning, and when the teacher directs students to engage in 20 minute uninterrupted self-selected reading during reading periods and literacy centers, at least twice per week. Books for reading often focus on topics being covered in class.

Library and resource systems contain books and reading material above and below all levels within the classroom students’ reading range. Books are labeled with general, grade-specific reading levels. There are several books at each level for students to independently consider, although not all genres are available at each level. Self-monitoring activities consist of students working together on similar assignments in small groups. Discussion allows the students to consult with one another when there is confusion, and students resolve problems by moving about the class and asking other students or interrupting the teacher, if necessary. Students are also expected to complete their own assignments; self-checking and peer tutoring may occur.

Stage 4: Full Implementation

Independent Silent Reading occurs during each flexible grouping instruction period with leveled reading materials and within a larger reading program with self-selected materials. Books for reading often focus on topics being covered in class.

Library and Resource Systems exist in specific locations in the classroom within a systematic organization including labels identifying specific guided reading levels and genre (e.g., fiction, nonfiction, etc.) and function (e.g.,
dictionary, encyclopedia, etc.). The textual resource system addresses print, media, and technological literacies.

Self-monitoring activities exist in the form of Literacy Centers including media and materials to advance students’ learning at various levels of competency. Students are aware of various alternatives for initiating independent work, problem solving for reading/writing challenges, and checking for accuracy in work completion due to specific instruction by the teacher and written directives found on the wall or in their desks.

Results of the Study: Transitions in Teachers’ Thinking and Literacy Center Use

At the start of the study, using the stages worksheet as a pretest, teachers’ practices using literacy centers were predominantly at the exploration stage, requiring substantive information as to the purposes and advantages of shifting to an integrated approach, complementary to flexible grouping for guided reading instruction. After 6 months of facts, figures, modeling, and feedback, the changes in how teachers organized for independent reading activities evolved into small groups engaging in more active learning, focused discourse, collaborative brainstorming, and generative writing. Teachers worked together with peers and considered the changes they would need to make to their classroom organization and how they would develop materials. Figure 1 shows that the numeric changes in how teachers transitioned into use of literacy centers.

Table 1: Transitions in Checklist Results

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<th>STAGES</th>
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<th>POSTINTERVENTION # OF TEACHERS (N = 21)</th>
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<td>Experimentation</td>
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<tr>
<td>Beginning Implementation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Full Implementation</td>
<td>2</td>
<td>4</td>
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The largest movement was from the Exploration of the theory and approaches for effective use of literacy centers into the Experimental level as teachers tried the new elements in their classrooms. These attempts were significant in that the teachers needed to prepare themselves and the students for the change in organization of reading instruction and informal assessment. In most cases, the changes were frequently used for instruction, but because they were not always consistent and were still being revised, the level of change was not considered to be at the Beginning Implementation stage. For example, some teachers were experimenting with format to
determine which organization of three simultaneous centers could be managed most effectively without requiring monitoring by the teacher, while other teachers allowed only one group to interact in a small group while all the other students completed assigned seatwork. In some classes, each center was developed differently, specific to the reading material, and would not be used again. Other teachers used the same protocol for each center with different reading material to develop students comfort with the process.

In their use of materials, classroom teachers' additions to their regular reading routines included very different choices from one another. In one classroom, a second grade teacher made room in a very small classroom for magnetic word sort activities by making use of a file cabinet in the back of the room. Using vocabulary from a biographical text selection, two sets of word sorts allowed for two perspectives about the how the words could be sorted, and the method allowed for engaged conversations related to meaning from context. A third grade teacher encouraged students to research factual information using computers to boost background knowledge of the history and happenings of the local setting of a narrative text being read in a flexible reading group. Students wrote short summaries of their new knowledge to share with other members of their group and the class, in general. A fifth grade teacher changed her literacy work areas from individualized contrived worksheets to collaborative groups working with manipulatives. Students worked with short case studies to resolve questions of how characters would respond in various situations. They wrote their ideas on paper to share with class members.

In the final weeks, all classroom, teachers leveled the books in their libraries to provide more opportunities for student choice and comfortable reading experiences. Teachers allowed and encouraged small group discourse to develop vocabulary concepts. Reading selections were no longer contrived worksheets, but selections and books of different genres or different perspectives on topics complementary to guided reading word study. Conversations at grade level meetings transitioned from discussions of academic limitations to challenges for additions to literacy centers and reading opportunities. Students became accustomed to focusing in closely to each of the five elements of reading for short periods during literacy centers. The changes were empowering to the teachers and students, and promise to continue as all class members become more comfortable with the expanded learning environment afforded by active literacy centers.

**Implications for Teacher Education**

Classroom teachers work hard to meet the needs of their students, leaving limited time for jumping into new programs that require time for reorga-
nization and changing paradigms of literacy instruction. Many of these teachers, several of whom were in their tenth to fifteenth year of teaching, have missed opportunities to experience the shift to flexible grouping approaches for teaching reading. Several of the younger teachers, in their third to sixth year of teaching, did not feel familiar enough with developing literacy centers with active learning and occasional peer interaction. Possibly, the message about the positive opportunities provided by literacy centers is not accentuated through readings and demonstration in reading methods classes for preservice and practicing teachers. In fact, much of what teachers reported learning about literacy centers and the guided reading programs from which they derive was from professional development offerings, many of which are short term, such as weekend conferences or monthly inservice institutes.

The most difficult element to be achieved was the shift in thinking by the teachers towards differentiated instruction and student empowerment through self-monitoring during literacy center work times. A second area of challenge was in the time-intensive nature of changing classrooms’ organization to make room for literacy centers and to reorganize classroom library systems to make leveled texts more accessible. An implication that follows the problem of reorganizing classrooms might be that the original set-up allow for the flexibility of including literacy centers as one option in an effective and balanced reading program. Therefore, teacher educators have the responsibility for providing models and support of the development of interactive reading stations as an option for classroom grouping to preservice and practicing teachers in order to ready them for expectations in the teaching field and for teaching to a diverse population of students having larger ranges in reading levels.

References
and physical contexts in a literature-based program. Urbana, IL: National Council of Teachers of English.


