

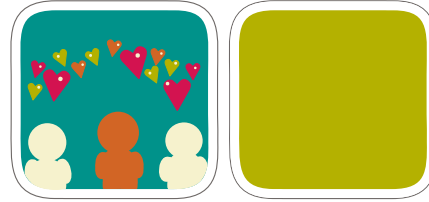
Association of Literacy Educators and Researchers
Dr. David Paige
ALER Treasurer
Bellarmine University
2001 Newburg Road
Louisville, KY 40205
dpaige@bellarmine.edu

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The Joy of Teaching Literacy

Martin, Boggs, Szabo, & Morrison



Association of Literacy Educators and Researchers Yearbook, Volume 34

The Joy of Teaching Literacy



Editors:
Linda Martin
Merry Boggs
Susan Szabo
Timothy Morrison



Joy of Teaching Literacy



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Co-Editors

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Ball State University

Timothy G. Morrison

Brigham Young University

Merry Boggs

Texas A&M University-Commerce

Susan Szabo

Texas A&M University-Commerce

Lizabeth Garza-Garcia

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Acknowledgements

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As always, we have many people to THANK for the completion of this volume. First, we wish to thank all those authors who worked diligently through the editing process in order to share their research, thoughts, and stories of their good work to add to the body of literacy knowledge. Second, we wish to thank the keynote speakers for their inspirational and motivational words of wisdom both at the conference and in their articles. Third, we would like to thank our editorial board members, as they continue to provide detailed editing suggestions to both the new and the seasoned authors with ideas for revision. This helps to create many high quality articles and continues to add rigor to this Yearbook's publication. Finally, we are grateful to the members of the Board of Directors who have continually supported the editorial team and the publication of the Yearbook, as well as Janelle Mathis, the Publication Committee Chairperson.

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SS, TM, MB, & LM

Introduction

For our 55th annual meeting, the Association of Literacy Educators and Researchers met in Richmond, Virginia at the Richmond Omni Hotel. Our conference attracts attendees from within the United States and beyond its borders. Attendees come from an array of educational settings, serve in various roles, and assume numerous types of responsibilities. Our annual conference provides chances to learn from and with each other, as well as being recognized for the genuine congeniality and camaraderie that exists among the attendees. The conference allows us to make connections, to learn from each other, and to push our thinking forward as we grow both as professionals and people. This year's conference theme was *The Joy of Teaching Literacy*, which we also used as the title for this year's Yearbook, Volume 34.

This organization has long been the home of some of our nation's most notable literacy experts. At the Richmond conference, these literacy professionals once again engaged us in dialogue of the utmost importance through their presentations and informal conversations throughout the conference. The articles included in this volume are representative of these dialogues that can lead to transformation, possibilities, and risk.

The Yearbook begins with the article representing Mary Roe's presentation to the membership. In her presidential address, Mary shared her views of *uncertainty*, what she called her uncertain journey and her belief that uncertainty has positive value. Mary offers insights into reasons why we should embrace uncertainty and how it can strengthen our core beliefs, guide our practices, and lead to innovations to transform literacy.

The second section reveals some of the specifics of the keynote addresses. In his keynote presentation, entitled *When the Audacity of Hope Meets Urban Education Research*, Robert Cooter, Jr. talked about how many urban school districts in the US have effectively become segregated once again along racial and economic lines. In his recorded presentation, which can be found on the ALER conference website, Cooter noted that the decline in the quality of literacy education is being seen for many student in poverty circumstances. Finally, Jack Cassidy was the J. Estill Alexander Forum speaker. In his presentation entitled *Literacy Trends and Issues: What's Hot—Past, Present, and Future*, Cassidy shared his survey of "hot" literacy topics, which have been published in *Reading Today* for the past 15 years. In addition, he talked about the procedures that are followed to create the yearly "hot" list.

The third section of the Yearbook contains our award winners' research. The dissertation winner, Taylar Clements from University of Central Florida, did her research on *Mathematical Literacy: Reading Clinicians' Perceptions of Domain Relevance of Cognitive Comprehension Strategies*. The purpose of this qualitative study was to examine teachers' perceptions of the relevance of cognitive comprehension strategy use during mathematics text application and to determine whether or not teachers' perceptions would differ after participation

in professional development on strategy usage. Results showed that after a two-week period, clinicians in the treatment group had a more positive perspective about strategy usage and its relevance to teaching mathematics than did their peers in the control group. The Master Thesis Winner was Robin Mara from the University of North Carolina at Charlotte. Her study was entitled “*Why Do We Read?*” : *A Case Study of Three African American Male Struggling Readers and How They View Reading in a Third Grade, Accelerated Reader Classroom.* Students were interviewed and observed in their classroom and school for five weeks to investigate their behaviors, understandings, purposes, and motivations related to reading. The three students exhibited a range of extrinsic and intrinsic motivations, and strikingly different primary motivations: Abraham read to feed his imagination and learning; BJ read to comply with teacher expectations; and Charles read to “get 100 percent on AR tests.” Findings suggest AR’s focus on extrinsic rewards interferes with development of cognitive clarity regarding authentic, useful purposes for reading in students from limited print literacy backgrounds. AR temporarily increased students’ reading practice, but student reading ended abruptly when the program ceased.

The remaining sections of the volume contain articles that have been sorted into three overarching categories: *The Joy of Learning through Professional Development*, *The Joy of Learning through University Course Work (inservice and preservice teachers)*, and *The Joy of Learning in and About the K-12 Classroom*. The articles within each of these categories are a great read.

It is our hope that the “scholarship of teaching” represented by our keynote speakers, our award winners, and our authors will provide new insights and possibilities that will support and extend literacy research.

SS, LM, TM, & MB

**PRESIDENTIAL
ADDRESS**

CAN'T SETTLE ON A TITLE: UNCERTAINTY IN LITERACY LEARNING AND LITERACY TEACHER EDUCATION

Mary Roe

Arizona State University

Presidential Address

Abstract

Mary Roe began her career as a middle school English teaching in Lansing, Michigan. Upon moving to Washington, she worked as a counselor who primarily served Native American students in the Coulee Dam School District. Driven by her desire to help her middle grade students with reading needs and to return to the classroom, she completed a reading specialist degree, initially directing a Title I reading program for elementary students and then going back to the middle grades as a reading teacher. Her career in higher education began at the University of Oregon and Washington State University. She has authored more than 50 articles in peer edited journals. In her presidential address, Mary explores a concept that she considers central to literacy learning and instruction: uncertainty.



Uncertainty: ubiquitous, essential, indispensable. While we might agree that uncertainty is everywhere, some might raise an eyebrow or emit an audible gasp when it is characterized as a vital and beneficial component of literacy learning and literacy teacher education. In the following comments, I share what I call my uncertain journey that, across time and experiences, established my personal acceptance and valuing of uncertainty. I share these ideas not to simply tell my story, but to nudge you to contemplate the ways that you frame and experience uncertainty. With that purpose and hope in mind, here goes.

Like many of you, I began my professional journey as a classroom teacher. As a new (and young, very young) teacher, I simultaneously experienced a sense of calm confidence and raging nervousness. I traded in my Michigan State wardrobe for things more suited to my teacher role, tied back my hair, and off I went. I felt dressed for the part (after all, my Mom and I had shopped

for teaching clothes before I did my student teaching), but I was uncertain, and it troubled me. I turned to those experienced English teachers for guidance. From one, I learned compassion—something of ongoing importance. From another, I learned some specifics for assessing grammar—with tests that he offered to me in good faith and which, with a bit of a guilty conscience, I filed away. From another first year teacher who left at midyear I learned to avoid the pitfalls of not having good classroom management. I shared what we called “war stories” with a math teacher who was close to my age. And, from the school counselor I learned to transition from that English major to a teacher of English (and Latin) to adolescents. I remember an encounter with her like yesterday. She came to stand by me one day while I did that mandatory hall duty, and following asking how things were going, gently said to me, “Your students don’t understand a word you’re saying.” From those first years, I still remember Angelina Owens, who was oh so smart, and Dale Saylor, who was oh so troubled. “If only I would have known then” often comes to mind—and still does. These people and events initially prepared me for things to come: the need to weigh pedagogical suggestions, to view classroom management as a means to an end, to adapt language for the learning or social context, to value and work with the differences that students bring with them, and to continually change and grow. My uncertain journey began with these lessons learned.

Now, years later, I have deepened my understandings about the students for whom I care and the practices that I know to consider. My years of teaching, reading, participating in countless professional development events, attending graduate school, and conducting research set the stage for a positive learning curve. Regardless of the resume, uncertainty remains.

Perhaps the complex process of literacy learning and teaching makes uncertainty, well, certain. Years ago, Thorndike (1917) characterized the understanding of a paragraph as “selecting the right elements of the situation and putting them together in the right relationship, and also with the right amount of weight or influence or force for each. The mind is assailed as it were by every word in the paragraph. It must select, repress, soften, emphasize, correlate and organize, all under the influence of the right mental set or purpose or demand” (p. 431). How can certainty occur within literacy teaching and learning when the process involves such a broad sweep of interacting decisions?

While the prospect of unyielding uncertainty might lead some to throw up their hands in despair, other options exist. I have a saying in my office, “change your thoughts, and you change your world.” While my world continues to include uncertainty, I now frame it as something to ponder. I remain cognizant and curious about questions like these:

1. Is uncertainty unique to literacy teacher education?
2. Should uncertainty ignite wonder? Induce dread? and
3. Can we—and should we—work to reduce it for ourselves and other educational stakeholders?

My previous comments might lead you to accurately predict my not so simple answers: no, yes, no, and no. That would make for a quick exit, so I continue on to share my current perspective about each question. As true of my uncertain journey, I blend the personal, the theoretical, and the empirical.

The Ubiquity of Uncertainty

Like so many concepts that grab our attention, uncertainty is not new news. In his classic account, *Schoolteacher*, Lortie (1975) stated, “education is a tenuous, uncertain affair. It is necessary to keep uncertainty in mind if we are to understand the psychic world of classroom teachers, for uncertainty is the lot of those who teach” (p. 133). About a decade later, McDonald (1986) characterized the tension that accompanies uncertainty as the driving force in teaching which cannot and should not be removed. For him, uncertainty gives teaching “its messy practicality” (p. 377) keeping the teacher’s adrenaline flowing and energizing the enthusiastic teacher. Susan Rosenholtz (1989) kept the concept of uncertainty center stage by referring to teaching as the uncertain profession. In her research about a teacher’s workplace, she offered strong evidence about the application of this concept to teachers’ lives. She didn’t condemn it, but simply offered it as a statement of fact. She was not alone. During this same era, Floden and Clark (1988) asserted, “teaching is evidently and inevitably uncertain.” They proposed areas where uncertainty could be reduced, but not eliminated, by increasing individual knowledge, turning to existing research, and all the while becoming tolerant toward its inevitability. I move beyond this final suggestion of inevitability to a central premise of literacy learning and literacy teacher education. After all, knowledge, research, and the classrooms where we apply them are not static.

These historical references confirm the existence of uncertainty across the decades. Its more recent consideration underscores that uncertainty in literacy education, whether explicitly named or simply inferred, has not become old news, but remains a point of conversation into the 21st century. For example, in the preface of the latest *Handbook of Reading Research* (Kamil, Pearson, Moje, & Afflerbach, 2011), the editors stated this:

A primary purpose of reading research is to inform theory, from which we may derive educational policy and practice. In simple form, a significant research finding is all that is needed to amend theory, and to inform instructional approach. A more nuanced form is guided by the understanding that the situated nature of what is researched (and research itself) matters, and that the complexities of human learning, classroom and school communities, and society influence actions based on research results, in predictable or unanticipated manner. The more we learn, the more we need to know (p. xxi).

Of that, we can be certain.

A brief look at other fields also evidences the intrusion of uncertainty. Whether a professional quarterback, a creator of a soap opera, or a CEO, options tug at us (Lehrer, 2009). Even if conducting a carefully considered cost-benefit analysis, we can never be 100% sure of our chosen path. For example, the literacy community often receives encouragement to follow a medical model and strive for its typical presentation as scientifically reliable. While deep differences exist, medicine holds at least one tantalizing similarity to literacy learning and literacy teacher education: the existence and fall out of uncertainty. In fact, Gawande (2002) devotes an entire section of his book, *Complications: A Surgeon's Notes on an Imperfect Science*, to uncertainty. As he explains, "What you find when you get in close, however—close enough to see the furrowed brows, the doubts and missteps, the failures as well as the successes—is how messy, uncertain, and also surprising medicine turns out to be" (p. 4). In fact, he considers "the core predicament of medicine—the thing that makes being a patient so wrenching, being a doctor so difficult, and being a part of a society that pays the bills they run up so vexing—is uncertainty" (p. 228). A business model has also been proposed as one for educators to follow. As recent events indicate, business is not immune to uncertainty. According to Fridson (2011), "Uncertainty is a perennial challenge in business planning. That's a good thing, because economists tell us that under conditions of **little** uncertainty there is little margin for profit." Other business leaders (e.g., McKee, 2011) turn to fuzzy logic which allows a movement from classifying a statement as true or false to categorizing the strength of a statement on a scale between zero and one. For teaching, medicine, and business, uncertainty appears. These professions involve human endeavors and humans encounter uncertainty at every turn.

Uncertainty: Ignite Wonder, Diminish Dread

To interrogate further my recasting of uncertainty as something to embrace rather than something to dread, I turned to the first and most recent Handbooks of Reading Research (Pearson, Barr, Kamil, & Mosenthal, 1984; Kamil, Pearson, Moje, & Afflerbach, 2011). The first edition includes a section entitled Instructional Practices: The State of the Art. It contains chapters summarizing the research on early reading, word identification, comprehension, studying, readability, classroom instruction, managing instruction, and oral reading. As evidenced by the following statements, these sections include caveats that pointed to the temporary, debatable, and incomplete nature of being state of the art: "the work reviewed here does not yield absolute conclusions...." (Mason, 1984, p. 536); "our overwhelming impression of word-identification research findings is that, pedagogically, few of the answers are in" (Johnson & Baumann, 1984, p. 602; regarding studying, "almost any technique can be effective" (An-

derson & Armbruster, 1984, p. 674); “humans and language are too complex to expect such simple cause-effect relationships” (Klare, 1984, p. 731); and the hopeful note that “future classroom research may not only provide us with more knowledge about these instructional procedures, but also provide teachers with practical applications of it” (Rosenshine & Stevens, 1984, p. 794). Even more definitive statements of findings (e.g., “no single method or approach is consistently more effective in developing general reading skill than any other,” Barr, 1984, p. 553) are not definitive. Flash forward to the most recent volume and a comparable section (*Teaching and Learning Reading*). In these chapters, descriptions and qualifying phrases such as these appear: “the complexities of the terrain” (Kucan & Palincsar, 2011, p. 353), “comprehension changes day-by-day, hour-by-hour, and moment-by-moment” (Wilkinson & Son, 2011, p. 359), “unanimity among scholars in any field is rare enough,” “we expect disagreements” (Nagy & Hiebert, 201, p. 400), and “the debate over reading methods has raged for more than a century” (Tunmer & Nicholson, 2011, p. 405). Differences appear. Gaps exist. When attempting to resolve or fill them, contradictory suggestions arise. Choices remain. Uncertainty abounds. And the chase is on, accompanied by a sense of wonder about more to learn, more to do, and more uncertainties to unveil.

With the softening of certainty as an ultimate goal, perhaps we can also soften the dread that uncertainty often triggers by considering potential down-sides of certainty. When we become too certain in our personal lives, we get reminders—some gentle and some not so—to remain a bit more hesitant to make assumptions. Such was the case when the landlord for a house that I rented replaced the kitchen cabinets. I assumed that they were ready for use and placed my China, depression glass, and other valued serving pieces in them. As I sat reading in the living room, I heard a loud and startling crash. When I went into the kitchen, I saw those new cabinets hanging from the wall and a mound of broken glass on the floor. You shake your head, shed a few tears, value the things left standing, and clean up the mess. So much for certainty.

Turning to our professional lives, most would agree that teaching is not a rational and straight line application of means to given ends. Teaching is complex. Since the present is more certain than the future, a desire for certainty can pull us toward a focus on immediate, obvious, specific difficulties, and away from global, long-term plans and goals. This might limit literacy teachers, literacy teacher educators, and literacy researchers to those parts where certainty is easiest to obtain. A literacy teacher in a quest of certainty might be drawn toward factual content that can be taught by rote memorization and tested by requests for recall and place undue attention on what Paris (2006) calls constrained skills. Jackson (1986) alluded to this potential downside in his seminal study where he noted the threat of curricular tightness and administrative supervision that can accompany it. Today’s educational climate provides an example. The certainty

that too many politicians hold that teaching is a relatively simple task leads to overly simple recommendations and statistically improbable goals (Linn, 2003). As Linn notes, “The goals that NCLB sets for student achievement would be wonderful if they could be reached, but, unfortunately, they are quite unrealistic, so much so, that they are apt to do more to demoralize educators than to inspire them” (p. 10).

A literacy teacher educator might be prompted to share things to do (and let’s be honest—don’t our undergraduate students appreciate the tidy package of proven practices in their quest for certainty?) and set aside that important balance between imparting practical practices within the wider consideration of their theoretical underpinnings and empirical warrant. Jackson (2011) refers to this type of ability to combine both as “a multimodal masterpiece” (p. 126).

And, a literacy researcher, especially in the push to be published and prolific, might see it more feasible to take a straightforward approach to the selection of topics and the conduct of a project instead of tackling those questions that they consider deep, rich, and, well, uncertain.

Embracing Uncertainty: Why and How?

If uncertainty remains omnipresent and if we cannot will it away, we really have no choice but to view it as a welcome and helpful companion. Lehrer (2009) asserts that “unless you experience the unpleasant symptoms of being wrong, your brain will never revise its models” (p. 54). Uncertainty, (along with a willingness to take a risk) too, can become a learning opportunity and offer a chance to debunk the myth of hyper-confidence.

As a bit of true confessions, I read self-help books - and I am quite certain about the benefits that I receive from them. From one I was reminded that an eagle must push her little ones out of the nest—expecting that they will fly but a bit uncertain that it will be true. Sometimes we all need that helpful push to help us give in without giving up.

As Beckwith (cited in Anderson, 2008) reminds us, “We often hear ‘Be bold. Take a leap.’ Sometimes you should. Other times, there’s a better idea. Take a step” (p. 10). So, what small step might support a push to have a change of heart regarding uncertainty? Following are a few suggestions that I have found helpful along my ever evolving and uncertain journey. For me, they keep my uncertainty (and my certainty) in-check. I use the Japanese term, *Hitotsu*, which means number one, to avoid the imposition of a hierarchical ordering on them.

Hitotsu: Stay True to Core Beliefs

Before sharing my literacy beliefs that contribute to helping me handle uncertainty, let me take a moment to set the stage for their importance. We benefit from having a compass for our personal lives that allows us to set priorities and

make choices about the use of our precious time. A compass can also matter in our professional lives. An articulated set of overarching beliefs can provide that professional compass to guide our thinking, our actions, and our new directions. While beliefs will not abate uncertainty for us as literacy educators and researchers, nor should they, they can provide points of departure to revisit, reinforce, and reconcile with the changing times. Poly explains the importance of a set of beliefs this way:

“Now, in teaching as in several other things, it does not matter much what your philosophy is or is not. It matters more whether you have a philosophy or not. And it matters very much whether you try to live up to your philosophy or not. The only principles of teaching, which I thoroughly dislike are those to which people pay only lip service” (p. 113).

However, and as a bit of an aside, I am unable to agree that the content of one’s philosophy does not matter. This lived experience comes to mind. During a conversation with a teacher about how to meet the varying reading needs of his students, he replied, “You know, Mary, I don’t really think about that because I believe that students learn to read at home.” I recoil from this belief that distances a teacher from what I believe to be a central mission. Like Jackson (2011), I believe that many students are school dependent—those who need school to stimulate their dreams and enable the possibilities that might otherwise go unfulfilled. However, I also believe in the concept of collective trust (Forsyth, Adams, & Hoy, 2011) which Forsyth and his colleagues frame this way: “a group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (p. 48). When encountered with a situation like this, I get that uncertain feeling—torn between a gratefulness for this teacher’s forthrightness and the knot in my stomach that its content triggers.

I was recently positively moved by the beliefs posed by Levine and Scheiber (2010) that apply to education in general and hold personal importance for me:

We believe that education is still the foremost path out of poverty for the poor in America today. We believe this is not simply a matter of good schools, but also overcoming the barriers to education including inadequate housing, bad jobs, poor healthcare, racism, and violence among others. We believe in the American Dream and its promise of opportunity for all Americans. We believe the American Dream has diminished as a prospect for many Americans, particularly the poor. We believe the Dream can and must be restored for all Americans and the nation has the tools to accomplish this (p. 6).

I share their beliefs. Not everyone does. As an example, I recently attended a friend’s wedding. During the dinner reception, and when those at the table learned

that I was a professor, one offered his advice about rectifying the problem with higher education: Only allow those to attend college whose families have a track record of success. I not so calmly replied, “I think that is an interesting idea. If we followed it, I would not have a Ph.D. because my father was a construction worker.” Now to my literacy beliefs that I first posed years ago (Roe, 1992). They continue to serve an important role as I try to steer my uncertain journey.

Real reading. I still believe to my core that students learn to read by reading—real reading. I’ve struggled over the years to come to terms with what that really means. Initially, I was questioning the manipulation of a book’s text to meet a readability formula. My personal experience with this practice occurred while working in Coulee Dam, Washington. While waiting in a resource room for a teacher and student to arrive, I picked up a copy of *Tale of Two Cities* (Dickens, 1922) from a book rack—a book which I read for the first time when I was in seventh grade. I eagerly opened it to that powerful opening section and read this: Times were good. Times were bad. “What?” immediately came to mind. This modification just could not replace the power of Dickens’ real words, “It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness. . . .” To be clear, I understand the importance of including the “classics” for all students (as a reminder, I did major in English), but I remain skeptical on two fronts: a direction that does not find room for a broader range of texts within the school environment as well as the appropriate attention to the “classics.” However, for me, this rewritten version in the hopes of making the classics accessible represents, to use Dickens’ term, foolishness. As time passed, my uncertainty appeared around the promotion of decodable texts—a text option that I continue to weigh. Now, I readily include more 21st-century texts such as tweets, e-mails, and blogs. From my 12-year-old niece, Delaney, I learned to appreciate the contribution of game-like software such as the one that caught her fancy linked to designing clothes and kept her reading for hours on end. From her younger brother, Jaden, I learned to value the Harry Potter series. While only in third grade, he has read every single one—unlike his aunt who forced herself to read one.

An environment that supports authentic instruction. In addition, I believe that the opportunity to read is insufficient without an instructionally supportive environment. While we may debate what to teach and how to best do it (a reason to remain uncertain), few would question the need for that just right bit of help by a more expert other—whether it comes from a teacher, a parent or guardian, community member, sibling, or peer. This support for instruction does not come without risks. As Jon Shapiro (2007) noted in his ALER (then CRA) presidential address, “Reading instruction which ignores the psychosocial, developmental needs of young readers or reading instruction that causes pain or shame or reading instruction that develops boredom or complacency in children is dysfunctional” (p. 8). Linked to Shapiro’s strong reminder, I also believe that reading instruction warrants the same authenticity as real reading.

An opportunity for social interaction. Finally—and especially for those middle school students with whom I learned for so many years—students are social, value peer relations, and highly prize opportunities to interact with friends. Whether engaging in literature discussion groups, informally chatting with friends, or using social media possibilities, these interactive and varied opportunities matter.

In spite of my ongoing struggle—my uncertainty—about how best to meet these beliefs and goals in ways that fit current research and changing times, my north star is intact—for now.

Hitotsu: Go Beyond Parallel Play

Years ago, the concept of parallel play found its way into my author's notebook. As used by Mosenthal (1995), parallel play involves “the formation of disparate discourse communities within which individuals dialogue with one another, but between which individuals ignore one another” (p. 574). Interacting with those who think like we think can be reassuring and easy, but it might foster a level of certainty that a wider discussion would call into question. Perhaps Moss (1996) offers an alternative: dialogic interaction. Moss defines this as “an ethical commitment to understand alternatives in their strongest possible light” (pp. 27-28).

Lehrer (2009) notes the way our brain works—the way it nags at us when we're trying to make a decision—to support this broadening of our thinking. As he advises:

The only way to counteract the bias for certainty is to encourage some inner dissonance. We must force ourselves to think about the information that we don't want to think about, to pay attention to the data that disturbs our entrenched beliefs. When we start censoring our minds, turning off those brain areas that contradict our assumptions, we end up ignoring relevant evidence (p. 217).

Hitotsu: View Research as Our Guide and Practice as Our Filter

An historic call for joining theory and practice comes from Dewey (1929). In his view, practitioners who are open to theory free themselves from “the bondage of habit which is always closing in on us, restricting our vision both of what is and of what the actual may become” (p. 310). I often relate the message of the children's book, *Officer Buckle and Gloria* (Rathmann, 1995), where neither the officer nor his dog found success alone, to underscore the importance of a close relationship between research and practice. For me—and when I feel too settled in my thinking—research can sound a warning signal when our simple

certainties are wrong and our beliefs no longer apply. As suggested by Ayers and Ayers (2011), practice can balance the empirical with common sense and open those statistically significant findings to examination, interrogation, and rethinking. As teachers, we can initially use these findings to guide our way and then consider them in light of a particular moment, a particular classroom, or a particular student. **Research** can provide some initial responses to what Ayers and Ayers consider the most important question, “Why?” I often reframe this to use the question posed by Professor Durkin (2005), Why am I doing what I’m doing? **Practice** can capture the ideas to question and goad researchers into considering teachers’ unanswered questions—perhaps joining as a valued partner. We want to remain cautious, however, of data driven righteousness or practice privileged guidance. Both sides of this coin can let go of the “impossible idea that what is right now will always be” (Ayers & Ayers, p. 116).

Hitotsu: Turn Uncertainties into Innovations

At this moment in time, it seems appropriate to quote Steve Jobs (n. d.) who believed that “innovation distinguishes between a leader and a follower.” Educators could heed this belief by pushing for national policy to be informed by innovative research and, in turn, promoting the development and evaluation of promising practices to improve outcomes for all children. Like in the business world, and the trajectory set by Jobs, we must maintain a profitable tension that promotes progress—uncertainty. The words spoken years ago by FDR can apply to this possibility. As he asserted then, “The country needs and, unless I mistake its temper, the country demands, bold, persistent experimentation. It is common sense to take a method and try it: If it fails, admit it frankly and try another. But above all, try something.” Shelton (2011) directly extends this call to education when he says that “education not only needs new ideas and inventions that shatter the performance expectations of today’s status quo; to make a meaningful impact, these new solutions must also ‘scale,’ that is grow large enough, to serve millions of students and teachers or large portions of specific underserved populations. True educational innovations are those products, processes, strategies and approaches that improve significantly upon the status quo and reach scale.” Our individual and collective uncertainties can help identify the most needed directions for those innovations and, perhaps, help push forward with the most intractable educational dilemma: helping all students reach a level of literacy attainments that allow them to become productive and content citizens.

Innovations will require what I call the guts factor. Failures may occur, but as General Patton proclaimed, “Fear kills more people than death” (as cited in Anderson, 2008, p. 8). Wilhelm and Novak (2011) describe the need to be bold this way: “If you don’t wipe out once in a while you ain’t skiing hard enough.

If you aren't experimenting, you must think you've achieved the pinnacle - and, sweetie, that's just delusional" (p. 162).

Hitotsu: Value Collaborations

Interactions with colleagues afford opportunities to not only collaborate but also commiserate and conspire. According to Harris Interactive and Met Life (2009), teachers report weekly collaborations with their colleagues. Whether these interactions occur within grade levels (the more common approach in elementary schools) or within a subject area (more commonly true of secondary teachers), much learning occurs during them. These advantages extend to higher education faculty—whether teacher educators, researchers, or both (Hutchings, Huber, & Ciccone, 2011).

Hitotsu: Change the Headlines

What would happen if we took things presented as unsettling certainties and worded them from a different, but also certain, viewpoint?

Fact: SAT scores drop. Fact: More students than ever take the SAT test.

Fact: Eight city high schools labeled failing. Fact: Chronic under funding of urban schools reaps predictable results.

Think of how many events receive a headline that uses true but partial pieces of evidence from a wider event. How we story the facts can alter the responses attached to them. Selecting a competing certainty that sheds light on what we consider important and equally verifiable holds the potential to alter public opinion and, in turn, the regard of education.

Hitotsu: Maintain a Beginner's Mind

A lack of a silver bullet, even a package of silver bullets, coincides with one aspect of what my colleagues Michelle Jordan and Robert Kleinsasser and I (Jordan, Kleinsasser, & Roe, 2011) consider part of the essence of teaching: constantly seeking, but never quite reaching, expertise. In that work, we turn to Chinese culture where the symbol for fire is turned upside down to represent a beginner's mind. We "support a call for teachers who continue to see expertise as elusive and the mindset of a novice as advantageous" (p. 1). O'Meara, Terosky, and Newmann (2008) offer general support for this notion. As they state, "The new narrative for faculty...assumes that their primary work, personally and professionally, is to learn and grow" (p. 178). Whether seeking to address the achievement gap, opportunity gap, expectations gap, outcomes gap, leadership gap, or a gap that has not yet come to our attention (Merrow, 2011), much work remains.

Maintaining that beginner's mind might afford fresh looks and daring ideas more apt to learn from, but not be blinded by, past approaches. We can be willing to falter and see those disappointments as educational. As Ayers and Ayers (2011) remind us, "What we experience and know is puny. We can always discover more, learn more, know more, and still we can never get to the bottom of it; we can never know all there is to know" p. 126). Literacy teachers, literacy teacher educators, and literacy researchers can never claim "mission accomplished." Of that, we can be certain.

And So It Goes: From Literacy Promises to the Joy of Literacy to Its Transformative Powers

For Cooper (as cited in Jackson, 2011), "How we educate remains the Gordian knot of America's ability to remain an economic and moral leader in the world. There is the need for a bold strategic stroke if we're to succeed in enabling the promise of America for all of its citizens" (p. 166). In thinking about uncertainty, perhaps a bold stroke might involve seeking a wisdom tradition over certainty (Nagler, 2005). Perhaps we initiate that bold and strategic stroke by placing our struggle with literacy's certainty and uncertainty in tension: balancing our confidence with our humility, not being overly proud or unduly modest, offering solutions while on the lookout for improving upon them.

Perhaps initiating a bold stroke is as simple as raising the drawbridge—giving us time to pause and reflect in order to have a Kairos moment—a moment when something special happens. Like Christopher Reeve, "I think we all have a little voice inside us that will guide us....If we shut out all the noise and clutter from our lives and listen to that voice, it will tell us the right thing to do." Whatever our uncertain journeys, hopes remain to realize literacy's promises (last year's conference theme), attend to its transformative possibilities (next year's conference theme), and experience joy along the way (our theme for this year).

This summer, my great-niece and I went to a stage play of the Buddy Holly story which ended with one of his well-known songs. I see links between his words and uncertainty. Uncertainty is a crazy feeling and I know it will continue to have me reeling, but we will, we must "Rave on."

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**KEYNOTE
ADDRESS**

WHEN THE AUDACITY OF HOPE MEETS URBAN EDUCATION RESEARCH

Dr. Robert Cooter

Bellarmino University

General Assesmbly: Keynote Speaker

Written by Susan Szabo

Abstract

*Robert Cooter, Jr. is Dean of e Annsley Frazier Thornton School of Education and Ursuline Endowed Chair of Teacher Education at Bellarmino University in Louisville, Kentucky. Cooter recently completed his tenure as editor of *The Reading Teacher*, the world's largest circulation refereed journal for literacy education. His research focuses on the improvement of literacy instruction for children living at the poverty level. He has authored or co-authored over 20 books in reading education and more than 60 refereed journal articles.*



In the decades since the landmark *Brown v. Board of Education of Topeka* Supreme Court case, many urban school districts in the United States have effectively become resegregated along racial and economic lines. With that reality has come a decline in the quality of literacy education for many students from high poverty circumstances who attend urban schools.

The nation's report card on reading for 2011 showed that among the fourth-graders who scored *below the 25th percentile* were: (1) 33% White, (2) 25% Black, (3) 35% Hispanic, and (4) 3% Asian. In addition to ethnicity, other factors were shown to be a deterrent: (1) 74% were eligible for free/reduced lunch, (2) 24% were English language learners, and (3) only 38% read for fun almost every day. On the other side, those fourth-graders that scored *above the 75th percentile* in 2011 were: (1) 71% White, (2) 7% Black, (3) 11% Hispanic, and (4) 8% Asian. Other factors that helped these students succeed were: (1) only 23% qualified for free/reduced lunch, (2) only 2% were English language learners, and (3) 60% of the students read for fun almost every day.

James Heckman, 2000 Nobel Prize-winning Economist, stated "if we don't provide disadvantaged young children with the proper environments to foster

cognitive and noncognitive skills, we'll create a class of people without such skills, without motivation, without the ability to contribute to the larger society nearly as much as they could if they'd been properly nurtured from an early age. The most economically efficient way to remediate the disadvantages of poverty is to invest in children when they are young."

It is evident that the most common and costly solution advocated by urban school leaders to the literacy crisis facing their schools is the commercial scripted programs as opposed to investing to improving teacher expertise. In addition, it seemed that every time learning teams were formed, teachers were reorganized. Thus, change (reorganization) can be used to create the illusion of progress while actually producing confusion, inefficiency, and demoralization.

In his keynote session Cooter briefly reviewed findings from four longitudinal research projects in Texas and Tennessee and he talked about the implications for more effectively addressing the literacy needs of children from poverty. The powerpoint that was used during his speech can be found on the ALER website at <http://www.aleronline.org/>; click on conference and go to Past Conference Highlights.

LITERACY TRENDS AND ISSUES: WHAT'S HOT—PAST, PRESENT AND FUTURE

Jack Cassidy

Retired from Texas A&M University-Corpus Christi

Given at the J. Estill Alexander For Leaders in Literacy:KeyNote Speaker

Written by Susan Szabo

Abstract

Cassidy, recently retired, was Associate Dean and professor in the Curriculum and Instruction Department. Throughout his career, Cassidy has received more than 40 honors and recognitions for outstanding contributions to the field of reading. A former president of IRA and ALER, he has given hundreds of presentations around the globe and has more than 100 publications. He is known for his work on literacy trends and issues, his numerous journal articles, and his column in Reading Today “What’s Hot, What’s Not in Literacy.” He has authored a number of text series.



In his presentation, Cassidy discussed his survey of “What’s Hot and What’s Not” topics in reading education, the results of which have been published in *Reading Today* on an annual basis for the past 15 years. Cassidy and his colleagues have conducted this survey using a three-step process.

1. 25 literacy leaders (list can be found at http://www.reading.org/general/publications/blog/BlogSinglePost/11-10-10/More_About_the_2012_What_s_Hot_What_s_Not_Literacy_Survey.aspx) with a national perspective are asked to respond to a list of topics from the previous year’s survey, making modifications, additions, and/or deletions.
2. the literacy leaders are interviewed.
3. the literacy leaders’ responses are analyzed.

This year’s list of “very hot” topics included adolescent literacy, comprehension, Response to Intervention, and core learning/literacy standards (Cassidy et al, 2011). Topics that seemed to be less “hot” included phonemic awareness,

phonics, fluency, and literacy and reading coaches. Cassidy cautioned that the label of “hot” does not indicate the importance of a specific topic, but rather that it is receiving the most attention at the time the surveys were conducted.

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**RESEARCH
AWARDS**

MATHEMATICAL LITERACY: READING CLINICIANS' PERCEPTIONS OF DOMAIN RELEVANCE OF COGNITIVE COMPREHENSION STRATEGIES

Doctoral Dissertation Award Winner

Taylor Clements

University of Central Florida

Abstract

This study examined teachers' perceptions of the relevance of cognitive comprehension strategy use during mathematics text application and determined whether or not teachers' perceptions would differ after participation in professional development on strategy usage. After a two-week period, the clinicians in the treatment group perceived the strategies with increased relevance to mathematics than their peers from the control group.

Purpose

Current mathematics education research describes the use of various effective strategies for supporting students' mathematical thinking and problem solving, many of which reveal strikingly similar cognitive bases to those used in reading education (Bauersfeld, 1995; Borasi & Siegel, 2000; Ma, 1999; Miller, 1996; Osterholm, 2005; Schneider & Artelt, 2010). Simply considered "cognitive strategies" in educational psychology research, processes such as visualizing, connecting, predicting, and questioning are not identified as domain-specific to reading or mathematics because their use can be learned, refined, and applied through self-regulation toward a variety of academic tasks. Too often, however, a segregated approach to teaching content and pedagogy within and across domains prevails in teacher preparation programs (Hausfather, 2002). For example, preservice teachers may learn to teach and support the strategy of visualizing to their elementary readers while teaching the math problem solving heuristic of "drawing a picture" to solve a word problem. Such lack of congruence in cognitive strategy instruction may ultimately result

in lost opportunities for developing self-regulation and promoting knowledge transfer in children across learning domains, especially at the elementary level of schooling. Further, this segregation of educational research may be limiting opportunities to identify powerful instructional models that could be used to inform policy and practice in schools. The dual-purpose of this study was a) to examine whether or not teachers identify the use of cognitive comprehension strategies as relevant to mathematical text, and b) to determine if their perceptions of applied cognitive reading comprehension strategy use in mathematics contexts would differ based on participation in one of two book study groups. Research questions included:

1. Do reading clinicians identify the use of cognitive comprehension strategies as relevant to mathematical text?
2. Do reading clinicians' perceptions of applied cognitive reading comprehension strategy use in mathematics contexts differ based on participation in contrasting professional development groups focusing on traditional comprehension strategy instruction or integrated comprehension instruction in reading and mathematics education?

Theoretical Framework

This study assumed a framework of self-regulatory knowledge in which there is a difference between domain-specific and domain-general knowledge and applied strategies for each, with the premise that domain-general knowledge and strategies can be more readily transferred across learning domains (Schraw, 2001). Current applied cognitive strategy instruction at the elementary level seems to be rooted in a domain-specific approach. This is illustrated by the prevalence of research as well as the curricular and instructional material on the topic that are differentiated according to reading education and mathematics education. Domain-specific approaches are grounded in the interpretation that content area tasks require the activated use of strategies that have been identified and developed within a field, often from the study of the cognition of scholars and experts in that domain. Students are trained to access their existing knowledge within the content area and approach a task with the use of taught cognitive strategies.

Literature Review

Existing Applied Research and Literature across Mathematics and Reading Education

The lack of shared research among reading and mathematics education causes notable limitations. The failure to collaborate explicitly on the use of cognitive strategies at the elementary level results in missed opportunities to engage

in dialogue and build upon new findings related to student cognition emerging in each discipline. Further, it may result in the development or persistence of disconnected content area curricula in teacher preparation programs. It seems as though evolving research in the fields of reading education and mathematics education has caused scholars within each field to have a comprehensive view of contributing factors, underlying constructs, and instructional implications related to content development and cognitive strategy use in their respective fields. However, there remains a disconnect in the dialogue among researchers from these disciplines. The terminology and instructional applications of cognitive strategies vary in terms of their use in the preparation of teachers at the university setting as well as instructionally in the elementary classroom (Borasi & Siegel, 1994).

There have certainly been numerous examples of research exploring consistencies and potential points of effective integration of instruction among problem solving in mathematics and comprehension in reading education. However, due to the relatively recent bodies of research that have identified the complexity of learning factors in both subject areas, this reading and mathematics integrated research is limited in terms of the scope it provides with regard to comprehension and problem solving. Dated research by Monroe & Englehart (1931) identified that reading achievement and mathematics achievement are correlated; however, the authors assumed that reading comprehension meant little more than answering a question about a text passage and that mathematical problem solving was demonstrated by identifying an accurate solution. Given that this frequently referenced research utilizes an oversimplified view of reading comprehension and mathematical problem solving, little significance can really be drawn. In fact, research referencing possible points of similarity or integration between the two subjects is often criticized for oversimplified interpretations of teaching and learning factors. For example, many mathematics educators continue to consider and measure reading components of mathematics in more discrete terms, focusing on text vocabulary, phonetic patterns, and syntax without recognition of the complex factors contributing to comprehension processes and instruction in recent research (Beal, Adams, & Cohen, 2010). Similarly, there is evidence of reading educators whose integrated research only focuses on the discrete elements of mathematics problems (i.e. key vocabulary words in text to signify mathematical operations, accurate use of algorithms, the mediation of written text to numeric expressions), without attention to the complexity of understanding, communicating, and justifying learned and discovered mathematical ideas. Siebert and Draper (2008) provided evidence of this when high school literacy specialists who were working with mathematics teachers to support students' understanding of word problems began to promote the use of memorized mathematical algorithms due to the literacy specialists' lack of curriculum knowledge and pedagogical content knowledge in mathematics.

Integrating Reading and Mathematics Strategies

Some fruitful examples of research focused on the integration of reading and mathematics strategies, from which the inspiration for this research was drawn, will now be reviewed. For this reason, these examples of research will be presented with greater detail. Additionally, examples that contain evidence of strategy instruction revealing consistencies across reading and mathematics education will be highlighted.

Borasi & Siegel (2000), a mathematics educator/researcher and literacy specialist/researcher research team, examined the development of a collaborative relationship to interweave the disciplines, which evolved into numerous studies about the impact of making explicit connections between the content for students. Siegel & Fonzi (1995) investigated the impact of teaching transactional strategies from reading education literature in four high school mathematics courses in order to increase students' reasoning abilities and foster communication among students. Findings revealed that regardless of which comprehension strategies students used in each identified mathematical episode, there was evidence of students actively engaging in communication about mathematical ideas. Conclusions from this research suggest that instructional strategies from reading education may be fruitful to reform mathematical education, specifically considering the impact on supporting students' reasoning and communication skills in mathematics.

Schurter (2002) sought to identify whether instruction in comprehension monitoring impacted high school students' success in mathematical problem solving and the frequency of students' metacognitive strategy use. In a quasi-experimental study involving three high school sections of a developmental math course, students received one of three instructional approaches. They include: 1) instruction in mathematics problem solving, 2) integrated instruction in mathematics problem solving and comprehension monitoring, or 3) integrated instruction in comprehension monitoring in addition to a research-based mathematics four-step problem solving process (Polya, 1945). Findings revealed that students who received instruction emphasizing the use of comprehension monitoring strategies performed better during math problem solving than students who did not receive instruction in comprehension.

Also examining students' comprehension of mathematical text, Osterholm (2005) conducted research with high-school and college students to identify differences in their reading comprehension across three different text sets: historical text, mathematical text without symbols, and mathematical text with symbols. Controlling for students' mathematics achievement level, Osterholm obtained results that revealed similarities in the students' reading comprehension of the historical text and mathematical text without symbols; however, there was a significant, negative difference in their comprehension of the mathematical text with symbols. Challenging a body of research that suggests that students' mathematical knowledge is a greater contributor to mathematical understanding when compared to reading comprehension, Osterholm inferred that the explicit teaching of reading comprehension for mathematical texts with symbols is warranted.

Examining the impact of reading comprehension on mathematical problem solving achievement of second-grade students, Ozdemir (2009) investigated whether participation in a treatment group in which students engaged in daily summarizing and clarifying of mathematical word problems contributed to higher problem solving achievement than participating in a control group that received instruction limited to solution finding. The results revealed positive, significant treatment effects; however, obvious limitations of this research do exist. The study, which took place over four months, does not clearly describe the instruction provided in the control group. Further, beyond mathematical ability, no other co-variables were identified or controlled, such as reading achievement and students' strategy use prior to the experimental instruction.

A Need for Increased Dialogue

Shulman (1999) identified "generativity" as a foundation of professional scholarship, in which researchers demonstrate the ability to expand purposefully on the existing research in a field. Therefore, in order for educational research to be considered relevant, researchers in education need to be able to access previous research findings and build upon them. This does not characterize the current practices across mathematics and reading education, in which research themes, methodologies, and instruments are frequently being developed without comparison between fields.

In addition to the lack of connectivity between reading and mathematics education, there is a lack of connection between applied content area research in these two disciplines and recent theoretical research in the field of educational psychology. Published research on student learning and metacognition in reading and mathematics needs to be aligned to existing theoretical research based on cognition, processing of text, and self-regulation. The resulting discourse and possible points of integration could allow for a deeper examination of student cognition, metacognition, and learning across domains. Thus, an implicit purpose of this study is to incorporate Shulman's generativity by aligning tenets of reading education, mathematics education, and educational psychology in the construct being examined.

Methods

Participants

Thirty-four college students participated in this study. A summer program site was purposively selected based on the access that it provided to a) both preservice and inservice teachers who were nearing completion of coursework that provides a state-certified reading endorsement that would differentiate the teachers as reading teacher leaders in their respective districts, and b) elementary students representing first through sixth grade who were tutored by the reading

clinicians, receiving differentiated instruction provided on a one-to-one ratio. All college students, hereby referred to as reading clinicians, were concurrently enrolled in a required reading practicum course, whether at the undergraduate or graduate level. Random assignment to treatment groups for the professional development book study was determined by designating a number to each of the reading clinicians using an ascending numerical assignment based on a roster of the clinicians, organized alphabetically by last name. A random number generator was then used to select the clinicians (half of the entire sample of clinicians) who were assigned to the experimental group. All remaining students were assigned to the control group. Descriptive statistics for the reading clinician participants, presented according to treatment group, are reported in Table 1.

Table 1: Descriptive Statistics for Nominal and Ordinal Variables of Reading Clinicians

Measure	Control			Treatment	
	%	<i>N</i>		%	<i>N</i>
Gender					
Female	94%	16		94%	16
Male	6%	1		6%	1
Academic Level					
Undergraduate	29%	5		29%	5
Graduate	71%	12		71%	12
Academic Major					
Elementary Ed.	41%	7		6%	1
Exceptional Ed.	18%	3		29%	5
Reading Ed.	41%	7		65%	11

Instrument

The reading clinicians completed both pre and post surveys over the course of this study. The Survey of Cognitive Reading Strategies, adapted from Barry’s Teaching Strategies Survey (2002), was administered on the first and last day of the professional development book study, and included three separate sections. Section 1 of the pre survey included a question eliciting identification of cognitive strategies that are relevant to text reading. Section 2 included a question eliciting identification of cognitive strategies that are relevant to text reading, specifically considering mathematical text. Section 3 obtained demographic information about the participant. On the post survey, sections 1 and 2 were the same as the pre survey. However, Section 3 provided a listing of the strategies that each clinician had individually identified for both section 1 and 2. The participants were further prompted to write an explanation of their perceived differences between strategy use in “typical” reading contexts and mathematical contexts, if any. Due to the electronic mode of delivery, each section had to be completed in sequence.

Procedures

Both assigned groups engaged in a facilitated book study, with the treatment group reading *Comprehending Math: Adapting Reading Strategies to Teach Mathematics, K-6* (Hyde, 2006) and the control group reading *Strategies That Work: Teaching Comprehension to Enhance Understanding* (Harvey & Goudvis, 2007). Hyde's (2006) practitioner-focused text identified the consistencies in strategy use advocated by reading and mathematics educators as well as applications of cognitive strategies across reading and mathematics contexts. Specific strategies discussed include: asking questions, making connections, visualizing, inferring and predicting, determining importance, and synthesizing. The Harvey and Goudvis (2007) text was selected as an appropriate control text due to the alignment of cognitive strategies as those presented in the treatment text: making connections, questioning, visualizing, inferring, determining importance, and synthesizing. The control text differed from the treatment such that each strategy was presented for use in a typical reading education setting. Descriptions for strategy use across fiction and nonfiction genres were provided; however, there was no direct link to support strategy use in different content areas, namely mathematics.

When the reading clinicians met on the first day of the study, their individual professional development seminar group assignment and meeting schedule was provided. The groups met on different days, and books were withheld between meetings to control for contamination threats, specifically diffusion of treatments. The reading clinicians took the Pre-Survey of Cognitive Reading Strategies before reading and discussing the first assigned chapter with the group. Book chapter assignments were aligned such that all participants were reading about the same strategy at a given meeting across texts (i.e. making text connections); however, the implications of integration of strategy use were only present in the treatment text. Consistent with Birchak et al. (1998), the following procedures were used to support the teacher study groups at each meeting: 1) a structure was provided that included reading time, personal reflection, facilitated discussion, and planning for the next meeting, 2) group roles of facilitator, time keeper, and record keeper were assigned, and 3) a facilitator planning sheet was provided and completed by the group. This practice remained in effect for each of the five meetings for both of the groups, and all members of the group had perfect attendance at the book study meetings. At the end of the last book study meeting, each reading clinician completed the Post-Survey of Cognitive Reading Strategies.

Results

To determine whether or not the reading clinicians identified the use of cognitive comprehension strategies as relevant to mathematical text, two sub-scores on the Pre-Survey of Cognitive Reading Strategies were compared: strategies identified for typical (fiction/nonfiction) text and strategies identified for mathematical text. A dependent *t* test was conducted to evaluate whether clinicians identified more

strategies as relevant to fiction/nonfiction than mathematics text specifically. The results indicated that the mean for strategies identified for fiction/nonfiction text ($M = 6.71, SD = 1.72$) was significantly greater than the mean for strategies identified for mathematical text ($M = 3.50, SD = 2.06$), $t(33) = 8.56, p < .01$. The standardized effect size index, d , was 1.47, which is considered to be a large effect.

The clinicians recognized a significantly different average number of cognitive comprehension strategies as relevant to reading fiction/nonfiction text than the average number recognized as relevant to the reading of mathematical text. Though not specified in the original hypothesis, the clinicians recognized more strategies on average for fiction/nonfiction than mathematics text, which aligns with the anticipated outcome.

To determine whether there was a difference in strategies identified as relevant to mathematics between the treatment and control group, a one-way analysis of covariance (ANCOVA) was conducted. A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between each of the covariates and the dependent variable did not differ significantly as a function of the independent variable: pre survey score, $F(2, 23) = 1.78, MSE = 3.92, p = .19$, partial $\eta^2 = .13$; academic major, $F(1, 23) = .00, MSE = 3.92, p = .99$, partial $\eta^2 = .00$; number of reading education courses, $F(1, 23) = 1.11, MSE = 3.92, p = .30$, partial $\eta^2 = .05$; number of mathematics education courses, $F(2, 23) = .56, MSE = 3.92, p = .58$, partial $\eta^2 = .05$. The ANCOVA was significant, $F(1, 27) = 8.38, MSE = 33.64, p < .01$. The strength of the relationship was very strong, as assessed by a partial η^2 with the treatment factor accounting for 24 percent of the variance of the dependent variable, holding constant the pre survey sub score for strategies identified as relevant to mathematics, academic major, number of reading education courses, and number of mathematics education courses. Therefore, subjects in the treatment group identified more strategies as relevant to mathematics text on average than did the control group. The adjusted mean for the treatment group was $M = 6.40$ and the adjusted mean for the control group was $M = 4.19$. A post-hoc power analysis revealed a power score of .80.

An additional component of the Post Survey of Cognitive Reading Strategies required the clinicians to provide an explanation of differences (if any) between use of strategies identified as relevant to both reading of fiction/nonfiction and mathematical text. The strategies that were cited most frequently as relevant to both text genres were questioning, predicting, visualizing, synthesizing, and connecting. Examples of clinicians' responses to this question are provided in Table 2.

Table 2: Clinicians’ Descriptions of Differences between Strategy Use Applied to Fiction/Nonfiction and Mathematical Text

Strategy Relevance Identified for Both Text Genres	Control Group Participant Comments	Treatment Group Participant Comments
Student-Generated Questioning	“The students will be asking questions about numbers rather than comprehension of reading”	“Strategy use would be similar in both contexts, where students are generating a variety of questions including wonder questions, questions of the author, and questions related to the main components of the math problem (similar to the main elements of fiction and/or the main idea of nonfiction)”
Predicting	“Predicting in math will involve estimation, not prediction of text”	“Predicting during the reading of math text involves levels of complexity, considering predictions of the content that the author will provide, anticipation of mathematical processes and end results (larger, smaller, etc.), and even predicting how to use this in the “real world””
Visualizing	“For visualizing with math, I would have the student drawing pictures to represent problems” “Students need to picture scenes in reading and pictures shapes in math”	“Visualizing is the same in math and reading”
Synthesizing	“Synthesizing in math would simply be writing down the key words/terms that give specific direction”	“Synthesizing in reading and math are the same processes. Students don’t use them in different ways.”
Connecting	(No students in this group recognized the Connecting strategy as relevant to across text genres)	“The process of connecting when reading math and when reading other nonfiction and fiction is actually the same and VERY important so that students can access their prior knowledge and experiences in order to have a deeper understanding of the text and draw on knowledge that will support additional strategies (such as making inferences and synthesizing).

Discussion

The dual purpose of this research was to: 1) examine teachers' perceptions of the relevance of cognitive comprehension strategy use during mathematics text applications, and 2) determine whether or not teachers' perceptions would differ after participation in a randomly assigned professional development. Research questions included: 1) Do reading clinicians identify the use of cognitive comprehension strategies as relevant to mathematical text?, and 2) Do reading clinicians' perceptions of applied cognitive reading comprehension strategy use in mathematics contexts differ based on participation in contrasting professional development groups focusing on traditional comprehension strategy instruction or integrated comprehension instruction in reading and mathematics education?. Each question will be addressed in the sections that follow.

Reading Clinicians' Initial Perceptions of Domain-Relevance of Strategies

One of the areas of investigation in this research was whether or not the reading clinicians identified the use of cognitive comprehension strategies as relevant to mathematical text. The reading clinicians not only identified significantly more cognitive strategies on average for reading fiction/nonfiction text compared to mathematics text, but they also identified more strategies in general for that question item than they did for the mathematics-related item. Explanations for the significant mean differences in item responses may be based on a variety of factors. One explanation may be that the clinicians considered their own educational experiences in K-12 schooling when answering the questions, which were likely heavily rooted in domain-specific instruction based on the age of the participants and a comparison of educational trends during their schooling. Research suggests that often teachers, especially those new in their careers, rely more heavily on memories of instructional practices from their K-12 education than the instructional theories and practices that were demonstrated in their teacher preparation programs (Kagen, 1992). Another possible explanation could be based on the instruction in reading education and mathematics education that the clinicians received during their teacher preparation programs. Due to the disconnect across reading and mathematics education literature (Hyde, 2006), university faculty in these fields may have been unfamiliar with the similarities of relevant cognitive strategy instruction within each discipline, thus the connections may not have been readily included in their instructional planning and delivery. Texts integrating reading and mathematics are limited in publication (Hyde, 2006) and the underlying research bases across these domains remains disjointed to date; therefore, it is unlikely that the textbooks and other reading materials to which the clinicians were exposed during their teacher preparation programs and professional development experiences illustrated similarities among the use of cognitive strategies in reading and mathematics contexts. Such literature synthesizing the similar, self-regulatory cognitive bases that are currently being advocated by the National Council of Teachers of Mathematics (2011), International Reading

Association (2011), and recent research in each content area would be useful. Beyond offering information, such resources could provide an impetus to align university-based teacher educators from these content areas who have the earliest opportunities to inform future teachers' perceptions and practices.

Reading Clinicians' Perceptions of Strategy Relevance

An additional component of this research focused on whether or not reading clinicians' perceptions of applied cognitive reading comprehension strategy use in mathematics contexts differed based on their participation in the book study. The results from this component of the study suggest that it is possible to quickly and positively impact reading clinicians' perceptions of domain-relevance of cognitive comprehension strategy use, specifically as applied to the reading of mathematical text. Prior to the intervention, the participating reading clinicians' mean scores of strategies identified as relevant to fiction/nonfiction reading were significantly different when compared to those identified for mathematical text reading. This suggested that prior to the intervention, the reading clinicians' demonstrated increased awareness of strategy relevance to fiction/nonfiction than mathematics-specific text. After only a two-week period, the clinicians in the treatment group perceived the strategies with increased relevance to mathematics than their peers from the control group. Explanatory survey responses from both groups (highlighted in Table 2) were also indicative of the difference in perceptions between the two groups. The participants in the treatment group provided more explanation about the salient features of each strategy and linked the descriptions of strategy use to deeper comprehension of text. Further, these participants demonstrated an awareness of the need for cognitive strategies to increase students' understanding the mathematical content and processes inherent in word problem texts. As Hyde (2006) suggests, such a change in perception could have positive implications for classroom instruction. With a slightly shifted focus on underlying cognition and comprehension, these teachers may have new ideas about how to integrate reading and mathematics instruction.

Limitations and Future Research

The Survey of Cognitive Reading Strategies that was used in this study was adapted and pilot tested prior to implementation in this research. The length of the instrument is a limitation, however, based on the inclusion of only two survey items. Due to the emerging, integrated nature of this research, there were no other instruments that could be used in this study. However, the development of a tool that measures teachers' perceptions of cognitive comprehension strategy instructional relevance to other learning domains is warranted, especially given the recent increased focus on content area reading strategies (Vacca & Vacca, 2004) and disciplinary literacy (Shanahan & Shanahan, 2008).

Another limitation was that teachers' perceptions were only obtained from the survey instrument, rather than additional methods such as analysis of their own practice, observations of others, or the use of classroom vignettes. Any of these methods may have offered more insight into what teachers were thinking about domain-general strategy instruction compared to domain-specific applications. Follow-up, applied research could be based in the classroom and include interviews with individual participants beyond survey measures to gain deeper insights into their understandings and applications of strategy instruction for elementary learners.

An additional limitation is based on the time during which treatment effects were measured. The clinicians demonstrated a difference by treatment group after a two-week period during the summer, which is a time when they were not working under the pressures and constraints that teachers experience during a typical school year. Therefore, it is difficult to determine whether or not the treatment effects are sustainable over time (with or without ongoing professional development) and whether or not the same results would be obtained if the professional development were delivered over the same time frame during the regular school year. Follow up research with participants could be conducted to identify the presence or absence of long-term differences according to treatment, including but not limited to interviews, classroom observations, and a review of individual professional development plans.

Conclusions

These findings offer significant contributions to the existing literature by revealing educators' limited awareness of underlying similarities of the cognitive demands of reading fiction, nonfiction, and mathematical text. Further, this study reveals that once teachers' limited viewpoints have been self-identified and discussed, it is possible to quickly and effectively impact their assertions about the relevance of cognitive comprehension instruction across domains. The findings of this study suggest significant implications for future research on broadening teachers' perceptions of strategy relevance and examining the impact of integrated strategy instruction in reading and mathematics education.

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“WHY DO WE READ?” A CASE STUDY OF THREE AFRICAN AMERICAN MALE STRUGGLING READERS AND HOW THEY VIEW READING IN A THIRD GRADE, ACCELERATED READER CLASSROOM

Master’s Thesis Winner

Robin Mara

University of North Carolina at Charlotte

Abstract

“Why do we read?” is a case study of three African American male struggling readers in one, third grade Accelerated Reader classroom. Students were interviewed and observed in their classroom and school for five weeks to investigate their behaviors, understandings, purposes, and motivations related to reading. The three students exhibited a range of extrinsic and intrinsic motivations, and strikingly different primary motivations: Abraham read to feed his imagination and learning; BJ read to comply with teacher expectations; and Charles read to “get 100 percent on AR tests.” Findings suggest AR’s focus on extrinsic rewards interferes with development of cognitive clarity regarding authentic, useful purposes for reading in students from limited print literacy backgrounds. AR temporarily increased students’ reading practice, but student reading ended abruptly when the program ceased.

“Why do we read?” As a remedial literacy teacher, I ask this question often in getting to know students. Upon returning to teaching after a multi-year hiatus, I posed the question to one young struggling reader and was startled when he flashed a broad smile and proudly announced, “To pass our AR tests and make 100 percents!” In time my surprise turned to dismay, as one struggling reader after another echoed this same, limited perspective on reading.

“AR” is everyday language for Accelerated Reader, the world’s most popular computerized reading program (Renaissance Learning [RL], 2012), used in over 75,000 schools internationally to promote reading achievement and motivation. Scientifically based research on AR’s efficacy is scant and conflicting, especially regarding effects on at-risk readers (Krashen, 2003; Nunnery, Ross & McDonald, 2006; What Works Clearinghouse/Institute for Education Sciences [WWC], 2012). AR’s widespread use and its profound influence on my own students provided compelling reasons to investigate AR’s role in shaping struggling readers’ perceptions about reading.

My students who viewed perfect AR scores as the prime purpose for reading were mostly African American male struggling readers from limited print backgrounds. Knowing that AR-related research on this student demographic is limited and inconclusive, a case study was designed which included three, low SES, African American male struggling readers in one third grade AR classroom to explore their purposes for reading and better understand how AR may enhance or impede their motivation to read.

Literature Review

Theoretical Framework

This study assumed a constructivist framework (Cambourne, 2002), grounded in socio-cultural learning theory (Vygotsky, 1934/1986). How teachers and others talk about the value and purposes of reading shapes a child’s concept of reading. Perceptions developed in the classroom support or limit students’ approach to literacy in other contexts and affect their values toward literacy. Cambourne asserts the task, means, and context in which knowledge or skills are learned determine how learning will be used later. If learning is mindless, the learner’s responses will be thoughtless, fixed, and unlikely to be transferred to other contexts.

Reading behaviors are rooted in concepts held by the reader, and concepts and behaviors continue to develop over time. Students’ concepts of reading inform and shape their motivation, and motivation is essential to reading success (Guthrie, McRae, & Klauda, 2007; Snow, Burns, & Griffin, 1998). Rosenblatt (2005) asserts that students need guidance in developing a broad repertoire of personal reading experiences and purposes (effort and aesthetic).

Theories and Aspects of Reading Motivation

Several theories of motivation informed this study. Guthrie, et al. (2007) identified five interrelated processes of reading motivation: intrinsic desire vs. avoidance; perceived autonomy vs. external control; self-efficacy vs. helplessness; collaboration vs. isolation; and mastery goal vs. performance goal pursuit. Gambrell, Palmer, Codling, and Mazzoni (1996) specified reading self-concept

(students' beliefs about their own competence as readers) and task value (the value they place on reading) as critical determinants of reading motivation and engagement. Students' use of comprehension and other reading strategies (including the effort they put into using them) is dependent on their motivation levels (Duke & Pearson, 2002; Guthrie et al., 2007) and their self-efficacy—their beliefs about their competence for performing the task (Schunk, 2003; Walker, 2003.)

These findings relate to self-determination theory (Ryan & Deci, 2000), which holds that even if students are not intrinsically interested, they will be more motivated to engage in a task if they place a high value on it and possess some degree of control. Self-determination theory aligns with the expectancy-value theory of motivation and asserts that over time students may begin to place a higher value on tasks they perform well and a lower value on those that reduce feelings of competence (Eccles & Wigfield, 2002). Goal orientation theory helps explain how students assign particular purposes and meanings to behaviors such as reading, in terms of mastery and performance goals (Patrick, Anderman, Ryan, Edelin, & Midgley, 2001). A mastery goal focuses on understanding or skill acquisition and is valued as an end in itself; a performance goal centers on proving one's ability to perform a task and outperforming others. Readers with mastery goal orientations tend to be more engaged and intrinsically motivated than those geared toward performance goals (Guthrie & Wigfield, 2000).

Intrinsic and extrinsic motivation. Intrinsic motivation is powered by one's personal interest or enjoyment, while extrinsic motivation is driven by a desire for external recognition. Intrinsic and extrinsic motivations are not opposites; often they are positively correlated with each other, and both predict children's reading frequency and breadth. However, extrinsically motivated students are inclined to use surface strategies for reading and be more interested in finishing an assignment than understanding or enjoying it (Guthrie & Wigfield, 2000).

According to Metsala, Sweet and Guthrie (1996), students are not simply motivated or unmotivated to read; instead, a student generally has several different (yet not equally powerful) motivations. Metsala et al. identified eight motivations for literacy: involvement in text; curiosity/learning; challenge/figuring out a plot/integrating facts; social interaction/sharing; compliance with teacher; recognition/points; competition for grades/superiority; and avoidance of other work. They classify the first four as intrinsic and crucial to perseverance in learning complex reading strategies, as well as lifelong, voluntary reading; they contrast these with extrinsic motivations (compliance, recognition and grades).

Research on the use of extrinsic rewards has yielded conflicting evidence of effectiveness (Marinak & Gambrell, 2008; Pressley et al., 2003) and indicates rewards (or conditions of rewards) may reduce intrinsic motivation to read (Deci, Koestner & Ryan, 2001). While Cameron, Banko, and Pierce (2001) argue that this undermining effect is minimal and inconsequential, they and others have found intrinsic motivation is reduced by external control and negative feedback

regarding competence (Cameron & Pierce, 1994; Deci et al., 2001; Ryan & Deci, 2000). Extrinsic motivation can produce powerful, positive, short-term results, but can be counterproductive, causing self-terminating behavior when students abruptly stop reading once a reward or recognition is achieved (Edmunds & Bauserman, 2006; Guthrie, 2004b).

Motivation Related to Struggling Readers

Motivating struggling readers to persist in reading is key to their long-term academic success. Morrow (2009) identified four factors in school and home settings that can promote student motivation to read: choice, appropriate challenge, social collaboration, and success with positive, empowering feedback (including acknowledgement of partial accomplishments). Cambourne (2001) found that students who fail to read generally lack at least one of the factors Morrow identified, and noted struggling readers often receive faulty or incomplete information about how to read or the uses of reading. Often students from less academic backgrounds lack cognitive clarity about reading and “have little idea what they are trying to do or why anyone would want to do it” (Cunningham and Cunningham, 2002, p. 88).

Since research indicates boys differ from girls in affective responses to reading (Mallette, Henk, & Melnick, 2004; Volland, Topping, & Evans, 1999), it is important to know what motivates boys to read. Multiple studies (Guthrie, 2004a; Smith & Wilhelm, 2002; Wilhelm and Smith, 2006) have identified five factors that motivate boys from diverse backgrounds: social connections; teachers who contribute to student self-efficacy; autonomy and choice; appropriate level of challenge; and immediate positive feedback. Social collaboration rather than competition should be emphasized for these students.

Regarding reading differences observed in minority populations, Guthrie et al. (2007) expressed concern that “intrinsic motivation does not correlate with reading achievement as highly for African American students as for White students” while avoidance motivation does correlate highly for African American students, “suggesting they are less favorably disposed to reading” (p. 248). Such conclusions are alarming and spotlight a need for critical investigations into motivation and reading interest among diverse struggling readers.

The Accelerated Reader Program

To begin in AR, each student takes a computerized, STAR diagnostic reading test (Renaissance Learning, 2011) and is assigned an independent reading level and reading range. Students then choose and read books within their range. Each book has a pre-assigned reading level and point value based on length and difficulty. Upon completing a book, the student takes a computerized comprehension test comprised of five or 10 literal-level multiple-choice questions. Students are awarded points and advance to higher levels of books as they score 85% or higher.

The U.S. Department of Education's What Works Clearinghouse (WWC, 2012) reviewed 100 AR-related studies and decided only two met evidence standards. The two studies yielded mixed results for AR's reading comprehension effects. WWC determined one study (Ross, Nunnery, & Goldfeder, 2004) showed effects to be positive and "substantively important" but not statistically significant, and WWC calculations showed effects in the second study (Bullock, 2005) to be negative for reading comprehension. However, WWC found "potentially positive results" for general reading achievement. Other AR research studies also indicate mixed results, especially regarding effects on male, struggling readers (Krashen, 2003, 2004; Melton, Smothers, Anderson, Fulton, Replogle & Thomas, 2004; Vollands et al., 1999).

Valid studies of AR's effects on motivation are even more scarce, with none meeting WWC standards. Some scholars point to positive effects on academic reading but not recreational reading while others support AR's use for struggling readers (Holmes & Brown, 2003; Howard, 1999; Vollands et al., 1999). In addition, scholars have shown that AR produced negative effects on student reading motivation (Melton et al., 2004; Pavonetti, Brimmer, & Ciplewski, 2002; Putman, 2005, 2007), especially in male struggling readers (Mallette et al., 2004; Putman, 2005, 2007). Since motivating low achieving males is the reason many schools choose to implement AR (Everhart, 2005; Schmidt, 2008), further research on this topic is required.

Research Questions

My research centered on three questions: (1) How do three African American male struggling readers view reading in a third grade Accelerated Reader classroom? (2) What purposes, motivations, and reading task values do they demonstrate? (3) What role might AR play in helping or hindering these students' reading concepts, motivation, and success?

Methods

Participants and Setting

A qualitative case study approach was employed, using a purposeful, convenience sampling of three African American male struggling readers in one third-grade classroom. Their teacher was a 20-year veteran in a Title 1 public elementary school outside a major southeastern city. Students were identified by the teacher as struggling readers achieving at least one year below grade level based on school assessments. All students in the school had a 30-minute AR period daily. They were rewarded daily, weekly, and quarterly with school privileges (not prizes) for reaching incremental AR goals. The student population was 51% Caucasian, 22% African American, and 21% Hispanic, with 56% qualifying for free/reduced lunch. I had no prior connection to the school.

Data Collection

I observed the three students primarily during language arts activities over five weeks during the final quarter of the school year. The following data-collection methods were employed:

- two open-ended interviews (10-20 minutes each) with each student at the start and end of the study;
- an AR-focused interview with each student midway in the study;
- a focus group interview with all three students near the end of the study;
- frequent, extended student observations during AR and other reading-related periods, including media center visits;
- field notes;
- document/artifact analysis;
- teacher/staff interviews.

To probe students' concepts and attitudes related to reading, interview questions were drawn from currently accepted reading inventories (Johnston, 2004; Stieglitz, 2002; Woods & Moe, 2007) and the researchers' inquiry. Guthrie et al. (2007) questioned the validity of existing structured interview protocols for use with struggling readers from diverse populations, so a semi-structured interview format was developed (Merriam, 2001; Rubin & Rubin, 1995) to enhance student understanding and receptivity. Similar questions were asked on multiple occasions in a variety of settings to verify validity of student answers. Students were asked follow-up questions for clarification.

Three weekly classroom visits were made by the researcher for five weeks; each visit was 2½-3 hours long. In addition to interviews and general observations, each student was observed for at least one 45-minute block every week. During the observations, the students' behavior was periodically noted. The students were sometimes asked to explain their behaviors or their thinking, during transition times so as not to disturb instruction. This schedule allowed the researcher to observe the students' reading-related behaviors throughout a full morning and during a range of language arts events on different days of the week. Frequent observations made it less likely that students would "perform."

Data Analysis

Data was inductively analyzed during and following collection, using constant comparative analysis, with reflection on recurring patterns and possible emergent themes (Merriam, 2001) related to reading views and task value in and among these students. Metsala et al.'s (1996) eight motivations for literacy served as a structure for analyzing and attributing student motivation related to each required or voluntary school reading task. Axial coding system (Rubin & Rubin, 1995) was used for analyzing the data. Student behaviors related to

goal orientation, task value, self-efficacy, reader's stance, cognitive clarity, and on-or off-task performance were also noted (see Appendix). Information was organized chronologically for each student, and then analyzed for patterns in and among students.

Coding student behaviors required some qualitative judgment. For example, after one student reached his goal and was no longer participating in AR, he chose to read "chapter books" independently and attentively alongside higher-achieving classmates. This behavior was coded: attraction to challenge, involvement in text, social interaction, recognition by his peers, on-task, positive task value (personal importance and intrinsic), aesthetic reader's stance, and positive self-efficacy. There was no basis for judging cognitive clarity in this example. Later, referring to the chronological data, it was easily discerned this was the first time this student appeared to read for intrinsic, aesthetic purposes. Since he did not monitor the teacher as usual and could have chosen other activities, his reading was not attributed to teacher compliance.

Narrative data were organized separately for all three students and then used to conduct a cross-case analysis of their responses and behaviors during interviews, book selection, and other reading-related events. Lastly, the students' computerized AR records were examined and analyzed looking for student's AR reading patterns for the school year, including books chosen, book levels, test scores, participation patterns related to success, and participation related to quarterly AR beginning and ending periods.

Findings

Findings are presented here as individual snapshots of the three students, pseudo-named Abraham, BJ, and Charles. The students demonstrated strikingly different primary motivations: Abraham read to feed his imagination and learning; BJ read to comply with teacher expectations; and Charles read to "get 100 percent on AR tests."

Abraham

Abraham's view of reading. Abraham described himself as a reader saying, "I'm kind of in the middle. I'm good at reading pretty much." Answering the question, "Why do we read?" Abraham's eyes lit and his voice was almost reverent. "You put yourself into a book...See how somebody or something is feeling...see what's going on...like I'm dreaming." Abraham revealed multiple purposes for reading: "I read because I have to take AR tests and reading is your whole life....To learn stuff, be able to solve problems, do school work... Learn about history and culture....It makes me feel like a better person when I read because it makes me look kind of special."

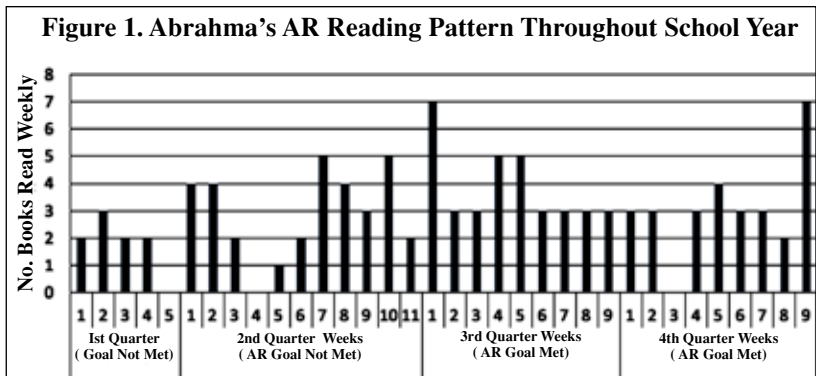
Despite living in a shelter and an ADHD diagnosis, Abraham said he read every day and night. He enjoyed his "mom, dad, sister, cousins, grandma,

teacher, and my friends” reading with him. Abraham predicted he would read that summer visiting his Grandma. “Grandma reads big, long books. Sometimes she reads aloud and it makes me feel real good.” He smiled and added, “I will read to my Grandma every day.”

Class AR records showed Abraham read more books than all but 6 of 22 classmates and more than twice as many non-fiction books (he read almost 60% non-fiction). Unlike others, Abraham often took 20 minutes to choose a book that appealed to him as well as met AR criteria. When AR stopped more than a full week before school ended Abraham stated, “The library is closed and we don’t get books anymore. I would read for fun.”

Abraham’s view of AR. Abraham described AR this way: “We choose which books we want so we can pass a test. We have to read the book at least three times....It’s important because you have to remember the book and it’s important to get points...for the grade and to get a certain level to do something fun.” He said AR helped him . “I cared even more. It [meaning AR computer test] could tell if I was reading the book or was just playing around....I like it better this way. Last year somebody else had to tell me if it [a book] was too high or too low.”

Abraham’s AR performance. Abraham’s first quarter AR level goal was 2.9 (second grade, ninth month). By year’s end, it was 3.0 (one month difference). Abraham averaged 2 books per week and failed to meet his goals during the first quarter’s five weeks of AR. After missing celebrations and privileges, Abraham started second quarter with a bang, testing on 8 books the first 2 weeks, later totaling 32 books to surpass his point goal. However he fell short on percent correct and reading level goals and did not receive AR awards. This near miss spurred him to read 7 books the first week of third quarter. He totaled 35 books and achieved all his AR goals that quarter. Fourth quarter he averaged 3 books per week and met all goals—after reading 6 books in AR’s last two days (see Figure 1).



Abraham's reading motivation behaviors. Abraham exhibited six of Met-sala et al.'s (1996) eight motivations: involvement, curiosity, challenge, social interaction, compliance, and recognition—including all four intrinsic motivations identified as crucial to lifelong reading and perseverance in learning reading strategies. He did not read to compete or to avoid other work. Once he hinted at avoidance motivation: "I started seeing how you could do things if you earn your points. And if you didn't, you had to just sit in the classroom and do work." Since Abraham first expressed the positive perspective of "doing" and did not voice the negative aspect again during the study, avoidance was not a critical factor.

Abraham also showed evidence of attainment, intrinsic and utility task values, as well as self-efficacy, a sense of ownership, and a strong balance between efferent and aesthetic reading. He exhibited a mastery goal orientation along with strong performance goals. His cognitive clarity regarding the value and purposes of reading was sharp and stood in high contrast to the other two students.

BJ

BJ's view of reading. BJ gave parrot-like answers about reading: "Reading is what people think about what the author is doing and what's his purpose....A text of words that you read, about remembering [sic] words in the story.... People should always like to read—make them better, make their brain healthy, get good grades and stuff." He said what he likes about reading is "to ask myself the author's purpose." In a separate interview when asked his favorite things to read about, he said, "I like to ask what the author done." He said he likes reading at school "because it helps you become a good reader."

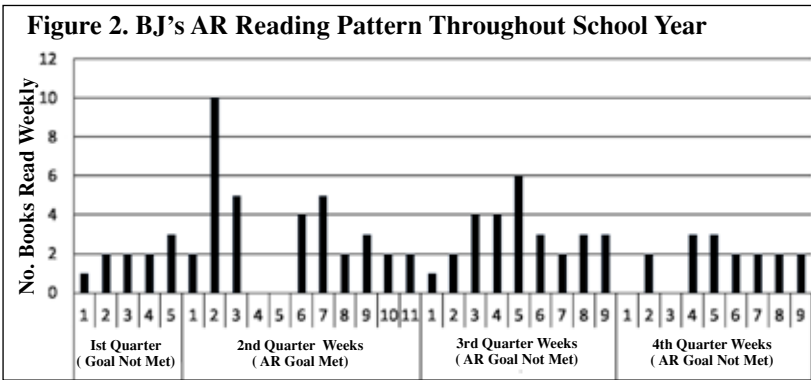
Asked, "When do you read?" BJ said he liked to read in second grade and added, "I have to read for homework. Then I come in and take a test." About reading at home, he said, "I read every night for homework....She [his teacher] checks it every day." When asked to name someone outside of school who read, he could not name anyone. BJ reported he liked to read "fairy tales—and Reading Street [a school reading series]. It has a lot of stories in one book. You read the story and then review everything about that story. At the end of the week you go to the next story." When pressed, he said he liked a "monster comic book" and "Arthur with the glasses." In his final interview, BJ said he liked to read "because we have lots of words and some of them can be easy."

A typical response from BJ when asked what he is reading is: "*Berenstain Bears*. It's 3.6." He chose it because "I didn't have much time. I got my level very quick. If it's my level, it doesn't really matter." Asked if he liked it, he responded, "Not much. When you read it over and over, you just get bored.... You have to keep the book 'til you test on it." To select books, BJ went straight to the "Everybody" cart in the school library; books there were mostly fiction and sorted solely by AR level. BJ always picked a book by the AR number printed on its spine, barely glancing at the cover and never opening the book to preview it. His selections were 93% fiction. During this study's last week, BJ was asked

about a book he had been reading. He said he didn't finish it: "AR tests are over and we can't read."

BJ's view of AR. BJ explained: "AR is like a test and you have to read books two times and try to pass and get at least an 80 or 100....It's good. If you take tests and pass, you make your AR goal and get to do things first, wear AR medals....Whenever you read, the computer asks you questions and you have to remember what you read in the book." He said AR helps him be a better reader by "remembering what you read in stories."

BJ's AR performance. BJ's first quarter AR reading level goal was 2.8; he read 10 books in five weeks and almost met his goals. Second quarter he rallied and read 12 books in the first 2 weeks and 35 books total to achieve all his AR goals. Third quarter BJ's reading level goal was raised to 3.4 based on a new STAR test. He read a total of 28 books, hit his higher reading level goal, but narrowly missed his point and percent correct goals. This appeared to discourage subsequent efforts. He read only 2 books total in the first 2 weeks of fourth quarter, and averaged only 2 books per week for the remainder, totaling only 16 books. By year's end he was disinterested—until the last day of AR when he took 2 tests on one day in a final push (see Figure 2).



BJ's reading motivation behaviors. BJ stayed on task throughout teacher-directed lessons, but looked up frequently during independent reading. He exhibited few instances of involvement in text, with little evidence of intrinsic motivation to read. His primary motivation appeared to be compliance with teacher expectations and, to a lesser degree, reading for points and recognition. When possible, BJ chose not to read. By the end of the fourth quarter, he avoided reading and appeared to abandon AR goals. He had not received specific or meaningful feedback on his AR reading performance—only the teacher's "Good, good, good!" when he succeeded and "Did you read it three times?" when he failed. He did not demonstrate self-efficacy, cognitive clarity about reading, or reading for aesthetic purposes. He maintained a performance goal orientation toward reading, and attainment and reward-related utility task values.

Charles

Charles's view of reading. When asked, "Why do we read?" Charles quickly responded, "It's important because it gives you those points." Subsequent conversations yielded: "To make AR goal—pass their test....Get fun stuff. Get ready for EOGs [state end of grade tests]." Charles spoke sparsely and in incomplete sentences. Asked why *he* read, he immediately answered, "To get 100 percent on AR tests." Pressed for more, he said, "Umm...It keeps you not to be bored. I like to read big words." In the focus group interview, after BJ said he liked to read to find out the author's purpose, Charles said "I like to say to myself: What's the main idea?" He said the best thing about reading is "very hard books." Asked how reading made him feel, Charles said, "Good?...when I'm trying my best with the words. Down—if I said a word wrong."

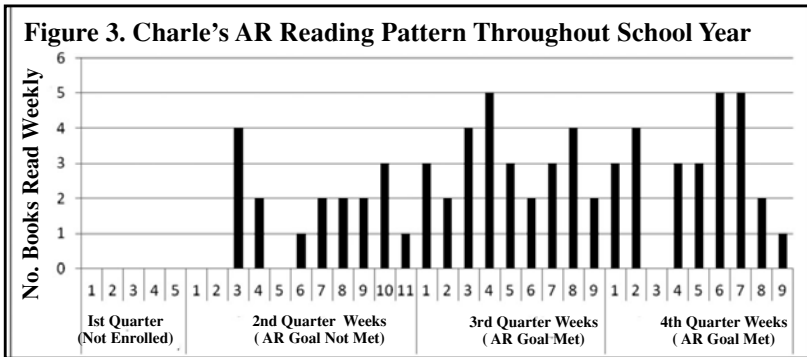
Charles said he read at home almost daily after homework. He had difficulty identifying people outside of school who read but reported, "My mom sometimes reads a book or a magazine where you watch on soaps." He said he liked to read "Reading Street books....My level. Something interesting. About me." Later he said Reading Street books were boring. Asked how he chose his *Arthur* book (Marc Brown's children's series), Charles said, "First I saw my level—and I like animals." Another day, asked what he was reading, he reported, "*Arthur* [a different book]—and it's my level." After he finished it, I asked how he enjoyed it. Charles beamed, "I liked it—because I passed and got a 100 and made my AR goal." Up until he passed his final AR goal, Charles usually went to the Everybody cart to choose from books sorted by AR level. He read mostly fiction (88%). Asked what he liked to read about, he answered: "Anything...I look for stuff that's interesting to me."

Charles continued to read after achieving AR goals. When he reached his year-end goal and no longer had to take AR tests, his reading options broadened. His eyes sparkled as he held up a new book: "I just started chapter books—*Junie B. Jones* [Barbara Parks's children's series]." He sat with three above average readers who were reading upper level books. Another below grade level reader noticed Charles' book and called out, "You can't read that book and take an AR test." He looked at her blankly and resumed reading. Occasionally he chatted with a neighbor about his book or requested help. Later when I asked how he liked it, his face fell. "I had to check it back in," he said. "I almost finished. We're not reading in school right now."

Charles' view of AR. Charles reported, "AR is fun because you get to do fun stuff—watch a movie or eat a Icee...People say you did a good job....If I didn't make my AR goal, you won't get to have fun—eat with friends." Asked why it was important to make his AR goal, he said, "You get to wear the medals we made.... And at lunch we get to talk with our friends."

Charles' AR performance. Charles' AR reading level goal remained at 2.7 all year. He averaged 2 books each week second quarter (his first quarter at

this school), meeting his point goal but not his book level and percent correct goals. He reached all his goals third and fourth quarters, reading 28 and 26 books respectively (see Figure 3). Unlike Abraham and BJ, Charles' AR reading was fairly consistent, allowing him to meet his point goals well before the end of each quarter. His teacher noted Charles had "parent support" and a more structured home environment than Abraham and BJ.



Charles' reading motivation behaviors. Clearly performance goal oriented, Charles read primarily for recognition and points and to comply with his teacher; however he also exhibited involvement in text and interest in social interaction during reading. He showed limited signs of self-efficacy and a definite efferent stance toward reading, although sometimes displayed aesthetic interest, especially when AR testing ended. He demonstrated attainment, intrinsic and utility task values.

Discussion and Implications

This study revealed widely different views of reading among struggling readers within a single AR classroom. Students exhibited a range of reading motivations—from Abraham's full repertoire of intrinsic and extrinsic motivations to BJ's almost exclusively extrinsic drive to Charles's predominantly extrinsic but growing intrinsic purposes. Even Charles, who plainly stated his main purpose for reading was to "make 100 percents on AR tests," had a broader range of motivations than he first implied. BJ had the most limited literacy background and least established personal purposes for reading. Little social motivation was observed in these students—likely a function of the classroom's focus on AR's independent reading practices. There was not a singular motivation pattern among the three students, although as AR deadlines approached, efferent reading habits became the norm for all three. In fact, only one student in the entire classroom was observed reading once AR ceased for the class, although many popular books were still available in the classroom.

This study suggests current classroom practices including AR may interfere with inexperienced readers' development of cognitive clarity regarding authentic purposes for reading. AR promoted reading for extrinsic purposes in the three case study students and appeared to distort concepts about reading and its uses in students from low literacy backgrounds, hindering development of intrinsic motivation to read.

AR's extrinsic rewards boosted attainment and utility task values for these students, motivating them to substantially increase their reading practice—temporarily. Reading was not sustained when AR ceased, as indicated in other studies involving extrinsic rewards (Deci et al., 2001; Marinak & Gambrell, 2008; Metsala et al., 1996). Surprisingly, even with increased practice, AR did not substantively improve these students' reading achievement levels over the course of the school year. Teacher time and school resources may have been better spent teaching effective and transferrable reading strategies, modeling personally meaningful book selection behaviors, and providing engaging and purposeful social interactions related to reading. This study also demonstrates the importance of being watchful for unintended messages communicated to students. Daily practices and the closing of this school's library when AR ended suggested there was no reason to read without AR.

AR's burgeoning popularity and an intensifying demand for expedient accountability systems related to student performance point to AR's continued expansion in schools around the world. This study illustrates the critical need for teachers and researchers to more thoroughly investigate AR's effects on students' understanding of the value and purposes of reading and on their long-term reading lives, particularly for students from limited print literacy backgrounds.

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Appendix

Observed Student Behavior Characteristics

Metsala, Sweet and Guthrie's (1996) eight motivations for literacy	<i>Goal Orientation</i>
<i>Intrinsic Motivations (1-4)</i>	Mastery
Involvement in text	Performance
Curiosity in learning	<i>Task Value</i>
Challenge (figuring out a plot, integrating facts)	Personal Importance of
Social interaction	Performing the Task <i>Well/Ownership</i>
<i>Extrinsic Motivations (5-7)</i>	Intrinsic Value
Compliance	Utility Value
Recognition (acknowledgement, points)	Cost (effort and anxiety)
Competition (superiority, grades)	<i>Self Efficacy</i>
<i>Work avoidance (8)</i>	<i>Readers Stance</i>
	Aesthetic
	Efferent
	<i>Cognitive Clarity</i>

**THE JOY OF LEARNING THROUGH
PROFESSIONAL DEVELOPMENT**

A BOOK STUDY: IMPROVING MIDDLE-SCHOOL TEACHERS LITERACY INSTRUCTION

Angela Falter Thomas

Bowling Green State University

Abstract

Teachers in a small rural middle school set a goal for improving their students' literacy learning by improving their literacy instruction using a professional book study. Interviews with all 13 content area teachers showed that the eight-week book study was instrumental in increasing both their literacy instruction, and for developing a new supportive attitude toward teaching reading in their content area classrooms. This study indicates that professional development, conducted through book studies, is a supportive model to encourage teacher change in their classroom practices to a more effective model.

Despite the time and financial investments districts put into professional development (PD), the typical teacher's PD experiences are not of high quality (Hill, 2009). While research results suggest that change in teaching occurs when teachers experience first-rate professional development (Darling-Hammond & McLaughlin, 2011; Penuel, Fishman, Yamaguchi & Gallagher, 2007), opportunities for professional growth in most schools are quite limited. Researchers have found evidence supporting the value of an extended period of PD with features such as reflection and collaboration (De Lay, 2009). This type of professional development is more effective than the all too familiar traditional settings, such as one-day workshops. High-quality PD enables teachers to grow to their next level of ability, which in turn can improve teacher effectiveness in school classrooms, which improves students' achievement and test scores.

Utilizing Book Studies as Professional Development

Professional development opportunities are varied. The use of professional book study groups as a means for effective PD can benefit educators by providing social connectedness (Tschannen-Moran, 2001) and an "intellectual forum for teachers to share ideas, thoughts, feelings, and reactions" (Flood & Lapp, 1994, p. 574).

Educators have had positive reactions to the use of book studies for PD, as they are able to work in groups to discuss questions, describe teaching-related issues, and enlist in peer support on how to approach issues in teaching (Burbank, Kaushak, & Bates; 2010). Book studies can meet the individual needs of each teacher (Darling-Hammond & McLaughlin, 2011), as well as having a positive impact on their attitudes through having blocks of time for reading, journaling and discussing (Goldberg and Pesko, 2000). Actively participating within the professional book study group provides teachers with a healthy means for sharing and debating issues pertaining to education and literacy instruction, as discussions are able to go beyond the text and how the information could be used in relationship to their own instructional practices (Burbank, Kaushak, & Bates).

Methods

This study was done in a small, rural middle school, located in the Midwest. The participants examined, and discussed their students' state achievement test scores at a faculty meeting. They determined that their seventh and eighth grade students had a five-year pattern of low-reading-test-scores. They began to discuss how they could improve their students' reading test scores. It was decided that they would include literacy instruction in all subject areas, not just in language arts.

Participants

Participants included 13 classroom teachers and two administrators (15 educators). There were 5 male teachers and 8 female teachers, as well as 1 male and 1 female administrator for a total of six male and nine female educators. Years of teaching experience ranged from two first year teachers to four teachers with over 20 years of experience. Fourteen of the participants were Caucasian and one was Asian. All educators worked full time. Four teachers taught more than one subject each day and five also taught elementary and/or high school students in addition to their seventh and eighth graders. Pseudonyms were used to encourage open and honest dialogue.

Data Collection Instruments

Surveys. The design of the surveys allowed the researcher to learn about the teachers' perceptions of the changes taking place with their instruction and how the book study impacted their beliefs and instruction. The surveys featured open-ended questions to allow for more individualized and specific responses. In addition to the brief surveys, where the educators shared their thoughts on their weekly book study session, all 15 participants also completed another anonymous survey at the end of the book study. Before interviewing, the surveys helped the researcher identify topics or themes to explore in depth during the interviews.

Interviews. Interviews are particularly useful for researchers to collect the story behind a participant's experiences. The interview seeks to describe and reveal the meanings of central themes in the world of the subjects. The main task in interviewing is to understand the meaning of what the interviewees say (Kvale, 1996). The design of semi-structured interviews allows each participant to respond to a set of similar questions. This is important if the goal is to make comparisons across individuals or groups of individuals.

Data Collection Procedure

Surveys: Participants completed weekly surveys, distributed at the conclusion of each book study session (See Appendix A). They were told to complete the surveys privately so that the location would not affect responses and so there would not be a threat to internal validity. This was to prevent instrument decay that can occur if participants get tired or feel rushed (Creswell, 2002). Participants were told to return the completed surveys to the researcher's mailbox within three days. They also completed a survey after all 8 of the book study sessions were finished (See Appendix B).

Interviews: Each of the 15 educators participated in a semi-structured private interview at the end of the book study with the researcher. The interviews were to gain a more in-depth understanding of the teachers' perceptions of any changes in their teaching or school, and to learn why they thought changes occurred.

In the interviews, the researcher initiated the conversation, presenting each topic by means of specific questions, and then decided when the conversation had satisfied the research objectives. The interviews were set up to collect qualitative data by allowing participant's time to talk in detail and depth about their opinions and practices of the book study experience. Open ended questions were designed by the researcher, yet some additional questions arose naturally during the interview, for example, "You said a moment ago...can you tell me more?" The researcher recorded notes from these interviews in her researcher's notebook and Xerox copied for the participants to review and keep (See Appendix C).

Member checks were utilized with the interview notes. According to Lincoln and Guba (1985), member checks are a strategy to increase the credibility of findings and to empower participants; therefore, a copy of the researcher's notes was made for each educator following the interview. The educators were asked to make corrections, if there were any, and to provide feedback to increase the credibility of findings and to let the teachers know their help was needed in the research process. Only one participant had corrections. The error was corrected and shared again with that individual to ensure accuracy.

Book Study Logistics: All of the middle school educators met for a 70 minute book study one afternoon each week for eight weeks. They agreed that the goal of their book study was to gain a deeper understanding of literacy and

how it applies to their own teaching context. Their middle school literacy coach facilitated the book study with Donalyn Miller's *The Book Whisperer* as their selected book. This book, written by a social studies and language arts teacher, was chosen by the administrators, the language arts teachers, and the literacy coach so the faculty members could examine Reader's Workshop, a style of teaching reading to students that was not currently being used at their middle school. The teachers were not paid to participate in the book study; however, they were able to log the time spent after school toward their contractually required PD hours.

Book Study Ground Rules: At the beginning of the first book study session, the literacy coach suggested the educators establish ground rules to follow during the weekly book studies to keep a respectful and professional environment. The educators agreed to respect others when talking and to speak from their own experience instead of generalizing ("I" instead of "they," "we," and "you"). They agreed to challenge respectfully one another by asking questions, but to refrain from personal attacks; this allowed them to focus on the ideas. The participants believed each educator should participate to his/her fullest ability because growth would depend on the inclusion of every individual voice. Another established ground rule was for participants to be conscious of body language and nonverbal responses because both forms of communication have the potential to be just as disrespectful as words.

In the Book Study: The book study began each week with the educators sitting in a large circle, facing one another. The literacy coach summarized the chapter the participants read and reflected upon, and then randomly broke the large group into small groups of 4-5 people for discussion and application.

Questions were provided for the small groups to use as discussion starters each week. They included a few scenarios to help the educators reflect and connect practical applications back to their own classrooms (See Appendix D). The educators interacted and shared thoughts and ideas with each other in small groups during the book study sessions. Some of the educators brought their notes, reflections, and questions about their readings to their small group conversations each week. The literacy coach rotated around from group to group, listening in on the conversations and sharing her personal perspective only when asked.

Each session ended with the educators returning to the large circle where the small groups shared their thoughts and opinions with the whole group and added any further discussion. Items the educators felt they needed in their classrooms to include literacy were listed on chart paper. Unanswered questions or additional thoughts for discussion were written down for next week. The literacy coach reminded participants of the next reading assignment and then the survey was handed out.

Data Analysis

Data analysis consists of examining, categorizing, and recombining the evidence (Yin, 1994). According to Lincoln & Guba (1985), the essential task of categorizing is to bring together, into categories, data that relate to the same content. To analyze this study's data, the researcher used an coding process (Creswell, 2002). The data were read and reread as the researcher sought to identify segments of information in the data based on similarities, but also noting data not supporting emerging patterns. The researcher initially labeled these segments to create categories. Next, the researcher removed redundancy, which reduced the categories and recorded the number of times the detail appears in the categories.

Two methods of data collection were utilized. With data to analyze from the surveys and interviews, the researcher was able to have the data checked, or cross-examined, from two sources. For example, data collected from the surveys was checked against the interview data for verification.

Next, the most important categories, based on similarities, were identified to determine the themes. Member checks of the researcher's data analysis were then conducted to ensure accuracy, credibility, and validity. Each participant was anonymously asked to read the findings of that data analysis and to affirm that the findings reflected their views, feelings and experiences, or to disaffirm that the findings reflect these experiences. All 15 participants agreed with the researcher's findings.

Results

The results of the data analysis suggest the book study was meaningful and had a positive impact on the 15 educators. All 15 participants claimed the book study experience had a positive effect on their work with students and on their school in general. Additionally, they noted improved collegial relations, as they appreciated and enjoyed the time spent with colleagues, learning together about literacy—and each other.

The researcher identified three themes from the data that represent how the teachers' perspective and belief about reading changed. These themes were 1) increased literacy instruction, 2) additional student self-selected reading opportunities, and 3) supportive attitudes toward reading.

Theme #1: Increase of literacy instruction

In the surveys and interviews, all 13 teachers reported including more literacy instruction in their teaching. A main topic during the book study was incorporating literacy in all subject areas. Each week the teachers reflected, discussed and shared ways to include literacy in their own—and in other—subject area classrooms.

- Janet wrote, *“I’m not a literacy person so it was nice to learn of direct connections for my subject area. I am now using some literacy. I see how it’s important because of all of the examples shared in the book and by my colleagues.”*
- David said, *“I now use pictures with the vocabulary words. Next, I’m going to try the drama options suggested by Rachelle. I think my students could get into that without getting off task and it can help make my content more meaningful.”*
- Lynn said, *“I never thought about it before, but science words are full of Greek and Latin roots. Now I am teaching roots to my students. So many words contain them it really opens up the door to knowing hundreds of other words, many are science related.”*
- Aaron said, *“It’s odd to reflect on it now, and I’m embarrassed to even say this, but I did not even know what Read Alouds were before this book study began. I’ve found some very interesting articles, mainly online, that I’m bringing in and reading aloud to my students. It’s actually a great way to complement my subject area instruction.”*

While all of the teachers stated they have changed their teaching to include more literacy, the biggest change shared was with the two language arts teachers. Savannah and Ann shared that they totally revised their literacy programs. They now use a Reader’s Workshop approach to reading instruction as highlighted by the book used in the book study. They no longer require all of their students to read the same book at the same time. One of the language arts teachers said, “My room, my teaching style—they don’t even resemble what I used to do at all! What I’m doing now is totally different.” Savannah said her students were making progress and were reading like never before. She said that the book study gave her the courage and support to change her teaching and to try something brand new.

Theme #2: Encouragement of self-selected student reading

All 15 participants noted an increased amount of student self-selected reading. The administration purchased trade books of high interest for the subject area classrooms based on the teachers’ recommendations in the book study. This was to encourage more self-selected reading and so that the students could have a variety of interesting, high quality reading material to complement the topics and issues they were studying in the subject areas.

Nine of the teachers mentioned in their surveys or interviews the students prefer the books available in the classrooms instead of what is available in the school’s library. Ann said, *“Students come from study hall—located in the school library, to my classroom to pick out books. It’s a shame that my library is now better than the school’s library, but it is.”*

The educators believed the amount of time students spend reading has increased. One administrator said, *"I stopped by a teacher's classroom and observed the class reading. Everyone reading would not have happened before taking on this new philosophy, started through our book study."* A teacher confirmed this. *"There's definitely a lot more reading during downtime. I observe students actively participating in reading and book discussions on many occasions since the book study started. I also see and hear our teachers engaging students in one-on-one discussions about what the students are reading and helping them make connections."*

One teacher wrote, *"They talk about books, ask me for recommendations and ask me what I'm reading now. They fight over books and beg for reading time. It's great to have books available for our kids this year."* Another teacher noticed, *"The students are definitely reading more and I've noticed an improvement in several students' reading abilities."* Another teacher remarked, *"My students are suggesting so many books to me that I don't think I will be able to keep up and read everything they are telling me I must read!"* An administrator said, *"Reading really caught on and took off since the book studies began. It's motivating—not just for the students, but for the teachers too."*

The teachers noticed the students' active engagement in self-selected reading. Chloe said, *"Before participating in the book studies if someone was reading during my class, I would tell them, 'Put that away!' and that was it. Now, because I understand the importance of reading and I don't want to stifle it, I say things like, 'This isn't the time for reading, but what are you reading? Do you like it?' I also informally share with them what I am reading outside of school so they see me as a role model for reading too, even though I'm not their language arts teacher."*

David shared that he has short amounts of silent reading time in his classes now and he discusses with his students the books they are reading. He said that he believes his students are enthusiastic about reading and are getting a lot out of it. Janelle agreed by writing, *"We now expect students to always carry books with them. We never did that before."*

The school's two special education teachers reported their special needs students were more motivated and were reading more books than they had read before. *"These students are asking if the school will buy more books like these new ones (motivating books for reluctant teen readers). It's exciting and really motivating! My students are reading in ways they had not been reading previously,"* said Aaron.

Randy said, *"You now see students stopping to chat with teachers about the books they are reading while changing classes."* A teacher interviewed stated: *"I was in the grocery store and a student came rushing up to me to tell me about the book she had just finished."*

Reports of increased student self-selected reading, and the teachers' motivating and supportive attitude toward reading was evident throughout the study.

The data indicated students were given more books to choose from, more time and places to read and more teacher support of reading than before the book study occurred.

Theme #3: Supportive attitude toward reading

According to the data, all 13 teachers claim the eight-week book study was instrumental in changing their practice to include more literacy and to allow for self-selected student reading. The data also indicates the educators improved their attitudes toward reading and in understanding the importance of including literacy in their classrooms, regardless of the subject area they taught. One teacher interviewed said, *“I believe now that I have a responsibility to include literacy in my classroom. I really did not before we came together like we did.”* Two different teachers interviewed commented:

- The book study allowed us, for the first time—really, to sit down and discuss educational philosophy and approaches. We are so busy we just do not have the time to do that. I hate to say this forced us, but it did—in a positive way though, to come together, to think and to talk deeply about our students’ education.
- I must admit I really was not looking forward to staying after school to learn about reading at all. I didn’t think it would apply to my subject area—and a lot of it didn’t directly apply, but it got me thinking and understanding why literacy is important for all teachers to include. It was a great experience in many ways. I learned what my colleagues are doing in their classrooms and why. And, actually, found myself applying what we were discussing in my classroom too.

One administrator wrote, *“Change was needed. The book study brought in that fact. The teachers realized that their ways of doing things were not working. My teachers are more willing to open up and try new things now. They are making changes, and encouraging and supporting each other.”* This administrator also noticed that teachers were talking about the book study book in the teachers’ lounge on many occasions.

Teachers found the time spent working together during the book studies helpful for changing their attitude toward reading. Teachers reported the book study helped them become supportive of reading and why it is important to include literacy instruction in their classrooms, regardless of their subject area.

Limitations

In this qualitative research study, the collected and analyzed data presents a portrait of changes in the middle school teachers’ perceptions and beliefs due to the book study PD. In qualitative research, the primary instrument is the researcher;

hence, the research is only as good as the investigator. All data analysis and interview interpretations are subject to the background, worldview, and perspective of the researcher. Therefore, the researcher brings outside filters to the research situation, which interacts with other people's constructions or understanding of the phenomenon being studied (Merriam, 1998). In addition, this was done in a small rural Midwest town with only 15 participants that were seventh and eighth grade teachers. Finally, this study did not have triangulation, as only two sources were used. Therefore, another data source may add more information or change some of the data information. Finally, the results may vary in different settings and at different grade levels.

Discussion

In order for educators to take full advantage of book studies for PD, they needed to have a structured and organized plan for coming together and talking about the book and sharing ideas for instructional improvement (Burbank, et al., 2010). This structured PD had a profound impact on all the educators, which supports the idea that professional book studies do help bring about the necessary changes needed in teachers' perceptions, beliefs, and teaching practices (Goldberg & Pesko, 2000).

In addition, book studies provide a rich social environment that facilitates sharing opportunities, peer support, and a sense of belonging. This book study PD caused an improvement in faculty relations while also creating a supportive model to encourage teachers' to change their views and instructional practices.

Furthermore, it showed these educators the power of independent reading with a self-selected book and the importance of creating an inviting atmosphere where students have immediate access to a variety of books (Galda & Graves, 2007; Graves, Juel, Graves, & Dewitz, 2011; Sanacore & Palumbo, 2010; Tompkins, 2010; Vacca, Vacca & Marc, 2010). When students are involved in reading self-selected books, literacy skills increase (Tompkins; Vacca, Vacca, & Marc). Thus, allocated time for independent reading in classrooms is vital.

Future Research

The results in the present study can help direct future research. Because this study focuses on one small, rural middle school, future studies can look at utilizing similar types of book studies at elementary or high schools, or with educators working in urban settings or in larger school settings. In addition, book studies can offer low cost PD in other schools as well. Could an educator in the school effectively lead book studies without a literacy coach? Does the selection of book need to be a professional reading to have an impact on the participants? Could book studies be held effectively during lunch breaks instead of after school?

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Appendix A

Weekly Book Study Survey

Please complete this survey at your leisure then fold it, staple it closed, and return it to the researcher's mailbox, located with the teachers' mailboxes in the office, within three days. Remember, you do not need to complete this survey or to answer every question; however, your opinions are very much appreciated. If you have any questions regarding your rights as a research participant, please contact the Chair of the Human Subjects Review Board. Thank you for your consideration!

1. Did today's book study session meet your needs? _____ Explain why or why not.
2. Describe your book study experience today.
3. Did you learn anything new? If so, what?
4. Have you made any changes to your teaching practices as a result of the book studies? Explain.
5. Have you noticed changes in your students' reading since beginning this book study? If so, why do you think you are seeing changes (or not seeing any changes)?
6. Please share any other thoughts, comments, or suggestions you may have.

Appendix B

End of Book Study Experience

Please complete this survey at your leisure then fold it, staple it closed, and return it to the researcher's mailbox, located with the teachers' mailboxes in the office, within three days. Remember, you do not need to complete this survey or to answer every question; however, your opinions are very much appreciated. If you have any questions regarding your rights as a research participant, please contact the Chair of the Human Subjects Review Board. Thank you for your consideration!

1. If you've made any changes in your instruction, since the Book Study began, please explain what you've changed.
2. If you've made any changes, why do you believe you made them?
3. If you've made changes, why do you believe (or do you not believe) they have made a difference for your students' learning?
4. If you've not made any changes in your instruction, in regards to the inclusion of literacy since the Book Study began, explain why not.
5. Tell how the book studies were (or were not) helpful to you as an educator.
6. Did the book studies meet your needs as a subject area teacher? Why or why not.

Please share any other thoughts, comments, or suggestions you may have.

Appendix C

Interview Question Set for Semi-Structured Interview

Listed below are interview questions. They will be used for our interview scheduled for ____ am/pm on ____ day, the ____ day of _____. We will meet privately in the _____. I estimate this interview will take about 20-45 minutes. Throughout our interview, I will take notes on this sheet. At the end, I will Xerox this sheet with my notes on it and give you a copy to review and keep. Please let me know if there are any corrections that need to be made. I will be happy to do so! Remember that you do not need to answer any or all of the questions. If you have any questions regarding your rights as a research participant, you can contact the Chair of the Human Subjects Review Board. Thank you for agreeing to meet with me and for sharing your thoughts! I look forward to hearing from you!

1. How have things been going in terms of incorporating literacy into your instruction?
2. If you've made any changes in your instruction, since the book study began, tell me what you are doing now that you were not doing before.
3. If you've made changes, why do you believe (or do you not believe) the changes have made a difference for your students' learning.
4. If you've not made any changes in your instruction, since the book study started, tell me why not.
5. If you've noticed overall changes in your middle school's students, tell me what you've noticed.
6. Explain how the book studies were helpful, not helpful, or both to you as an educator.
7. Was the book study valuable professional development? Why or why not.
8. Please share any other thoughts, comments, or suggestions you may have.

Appendix D

Sample Reflection and Discussion Questions for Today's Book Study (Session #1)

Remember, you do not need to discuss any or all of these questions. They are provided simply to get you thinking and discussing the chapter. Please revisit our established ground rules before beginning your discussions. Thank you

Chapter One, *The Book Whisperer* by Donalyn Miller

Donalyn Miller talks about books connecting her to the most important people in her life (p. 9). Do you have readers in your life? Who are they and why do you classify them as the readers?

“I will never climb Mt. Everest, but I have seen its terrifying majestic summit through the eyes of Jon Krakurer and Peak Marcello. Going to New York City for the first time was like visiting an old friend I knew from E. L. Konigsburg’s “From the Mixed Up Files of Mrs. Basil E. Frankweiler.” Do you agree with Donalyn Miller’s belief? Have you had similar experiences?

Miller states, “I know from personal experience that readers lead rich lives, more lives, than those who don’t read.” (p. 11) Do you agree or disagree with her statement? How might this apply to your students and your classroom?

Donalyn Miller believes students need choice for their self-selected reading. Do you agree students need choice in the books they read? If so, how do—or how could—you allow student choice in your classroom, what about in other classrooms with different subject areas than your own?

A PROFESSIONAL LEARNING COMMUNITY IMPLEMENTS FORMATIVE ASSESSMENT IN MIDDLE SCHOOL LANGUAGE ARTS CLASSES

Roberta Linder

Wittenberg University

Abstract

This article describes the implementation of a Professional Learning Community (PLC) that involved a university faculty member working with middle school language arts teachers to engage in the study of formative assessment. The investigation identified several factors that contributed to the successful establishment of the group as well as challenges noted by the researcher. The members of the group engaged in active participation that involved changes in their instructional practices and collaboration among the members.

Marian is a veteran teacher with 28 years of teaching experience in the elementary school. Her experience with professional development during her career has included district-sponsored workshops and attendance at one-day conferences. She has tried some of the ideas in her classroom, but nothing has seemed to work for her and her students.

Donald is a middle school language arts teacher who has been teaching for 12 years. He is active in his state's professional organization and enjoys using a variety of creative, high-interest learning activities with his students. However, he would like to learn more about teaching students with special needs and methods to help his students expand their vocabulary knowledge.

Tonya is a novice teacher who has recently joined the English department at an urban high school. Her primary source of knowledge is based on her college course work and related field experiences, but now she would also like to learn from her fellow English teachers.

These descriptions are representative of the breadth of experience and knowledge present within groups of educators, whether at the school or district level. Confronted with such a diverse group of learners, how can professional development effectively address the needs of today's classroom teachers? Tra-

ditional methods, such as workshops, have been mostly ineffective in producing long-term effects in teachers' pedagogy or students' performance (Schmoker, 2005). Other types of professional development, such as attendance at professional conferences, have been curtailed or eliminated in school districts due to budget cuts.

This article describes the implementation of a Professional Learning Community (PLC) involving a university faculty member, district curriculum coordinator, and a group of middle school language arts teachers. The review of the literature first addresses the elements of effective professional development, defines PLCs, and examines studies of PLCs involving literacy topics.

Review of the Literature

Effective Professional Development

Effective professional development impacts teachers' thinking and pedagogy in ways that, in turn, improve student learning and researchers have sought to identify the qualities of effective professional development. Based on the results of their nationwide survey and case studies, Berman, Desimone, Porter, and Garet (2000) learned that the structural features (i.e., form, duration, and participation) and the processes (i.e., content focus, active learning, and coherence) of professional development were key elements that influenced the knowledge and skills of the participating teachers.

From their review of the literature, Anders, Hoffman, and Duffy (2000) identified six features that characterized quality inservice teacher education:

- (1) establishing intensive/extensive commitments;
- (2) monitoring/coaching/supporting teachers;
- (3) reflecting on practices while moving toward change;
- (4) deliberating, dialoguing, and negotiating;
- (5) participating voluntarily; and
- (6) collaborating among different role groups.

Additional literature provides support for the consideration of these elements in planning professional development, particularly the need for long-term, sustained professional development (Kennedy & Shiel, 2010) and a strong focus on deepening teachers' content knowledge (Borko, 2004; Jetton, Caciennne, & Greever, 2008; Kennedy & Shiel, 2010; Wayne, Yoon, Zhu, Cronen, & Garet, 2008). Specific to the field of literacy, Bean and Morewood (2007) suggests four promising approaches for professional development: (1) literacy coaching, (2) communities of learners, (3) teacher research, and (4) online courses/experiences. All of these incorporate various aspects of effective professional development.

Professional Learning Communities

Professional learning can be found replacing the traditional term of professional development in some contemporary literature related to educating inservice teachers. The National Staff Development Council (Learning Forward, 2011) and the International Reading Association (2010) have developed standards related to *professional learning*, and both sets of standards make reference to the element of collaborative learning among groups of professionals. Professional Learning Communities (PLCs) are a form of professional development that emerged in the 1960s as a means to promote collaboration rather than isolation among teachers (Schmoker, 2005). Stoll, Bolam, McMahon, Wallace, and Thomas (2006) describe a PLC as “a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way” (p. 223). The members of PLCs seek to increase their knowledge and share their learning with each other, and their participation in the PLCs enhances their effectiveness and, ultimately, benefits their students. The term *community* implies that the members of the group share a common set of beliefs and understandings, encourage interaction and participation, and are willing to consider each other’s’ viewpoints (Stoll et al., 2006).

DuFour (2005) has identified three foundational ideas that represent the core concepts of PLCs. First, the PLC is focused on student learning, guided by identifying what students are to learn, how teachers will know that students have learned, and what they will do when students struggle with learning. Second, PLCs develop a culture of collaboration in which they work together to systematically analyze and improve their classroom instruction. Third, PLCs focus on results, seeking to increase student performance by continually examining evidence of student achievement and setting goals for improvement. Based on the results of their study, Stoll et al. (2006) identified these characteristics of effective PLCs:

- Shared values and vision
- Collective responsibility
- Reflective professional inquiry
- Collaboration
- Focus on group and individual learning

They also noted that mutual trust, respect, and support among the group members, and an inclusive membership contributed to the effectiveness of the PLCs.

Research involving PLCs has provided evidence related to changes in teacher practices and changes in students’ performance. Borrero (2010) reported that monthly workshops led teachers to feel a sense of camaraderie with colleagues, connection to their schools, ownership for the content of the workshops, and increased analysis of their student data. Jetton, Caciene, and

Greever (2008) determined that the high school teachers in their study became more confident in implementing new literacy instructional strategies through the use of a coaching model. Another group of researchers (Linder, Post, & Calabrese, 2012) indicated that the teachers in their PLCs were increasing their content knowledge in mathematics and literacy instruction and were beginning to implement new instructional strategies in their elementary and middle school classrooms. Dallas (2006) found that the sixth grade teachers in an urban middle school implemented changes in their classroom literacy instruction, and the students' scores on a standardized reading test showed a modest gain for the first time in six years. Also in an urban setting, Kennedy and Shiel (2010) reported that the teachers demonstrated increased expertise and self-efficacy in their literacy instruction and raised their expectations for student achievement. In turn, the students became more strategic readers, became more motivated, and improved their reading, spelling, and writing. Thompson, Gregg, and Niska (2004) reported that principals and teachers in the PLCs of three urban and three suburban middle schools valued their shared vision, emphasis on team learning, and the relationships and trust that had developed. They also noted that achievement scores for their students were showing steady improvement.

Background and Purpose of the Study

During the 2010-2011 academic year, three faculty members in the Education Department at a small, liberal arts university in the Midwest utilized money from a congressional appropriations grant in order to establish partnerships with area schools. In August, 2010, the faculty members met on campus with superintendents and district curriculum coordinators to describe the concept of PLCs and distribute proposal packets for each district. Proposals were received from neighboring districts, and in September each faculty member selected one that aligned with her research interests and areas of expertise: the author's background aligned with middle school, a second faculty member led a math PLC, and the third facilitated a PLC investigating the effects of poverty on students' learning. At an October middle school faculty meeting, the author made a presentation about the formative assessment group that would be formed at that building and encouraged teachers to attend the first meeting two weeks later.

The middle school formative assessment group began meeting in October, 2010, continued through the remainder of the school year, and met several times during June and July, 2011. The members of the PLC identified students' comprehension strategy use, background knowledge, vocabulary, and writing skills as areas they hoped to strengthen through the use of formative assessment. During their fall semester readings, one article in particular resonated with them, the study by Andrade, Buff, Terry, Erano, and Paolino (2009) in which

they described their use of the *6 Traits* instruction and formative assessment with sixth, seventh, and eighth grade students. As a result, during the spring semester the group members began familiarizing themselves with the *6 Traits* of writing (Culham, 2010) due to the central role of formative assessment in this writing framework. In addition, the text by Benjamin (2008) provided them with a formative assessment tool, the Chapter Keeper, which they implemented in their classrooms during the spring semester (see Appendix A). The *6 Traits* writing framework addressed their need for a more systematic approach to teaching and assessing writing and the Chapter Keeper was a flexible format that was used to assess a variety of student understandings (e.g., summarizing, vocabulary, and writing).

The purpose of this study was to investigate the effectiveness of the PLC as a model for establishing university-school partnerships and to document the learning of the faculty member and the teachers in the PLC. These questions guided the researcher during the implementation year of this middle school Professional Learning Community.

1. What factors contributed to the successful formation of a Professional Learning Communities (PLC) focused on formative assessment in middle school language arts classes?
2. What learning took place among the school and district personnel participating in a PLC focused on formative assessment in middle school language arts classes?
3. What insights did the university faculty member gain related to implementing a PLC and forming a university-school partnership with middle school language arts teachers?

Methods

The researcher employed an intrinsic case study design (Stake, 1995), seeking to learn about this PLC of middle school language arts teachers. The study was conducted between October 2010 and July 2011.

Context and Participants

The formative assessment PLC met in the only middle school of a rural school district located in central Ohio. The middle school housed approximately 750 students who were predominantly White, non-Hispanic (89.2%) and Hispanic (7.6%). Over 44% of the students were categorized as economically disadvantaged and almost 15% were identified as students with disabilities. Results from 2010 state testing in reading indicated that grades 6, 7, and 8 all exceeded the state requirement of 75% of the students scoring proficient or above (Ohio Department of Education, 2010).

The PLC consisted of four female teachers: a language arts teacher from each of the three grade levels and an intervention specialist involved in language arts instruction. The district curriculum coordinator also attended the PLC and provided her office as the meeting site for the PLC. The researcher chose to work with this group due to her interest and expertise in middle level education and assessment. She served as the facilitator for the group, providing professional articles and texts for readings, guiding discussions, and taking notes at each session. The PLC began its after-school meetings in October, 2010 and met bi-weekly through May, 2011. The sessions were generally one hour to one-and-one-half hours in length and included discussions about the readings, discussions about formative assessment implementation and use in the classrooms, sharing of student work samples, and planning for future investigation.

Data Collection and Analysis

Multiple sources of data were collected throughout the 10-month implementation of the PLC, providing triangulation (Stake, 1995). Data sources included teachers' artifacts related to the implementation of the formative assessment strategies, mid-year and end-of-year written feedback from the members of the PLC, and field notes of the researcher. In addition, the researcher took notes at each of the meetings, and then sent them electronically to the members of the PLC for review, providing for member checks of her recorded information. The mid-year progress check consisted of five open-ended questions to which the participants responded at their meeting in February 2011: (a) What formative assessment(s) have you tried so far? (b) What has worked well for you? (c) What have you changed or would you like to change? (d) Which areas (listed above) have been addressed with formative assessment? (e) What would you like to try next?

The end-of-year feedback consisted of a survey instrument that was designed to elicit responses from the members of the PLC. The surveys were completed at the final meeting of the PLC in May 2011. The participants first rated seven components of the PLCs on a scale of 1 to 5, indicating the degree to which they valued each component. They were also provided with a space for adding comments supporting their ratings. These seven components were rated by the participants:

- Reading and discussing journal articles
- Reading and discussing book chapters
- Selecting, implementing, sharing, and discussing results of activities
- Selecting and receiving new materials related to the PLC's selected topic
- Meeting on a regular basis
- Being able to study a selected topic in depth
- Having the assistance of a university faculty member

In addition to the ratings, the survey included four open-ended questions that addressed the strengths and weaknesses of the PLC as well as identified future directions for the PLC:

- What part(s) of the PLC were most beneficial to you?
- What changes could be made to improve the PLC?
- What do you see as the next steps for this PLC?
- Are there other topics you would like to investigate?

Due to the small number of participants and lack of variability in their ratings, the quantitative data from the end-of-the-year survey were simply tabulated and analyzed. The qualitative data from participants' mid-year and end-of-year comments along with the notes from the meetings and the researcher's field notes were analyzed throughout the study using the constant comparative method (Glaser & Strauss, 1967). Through open coding of these documents, the researcher identified categories and themes that described elements essential to the successful formation of the PLC as a form of university-school partnership. Analysis of data from teachers' artifacts, notes from the meetings, and the researcher's field notes yielded information about the learning that occurred among the school and district personnel participating in the PLC.

Results

Factors Contributing to the Successful Formation of PLCs

Feedback from the participants at mid-year and at the end-of-year as well as the field notes of the researcher provided the data related to the first research question. A mid-year progress check gathered feedback from four participants in February. All four PLC members responded that they had tried Chapter Keepers by this time, and individual teachers had implemented exit slips (e.g., a 3-2-1 exit slip: List 3 types of point of view, List 2 ways to categorize characters, Name the protagonist in 1 book you have read), used more rubrics and rewrites, and tried peer editing. Three participants indicated that they were interested in implementing the traits of writing, and one teacher wanted to have her students complete Chapter Keepers as they read their books for Accelerated Reader. The responses from the teachers documented that they were expanding their pedagogical practices and were still focused on areas of need they initially identified in October and November.

The results of the survey completed by all five of the participants at the end of the school year provided support for the implementation of the PLC as a form of professional development. Of the seven components rated by the participants, only "Reading and discussing book chapters" received two ratings of 4 and three ratings of 5 from the PLC members. The remaining six components received ratings of 5 from all participants indicating that these components were highly valued. Participants also offered these comments in support of their ratings.

- The collaboration was really meaningful. Teachers commented on how much they enjoyed having time to talk and share ideas.
- I liked the dedicated time to explore, plan, evaluate new practices.
- Can't wait to utilize mentor texts.
- Results and sharing were vital to the success of our group.

Responses to the open-ended questions further supported the participants' appreciation for the collaborative aspect of the PLC, the materials they obtained to support their classroom instruction, and the professional discussions that centered on the topic of formative assessment. They indicated that they would eventually like to include additional language arts teachers, perhaps teachers from other buildings. The group members commented that they wanted to continue to focus on the topic of formative assessment, and they were interested in implementing *6 Traits* writing, developing tests and rubrics, collecting data related to student performance, and perhaps adding more formative assessment tools.

As identified in the mid-year progress check and the ratings and comments on the end-of-the-year survey, factors critical to the formation of this PLC were their shared commitment to the implementation of formative assessments and *6 Traits* writing, their willingness to change their teaching practices, and the collaborative aspect of the group. In addition, the group was moving toward more data-driven evaluation of their students' performance and their teaching effectiveness.

Learning Among School and District Personnel

Teachers' artifacts related to formative assessment, notes from the PLC's meetings, and the researcher's field notes provided documentation related to the second research question. During the spring 2011 semester, the PLC implemented Chapter Keepers (Benjamin, 2008) into their instruction and began learning about *6 Traits* writing. The Chapter Keepers were implemented and evaluated by all the members of the group. Each of the three language arts teachers designed and utilized the tool differently, adapting it to the levels and needs of her students. In discussions during the PLC meetings, the teachers shared the ways they had modified the Chapter Keepers, brought student samples demonstrating a range of understanding and completion, and commented on the ways they were scaffolding the students by modeling responses, using samples of students' actual work, and allowing students to revise and resubmit. The teachers observed that students initially located easy vocabulary words and short quotations from their texts, but the instruction they provided based upon students' responses guided them to record memorable quotes and vocabulary words that were more substantive. The teachers discovered that the Chapter Keepers were easier to use when the students were doing a novel study rather than doing independent reading because teacher demonstrations could focus on a single text and the

students would all be familiar with the content of the text. Also, they used the Chapter Keepers with some, but not all, chapters in the novels so students would not become bored with using the tool. In addition, the teachers noted that the Chapter Keepers encouraged student discussion, particularly related to students' selections of memorable quotes and vocabulary words.

During the spring semester, the teachers began learning about the *6 Traits* writing framework and scoring rubrics. They read selected chapters from the *6 Traits* text for middle school (Culham, 2010) and attended a short after-school workshop provided by a reading specialist from a neighboring district. Due to the spring state testing, the teachers became focused on having their students write extended responses for the reading test. The group selected a common test item that they all gave to their students, and they discovered that the content of the reading selection was too difficult for many of the students, particularly for the students with special needs, and the *6 Traits* scoring was not a good fit for evaluating extended response writing. Instead, they felt that the scoring for extended response writing would be based more on the written response adequately addressing the parts of the prompt rather than demonstrating writing traits such as voice, word choice, or sentence fluency. Instead, they planned to use the *6 Traits* rubrics when scoring students' narrative writing pieces. In summer meetings, the group decided to use a common assessment for students' writing at the beginning and end of the 2011-2012 school year. The prompt selected for the writing was, "Write about an object that is important to you. Describe it and tell why it is important," and students' essays were going to be scored in two different ways: using a holistic *6 Traits* rubric to score the writing traits and a checklist to score the students' ability to respond to the prompt. See Appendix B for the scoring tool that was developed for this common assessment.

Insights Gained about PLC Implementation and Partnership Formation

Responses on the end-of-the-year survey provided the researcher with feedback regarding her contributions to the implementation the PLC. First, all members of the PLC indicated in their ratings that they highly valued the assistance of a university faculty member. It was important to the researcher to determine whether or not she was meeting the needs of the group and establishing a viable working relationship with them. Next, comments written by the participants identified specific qualities they valued: responsiveness to teachers' needs and requests, knowledge and access to resources, and an understanding of what was reasonable to expect from working students. The members of this PLC valued a university faculty member who was able to bring her content knowledge to their group and apply her knowledge of working with adult learners.

The researcher's notes from the meetings and field notes recorded throughout the study documented the learning of the PLC members and also identified a number of challenges encountered in implementing and leading a PLC. First,

the researcher had to establish a relationship with the members of the PLC. This was consistent with findings of Stoll et al. (2006) that although mutual trust is a characteristic of an effective PLC, it is developed slowly over a period of time. Second, although the group had established a meeting schedule for the spring semester, regular attendance at meetings and cancellations due to inclement weather affected the PLC. Implementation of selected activities (e.g., the common extended-response reading and writing prompt) and rescheduling of meetings were difficult due to participant's full schedules, both within and beyond the school day. Third, attempting to add participants to the group during the second semester was not successful. Two additional language arts teachers joined the group during February and March for several sessions, but they did not finish the semester with the PLC. Fourth, prior to the state testing in April, teachers became more concerned about student performance on the state tests. They questioned whether or not the changes in reading and writing they had implemented or planned to implement would have an impact on students' test results. As a result, the group shifted its focus to the extended response portions of the state reading test. The group remained interested in the improvement of their students' writing, but now their instructional decisions were influenced by the mandated testing.

Throughout this study, the participants in the PLC increased their knowledge about formative assessment through their initial readings and discussions in the fall. During the spring, they experimented with various formats of Chapter Keepers and determined which formats worked best for them and their students. The participants also began reading about the *6 Traits* writing framework and learned that it did not meet their needs when scoring extended response writing. During the summer, the members of the PLC extended their knowledge about *6 Traits* writing and selected a common writing prompt that they were going to administer and score at the beginning and end of the 2011-2012 school year. The researcher learned that her contributions to the PLC were her selections of journal articles and other texts for the group, her knowledge of middle school language arts instruction and assessment, and her ability to work with adult learners. However, there were challenges in facilitating the group related to gaining the trust of the group, expanding the size of the group, and reacting to the pressures of state testing.

Limitations

Two limitations need to be acknowledged in relation to this study. First, the number of participants was small and the context was unique to the location of the study. As a result, findings may not generalize to other professional learning communities. Second, the data collection included the use of a survey instru-

ment that relied on participant self-report. In assessing professional development, participants' responses on survey instruments may overrate elements of the professional development because comments have a tendency to be more socially desirable than accurate in their reporting (Desimone, 2009).

Discussion

The results of this study investigating the implementation of the middle school PLC supported previous research and scholarship on professional development and professional learning communities and embodied several elements of effective professional development and PLCs. First, the members of the PLC were voluntary participants, and the group met consistently throughout the school year and into the summer, providing professional development that was long-term and sustained over time (Berman et al., 2000). Second, the content of the PLC's meetings was focused on their subject area of language arts, and the members of the PLC highly valued having the opportunity to have regularly-scheduled professional conversations with their colleagues and share the results of their new instructional practices (Anders et al., 2000; DuFour, 2005; Stoll et al., 2006). Because this PLC involved a school/university partnership, it also engaged the members in collaboration among different role groups (Anders et al., 2000). In addition, the teachers appreciated the resources that were provided, enabling them to increase their knowledge about formative assessment and *6 Traits* writing.

Two outcomes of this study were in contrast to the literature on professional development and PLCs. Although Stoll et al. (2006) reported that an inclusive membership is a characteristic of an effective PLC, this PLC was not successful when attempting to include additional language arts teachers during the spring semester. This may have been due to the fact that the teachers were joining the group several months after it had been established, or it may have been because neither of the two teachers was able to commit to attendance at all of the meetings, thereby not fully integrating into the group. Second, the members of the group generally maintained a focus on their subject area content (Borko, 2004; Wayne et al., 2008), but abandoned their work on integrating *6 Traits* writing into their classroom instruction as they neared spring testing time. Test preparation became the main topic of several spring meetings.

This study identified several factors that were critical in the implementation of this PLC. The teachers and curriculum coordinator increased their knowledge of formative assessments and *6 Traits* writing, and the researcher has learned about the rewards and challenges of facilitating a PLC. The members of this group have continued into their second year of professional learning, and they are continuing to examine their teaching practices and the ways they impact student performance.

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Appendix A
Example of a seventh grade Chapter Keeper
(adapted from Benjamin, 2008)

Write the following in your composition notebook.
The Chapter Keeper—*The Outsiders*, Chapter 4.

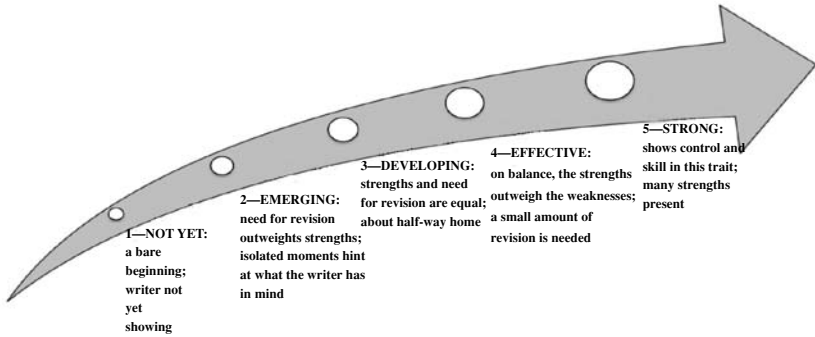
Name _____

A one-sentence summary of the chapter.

1. A question or observation you have about the behavior or thinking of the character(s).
2. A memorable quotation; provide a reason for your selection.
3. A memorable description.
4. A New Word: write the phrase in which it appears, your guess of its definition, and the dictionary definition that fits the context.
5. A Headline that encapsulates the chapter.

Appendix B

Rubric based on 6 Traits of writing (Culham, 2010)



Addressing the prompt

- _____ Addressed all parts of the prompt, essay well written
- _____ Addressed all parts of the prompt, essay not well written
- _____ Partially addressed the parts of the prompt
- _____ Did not address the parts of the prompt

UNDERSTANDING AND ADDRESSING CHALLENGES FACED BY SCHOOL- BASED LITERACY PROFESSIONALS: THE VIEWS OF DISTRICT LEVEL SUPERVISORS

Elizabeth G. Sturtevant

Kimberly M. Kopfman

George Mason University

Abstract

This paper reports a study in which district-level literacy supervisors described the roles of the literacy professionals in their districts as well as dilemmas they faced, ways the district supported their work, how roles were determined and had changed over time, and ways university preparation for reading specialists could more closely align with roles graduates were expected to fill. Participants included 9 district-level supervisors of reading/literacy representing almost all districts in a large region near a major east coast U.S. city. Participants completed lengthy open-ended surveys; data were analyzed qualitatively and with descriptive statistics. Findings included information on changing roles, differences in the roles of reading specialists according to grade level, and detailed information on dilemmas literacy professionals face as well as supports districts were implementing.

“Understanding the influence that literacy leaders have within the public school system is an important part of providing equitable education to all students” (Pratt-Fartro, 2009, p. 9).

Theoretical Framework

The roles of school-based literacy professionals have been studied from a variety of perspectives and found to vary greatly. Many roles have been advocated and many titles are in use (e.g., Reading Specialist, Literacy Coach, Reading Teacher), however, the term *literacy professionals* will be used throughout

this paper except where other terms were used in direct quotes or in the survey questions.

It is often unclear why particular literacy professionals have certain roles, who makes decisions about these roles, and what supports are provided or obstacles encountered in these professionals' daily work (International Reading Association, 2006; Sturtevant, 2003). Several studies have found, for example, that literacy professionals' time is often fragmented among numerous activities; in addition, many feel very isolated in their work, as often there is only a single literacy professional in a school (Calo, 2008; RAND, 2008). Other literacy professionals report difficulty gaining acceptance from classroom and/or content area teachers (Mraz & Sturtevant, 2011; Vogt & Shearer, 2011). Power relationships among various stakeholders such as teachers, principals, supervisors, superintendents and school boards may also have an influence on their workload (Ferguson, 2011).

The difficulties faced by school-based literacy professionals can have a serious and negative impact on their effectiveness in supporting excellent instruction and student learning. A recent article by L'Allier, Elish-Piper, and Bean (2010) that summarizes a decade of research on elementary school literacy coaching suggests that particular types of coaching activities, such as direct work with teachers, collaboration, and leadership, are important for improving student achievement. However, other time-consuming tasks often assumed by literacy professionals, such as organizing book rooms and managing school assessment programs are less clearly related to student learning. The authors note, "...literacy coaches must prioritize the activities they implement so that they focus on research-based practices associated with student achievement gains" (p. 552). In the face of numerous demands on their time and expertise, these professionals may need an infrastructure of support and guidance so that they can appropriately negotiate their job descriptions with their administrators. Indeed, having a supportive administrative system may be key to the success of school based literacy professionals (Guth & Pettengill, 2005).

Why Study the Views of District Level Supervisors?

While the studies described above, along with others (e.g., Roller, 2006) provide valuable insight into the roles of literacy professionals in schools, we need to know more about the contexts within which these literacy professionals work. The International Reading Association, in its *Standards for Reading Professionals* (2010) lists seven roles generally held by reading/literacy professionals working in school districts, ranging from "Education Support Personnel" to "Administrator" (defined as "principal, supervisor of instruction and curriculum, or superintendent" [Standards 2010, n. d.]). In our region of the southeast United States, school districts, depending on their size, often

employ supervisors with responsibility for oversight of their entire district's reading/literacy program or a portion of the reading/literacy program (such as elementary or secondary). Reading/literacy supervisors are generally housed in the central district offices. A large portion of their role includes working directly in the support of school-based literacy professionals, such as reading specialists and literacy coaches. In most cases, these supervisors are state-licensed K-12 Reading Specialists holding advanced degrees.

Few studies have been conducted of district level literacy supervisors. One of these (Pratt-Fartro, 2009) explored relationships between district level literacy supervisors and the school based literacy professionals in their districts, finding that supervisors often have substantial responsibility for working with these school-based literacy professionals and may serve as their advocates. Several case examples and published reports (e.g., Guth & Pettengill, 2005; Vogt & Shearer, 2011) have indicated that district supervisors can also influence the work of their colleagues in the schools through formal actions, such as writing job descriptions and making hiring decisions, or through informal actions, such as engaging in casual conversations with principals and school superintendents. They also can provide valuable support to school based literacy professionals through a variety of avenues such as holding regular meetings, making personal contacts, offering support when difficult situations arise, and providing professional development on topics specific to the role (such as data analysis or coaching). Little is known, however, about the perspectives of district level supervisors on the work of school-based literacy professionals and how this work can be enhanced and supported.

In their recent keynote address to the National Reading Conference, later published as a review of research on literacy coaching, Walpole and McKenna (2009) strongly suggested that future research on literacy coaching must be multi-level and multidisciplinary, since "coaching impinges on areas that have been traditionally peripheral to literacy research" (p. 30). Links between central office personnel and schools, for example, are frequently only studied through the lenses of scholars in educational leadership (e.g., Johnson & Chrispeels, 2010). Walpole and McKenna (2009) also advocate that researchers "must endeavor not only to describe the processes of coaching but to identify contextual elements that may facilitate or impede those processes in other settings" (p. 30). The contextual elements affecting literacy professionals at the school level clearly include district-level conditions and policies. District level literacy supervisors can help their school based colleagues as well as other stakeholders and scholars better understand this context.

In summary, while research has provided us with information on the multiple and complex roles of literacy professionals in schools from their own perspectives (e.g., Calo, 2008; Mraz & Sturtevant, 2011), and a few studies suggest links between particular aspects of literacy coaching and student achievement (L'Allier, Elish-Piper, & Bean, 2010) we need to know much more

about the contexts in which literacy professionals in schools work (Walpole & McKenna, 2009). Improvement in current conditions depends on obtaining a fuller understanding of a variety of issues that may impact schools and literacy programs, including how school based literacy professionals' roles are determined, dilemmas they face, and ways districts, universities, and others can support their work. We also need to know more about how and why policies related to literacy professionals' work may change over time. The purpose of this study was to explore these questions from the perspectives of nine district level literacy supervisors.

Methods

Background of the Project

This project emerged out of a partnership between a large state-supported university located near a city on the east coast of the United States and 11 school districts in the region. The school districts, as a group, serve a very ethnically diverse student population (over 300,000 total students) in urban, suburban and rural schools. The region is characterized by a high presence of families of military personnel and federal government employees as well as families from all over the world who have immigrated to the region. Over approximately 13 years, the university's literacy program has been providing master's level reading specialist preparation for experienced teachers in K-12 schools in the region, with approximately 45 graduates each year. These graduates typically are employed by local school districts, often shifting from classroom teacher to school-based reading specialist/literacy coaching positions after they earn their master's degrees.

The university's literacy program receives guidance for curriculum development from the state as well as from the International Reading Association (IRA) through its affiliation with the National Council for the Accreditation of Teacher Education (NCATE). In addition, an advisory board made up of the reading supervisors/coordinators (titles vary) from all of the local school districts as well as graduates from the program provide curricular and other forms of advice. In particular, the advisory board provides input on the changing roles of literacy professionals in the region (e.g., as reading teachers and literacy coaches) and suggestions for the ways in which the program could be revised over time to insure it continues to prepare graduates to meet the ever-changing needs of the schools and students in the region.

Participants

In this study nine (of the 11 possible) district-level reading/literacy supervisors in the region completed an online anonymous questionnaire primarily consisting of open-ended questions (see Appendix A). The school districts varied

dramatically in size, ranging from 2,000 to 175,000 students (See Appendix B). The supervisors' years of experience in their current roles ranged from two years to 13 years with eight years of experience as the average. Eight of the nine supervisors previously held the position of Reading Specialist at the school level, with all nine having substantial prior experience in education. As noted earlier, all supervisors were also participants in an advisory board organized by the university-based literacy program.

Data Collection and Analysis Methods

In the advisory group meetings for several years before the study began, the supervisors had participated in informal discussions related to the changing role of the literacy professional. These discussions served to inform the development of the survey questions. Questions were developed and then field tested by sharing them with the entire advisory board. Board members offered oral and written suggestions on improvement of the questions and they provided additional questions that would be beneficial. After receiving IRB approval, surveys were sent electronically and confidentially through a web-based survey site (Survey Monkey) to all 11 supervisors. Nine completed the survey.

Some questions on the survey are limited response and some are open-ended. To analyze data from the open ended questions, the two researchers, authors of this paper, first read the complete set of answers for each survey participant to gain a holistic understanding of the information provided by each participant. For example, we each read the entire survey of participant #1, making notes, and then moved to participant #2. Using our notes, we collaboratively developed top-level codes for sorting information (such as RR for roles/responsibilities of the literacy professional, and DS for district support). We then re-read all of the survey data, this time coding the data with the top-level codes. We then read data within each code, further fine-tuning the coding categories to represent important ideas as well as similarities and differences in the data (Emerson, Fretz, & Shaw, 1995). Differences included, for example, size of district, the levels of schools (elementary, middle, high) that employed literacy professionals, and types of leadership roles for literacy professionals. We later looked for themes within and across the data through cross-connecting analysis (Maxwell, 1995). For example, the code "leadership" (L) was a sub category under the top level category of "roles and responsibilities" (RR). Through further analysis and comparison, we explored how leadership varied across school levels, finding, for example, that the district supervisors believed that more literacy professionals held leadership roles at the elementary than at the secondary level. We identified four major themes that will be explained in the next section.

Results

During data analysis, four overarching themes were identified: supervisors' views on who determines roles and responsibilities, change of roles over time, "the most important" roles vs. current roles, and challenges and supports. This section provides a discussion of each of these themes.

Who Determines the Roles and Responsibilities of Literacy Professionals?

As noted earlier, when literacy professionals have been surveyed and interviewed (Calo, 2008), they often report a wide array of roles/responsibilities in their jobs. We were therefore interested in learning more about district policies about *who* makes decisions about this role, in that any advocacy for change is reliant on understanding the current decision-making structure. Overall, the supervisors in this study reported decision-making structures that were very similar—shared decision-making between the school principals and the central office personnel, including, in just one district, the literacy professionals themselves. There were differences in emphasis, however. For example, the supervisor who represents the second largest school district reported that she determined "most responsibilities" but that the principals "[have] some leeway in assigning additional roles/responsibilities." In contrast, the supervisor of the largest district reported that "there is a list of job responsibilities, but the principal has the authority to make changes to that list." These comments seem similar, with the principal seeming to have less authority in the first example and more in the second. It was unclear from the data if the supervisor in the largest district was involved in creating the list of responsibilities she mentioned.

Similarly, a supervisor of a medium-sized district reported that "the job description comes from central office with the interpretation of the role from the school administration," while the supervisor of smallest district reported that the literacy professional's roles and responsibilities were determined solely by the "building principal, and at times, the building principal works with the [school based] reading specialist in order to determine the roles/responsibilities within the school." In sum, all but one supervisor indicated that determining the role is a shared responsibility of the central office personnel and the principal, with one stating the decision rested with the principal and the literacy professional at the school level. It is notable, first, that only one district appeared to involve the school-based literacy professional in the decision at all, and, second, that this was the smallest district in the study. However, it would be premature from these data to speculate why that might be. We feel it is important to keep in mind that decision-making at the school level was not specifically studied and interviews with additional principals might indicate that they do take their staff's views into account when deciding on roles/responsibilities. This is an area for future exploration.

Change and Reasons for Change

We asked the supervisors about possible changes in the role/responsibilities of school based literacy professionals over the previous 5-8 years for several reasons. First, the study was conducted in a time period of economic downturn throughout the United States, which was negatively impacting school districts. Secondly, at the same time, school literacy/reading programs nationally had been increasingly under scrutiny due to policy mandates regarding students' achieving passing scores on high stakes tests. In addition, among literacy educators, scholars, and policy makers on a national level there was substantial new interest in the concept of "literacy coaching" during this time period (International Reading Association, 2006; 2010; Sturtevant, 2003).

Eight of the nine supervisors indicated that (sometimes major) changes in literacy professionals' roles/responsibilities had occurred in their districts in response to both economic and assessment pressures, but interestingly, the school districts' responses to similar pressures varied substantially. In several cases, districts took completely opposite routes. Specifically, three districts reported that literacy professionals were now expected to teach *more* students and/or classes than previously (as compared to coaching of teachers) due, in part, to "budget constraints" and accountability issues. By contrast, the remaining five districts reported that literacy professionals now were assuming a broader role in the school, and were therefore teaching *less frequently*. The expanded roles included conducting professional development, analyzing assessment data, and modelling lessons for teachers. Of these five districts, two mentioned that the role of the school-based literacy professional had changed almost completely, from working with students to working with teachers. For example, the supervisor of the largest school district reported that "currently, there is far less emphasis on working with small groups of students throughout the year and more emphasis upon working with classroom teachers to influence instruction."

Another change involved the use of packaged instructional programs, as some districts now focused at least part of the work of the literacy professional on supporting or implementing purchased programs. In particular, districts reported that many middle and high school literacy professionals were teaching classes using required curriculums such as READ 180 (Scholastic). A very small school district reported a strong emphasis on these programs, with the supervisor stating, "the role of the literacy professional has become a role in leading the effective implementation of reading programs [while also] teaching content [classes] as a certified reading specialist." This district had a unique perspective as they had used professional development funds to pay tuition for many of their teachers to become licensed reading specialists with the intent that they would remain in classrooms to form a cadre of reading specialist/classroom teachers in every school.

Supervisors' Views of "the Most Important" Roles vs. Current Roles

We were interested in the supervisors' views on the most important roles for literacy professionals because all were experienced literacy leaders who were likely at least somewhat aware that a major literacy organization (the International Reading Association) had advocated for an expanded role for literacy professionals over the previous decade through position statements and publications. Almost all had also been school-based literacy professionals earlier in their careers. In this section we compare what supervisors reported as "most important" with what they reported as actually occurring in their districts.

In response to the open-ended question, "In your view, what are the three most important roles of the Literacy Professional?" the most common responses among the supervisors related to *leadership, collaboration with and support for classroom teachers, and working with students* (in that order). Several mentioned only the leadership and coaching roles (e.g., "providing leadership for the school's literacy program and providing school-based, job embedded staff development and coaching in order to improve instruction"; "assisting the principal by providing leadership for the school's literacy program").

In terms of where literacy professionals were placed, all nine districts reported having a literacy professional at every elementary school while eight of the nine reported having a literacy professional at every middle school and one district reported having a literacy professional only at some middle schools. At the high school level, five districts reported having a literacy professional at every school, two reported having a literacy professional at some high schools and two reported having no literacy professionals at the high school level.

In looking at the actual roles reported (versus what the supervisors believed were the most important roles) we found commonalities at the elementary, middle, and high school levels that crossed districts. The literacy professionals' roles varied at the different grade levels in a way that was fairly consistent across the districts. Specifically, in the seven districts that reported employing literacy professionals at the high school level, all seven indicated that the reading specialists' primary role at that level was to teach classes. In addition, six of the seven stated that high school literacy professionals administered reading tests and analyzed test data.

In comparison, across districts at the elementary level, the roles and responsibilities were reported to be broader and to include more leadership and collaborative work with classroom teachers than at the middle and high school levels. Specifically, eight of nine supervisors reported that elementary level literacy professionals helped teachers plan instruction, modeled lessons, and co-taught with teachers. All nine districts reported that literacy professionals at the elementary level also administered reading tests and analyzed test data. Six of the nine supervisors also indicated that the elementary literacy professionals were tasked with leading a literacy or curriculum team. The role at the elemen-

tary level was not found to be entirely a coaching/leadership role, however, as in eight of nine districts the literacy professionals also tutored small groups of students and in five districts they sometimes taught whole classes. Additional tasks such as “plan[ing] and implement[ing] school-wide literacy events” were also noted.

Overall, while all supervisors identified “leadership” as important to the role of the literacy professional, they saw leadership occurring less frequently in the upper grades than in the lower grades. At the high school level, only two supervisors (of the seven who had high school programs) indicated that the high school literacy professional’s role included “lead[ing] a curriculum or literacy team.” Moreover, only four of seven supervisors indicated that literacy professionals at the high school level modeled lessons for other teachers or helped them with their instruction (compared to eight of nine at the elementary level). This is not surprising since the high school literacy professionals apparently had a full schedule of their own classes to teach and their role was not defined as a coaching role. In fact, it is very interesting that some high school literacy professionals may be taking on coaching roles (such as modeling lessons) that seem to go beyond their job descriptions. This is an area that warrants further study as it would be valuable to know if other high school specialists were also taking on these roles and what inspired them to do so.

In sum, we found numerous roles/responsibilities indicated for the school-based literacy professionals, regardless of level. Elementary roles focused more heavily on coaching and leadership (roles believed by supervisors to be “most important”), with middle and high school literacy professional roles focused more heavily on teaching whole classes, often with packaged curriculums.

Challenges and Supports

The survey data also showed that the numerous roles/responsibilities of literacy professionals created challenges, especially related to time pressures, relationships with principals and teachers, and accountability/testing programs. One supervisor described the time issue succinctly: “...[there are] so many roles and [it is] so difficult [for them] to balance all demands. They could be working 24 hours a day.” Another specified that limited time was available for important activities, “[they have] challenges in [having] time for working with classroom colleagues and reading specialist colleagues.”

In terms of working with principals, one supervisor was very direct and stated that “[principals] do not understand literacy or the role of the literacy professional.” This appears to be a serious concern considering that the building administrator was also reported to be the individual most often tasked with making decisions about the role of the literacy professional in their buildings.

Additionally, the role of the literacy professional is not always understood by other teachers, which may influence how the literacy professional responds.

As one survey respondent noted, “Literacy professionals are not always accepted by all faculty. Many teachers do not view themselves as teachers of literacy and as a result, many literacy professionals lean toward assisting those who volunteer for help when it is likely all faculty need help.” Accountability assessment was mentioned as a challenge for the literacy professional as well, perhaps because many have been asked to take on major responsibilities in reading assessment systems.

When asked how the challenges faced by literacy professionals are addressed within their districts, all supervisors gave specific steps that had been taken to provide support. These included holding meetings to share ideas, providing funds for materials or conference attendance, providing mentors, and increasingly, using technology tools for building a sense of community. Specifically, four supervisors mentioned that they hold monthly meetings for their school-based literacy professionals while all nine mentioned providing professional development opportunities for these individuals, albeit in different contexts. For example, the supervisor of the second largest school district, which employs literacy professionals who coach and provide leadership at all levels, mentioned that she provides professional development as part of her monthly meetings for the middle/high school level literacy professionals. Another supervisor mentioned purchased programs and their respective professional development programs, and one supervisor mentioned providing the opportunity to attend conferences as a support for her district’s literacy professionals. The supervisor of the largest school district mentioned that “[sessions on how to coach] have been provided in the past, but not this year due to budget issues.” This same supervisor mentioned technology supports such as a BlackBoard discussion site that is established specifically for school based literacy professionals in the district to post questions and discuss answers. Similarly, one supervisor of a medium-sized district reported using technologies such as a “listserve and a fusion page, so the network among the reading specialists is strong and vibrant.” Seven of nine supervisors also mentioned that materials are provided and five of nine reported providing mentors to new reading specialists. Additionally, four supervisors mentioned that district wide professional reading and learning communities in the form of book study groups were provided as a support for their literacy professionals.

In terms of the preparation of literacy professionals, there also were substantive suggestions about the topics that should be emphasized in a university program. The suggestions across the districts included “leadership skills,” “coaching,” “state standards and how to help teachers with them” as well as “more emphasis on teaching reading to diverse populations” and the “impact of poverty and low SES on reading achievement.” Supervisors also mentioned “data-based decision making” as an important topic in the preparation of literacy professionals. This is consistent with the earlier finding that all supervisors in-

icated that their district's literacy professionals are now tasked with analyzing test data at the elementary, middle, and high school levels.

Discussion

The study presented here explores the role of the school-based literacy professional in relation to the broader context of the school district from the view of the district level supervisors. While findings are specific to one region of the United States and represent only nine school districts, the student population in the region is large (over 300,000) and includes diverse urban, suburban, and rural schools.

Earlier work on this topic has explored roles primarily through the lens of literacy professionals themselves. We found substantial consistency with earlier findings at the elementary level (e.g., L'Allier, Elish-Piper, & Bean, 2010) in our data regarding the multiple roles of literacy professionals as well as concerns about limited time and the need to build interpersonal relations with administrators and other teachers, especially at the elementary level. Our findings differed somewhat from Calo's (2008) findings at the middle school level as well as Mraz and Sturtevant's (2011) findings at the high school level, as our participants indicated a stronger focus on teaching whole classes and using packaged programs than the earlier studies reported. Interesting areas where our study extends the findings of earlier work include: (1) differences in the roles of literacy professionals by school level, including that a leadership role seemed more predominant at the elementary level; (2) effects of budget constraints and accountability policy on the decisions districts made about this role—with different districts in this study apparently making opposite decisions; and (3) the need for literacy professionals to have their own community of support and learning with others in similar roles, and ways districts are increasingly using technology tools as well as traditional meetings for this purpose.

As Kruse and Zimmerman (2012) note, "School leaders must provide strong support and be actively involved with [literacy] coaching efforts for the model to have broad and lasting effect" (p. 1). The supervisors in this study seem actively involved with the work of the literacy professionals in their districts, as evidenced in part by their voluntary involvement on the university advisory board as well as by the programs they were implementing for these professionals in their districts. Yet, they had to operate within the reality of strict budgets, state standards, and other constraints including the network of district and school level administrators who were involved in decisions.

A recent study (Johnson & Chrispeels, 2010) of school reform that included 45 school leadership team members, 5 principals, and 10 central office leaders found that "relational linkages" (p. 738) between central office staff and staff at schools can be central to the success of school reform efforts. Similarly, work

by scholars in organizational behavior in schools indicates the importance of trust building in successful school change efforts (Daly & Chrispeels, 2008). Relationships among school personnel are certainly worthy of further study, and our next step in this project will be in depth interviews to explore these issues more fully. We hope others will join in this effort to further expand our knowledge on the work of literacy professionals in schools.

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Appendix A

Survey Questions

(Note: In the study additional space was given for each written response).

1. What is the size of your school district (about how many students)?
2. In which U.S. state is your school located?
3. What is your position or title?
4. How many years have you held this position, including this year?
5. During your career, have you ever held the position of reading specialist or literacy coach, either in your current or another district?
6. Does your school district employ teachers with a reading specialist license at the elementary level? Please indicate:
 Every School Some Schools No Schools
7. Does your school district employ teachers with a reading specialist license at the middle school level?
 Every School Some Schools No Schools
8. Does your school district employ teachers with a reading specialist license at the high school level?
 Every School Some Schools No Schools
9. In your district, who or what determines whether or not a school has a reading specialist? (Note: throughout the survey, we use the term "reading specialist" to indicate a teacher with advanced preparation who is working as a reading specialist and/or a literacy coach.)

10. What are the Literacy Professional’s roles/responsibilities at the various school levels within your district? (Check all roles that apply and list any others in the comment box.)

	Elementary School	Middle School	High School
Teach classes			
Tutor individuals or small groups			
Model lessons for other teachers			
Help teachers plan instruction			
Co-teach			
Administer reading tests			
Analyze test data			
Lead a curriculum or literacy team			

11. In your view, what are the three (3) most important roles of the Reading specialist?
12. Who or what determines a reading specialist’s role/responsibilities within a particular school in your district? Other roles/responsibilities (please list and identify level):
13. What supports are provided for reading specialists in your district? (For example, professional development sessions, mentoring, and materials). Please give examples if possible.
14. In your view, what dilemmas or difficulties do reading specialists face in their work?
15. Does your district employ literacy coaches who are not licensed as reading specialists?

Please explain:

16. Has the role of the reading specialists in your district changed in the past 5 to 8 years? If so, how and why?
17. What topics do you think should be emphasized in a university reading specialist preparation program?
18. Do you think your district will continue to employ reading specialists in the future at the current level? Why or why not?
19. Other comments?
20. Would you be willing for us to contact you about the possibility of participating in a 30 minute follow-up phone or in person interview on the role of the reading specialist?

Appendix B
Size of school districts in which the supervisors worked.

School District (small, Medium, Large according to member of students)	Number of Students
<i>Small Districts</i>	
District A	2,000
District B	3,000
District C	7,000
<i>Medium Districts</i>	
District D	12,000
District E	20,000
District F	24,000
District G	27,000
<i>Large Districts</i>	
District H	63,500
District I	175,000

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MOVING A GRADUATE READING PROGRAM ONLINE WHILE CONTINUING TO MAINTAIN PROGRAM RIGOR AND MEET STANDARDS

Sara R. Helfrich
William E. Smith

Ohio University

Abstract

As the demand for online learning grows, more educators are being asked to transition teacher education programs to an online format. In this article, we discuss how we transitioned our accredited graduate reading education program online while maintaining program rigor and International Reading Association and National Council for Accreditation of Teacher Education standards. Logistical considerations, examples of web-based tools used to facilitate candidate learning, and examples of how these tools enabled us to continue to meet standards, broaden the experiences of students, and allow for interaction between students and instructors are given in an effort to help others successfully transition their reading programs online.

Online learning in the field of teacher education is growing in popularity (Galy, Downey, & Johnson, 2011; Olson & Werhan, 2005). By offering programs online, colleges of education “may hold the potential to reach a greater number of teachers than on-campus programs, providing professional growth opportunities to teachers that are geographically isolated” (Frey, 2008, p. 182). Additionally, Salazar (2010) provides additional advantages to online learning:

Online learning could help participants develop a more complete picture of the educational landscape simply through exposure to other participants whose schools present circumstances and limitations different from their own. Fresh insights can serve to mitigate the isolation of rural teachers by acknowledging their existence and special challenges (p. 1).

As professionals in the field move in this direction, one must consider this type of course delivery format from the perspective of the graduate student. Shin

and Lee (2009) found students enrolled in graduate education programs enjoyed the flexibility offered by online courses; they also found online course delivery might encourage participation by students who may not have been active participants in traditional courses, an idea also expressed by Leonard and Guha (2001). Kirkwood (2006) concluded that the benefits of online learning—providing students with access to information and encouraging and facilitating dialogue between them—“are particularly pertinent in educational contexts in which learners . . . are unlikely to have easy or regular access to suitable resources and to fellow students” (p. 118). Leonard and Guha (2001) found graduate students believed online courses gave them opportunities to interact with their classmates and oftentimes provided a better learning opportunity than face-to-face courses. Song, Singleton, Hill, and Koh (2004) found online learners reported course design, learner motivation, time management, and comfortableness with online technologies led to successful experiences with online learning.

However, not all graduate students enjoy or believe they benefit from online learning. Song et al. (2004) found online learners reported technical problems, a perceived lack of sense of community, time constraints, and difficulty understanding course objectives in online courses. In our own experiences teaching online courses, we can report that some graduate students comment through end-of-course evaluations on their desire to have taken the course face-to-face. Other comments include a desire to meet in person with the instructors and other students in order to build more personal relationships, or the need to be held accountable and keep to a schedule for time-management purposes.

With a move toward more online course delivery, there may also be concern on the part of teacher educators and program coordinators that online courses are less rigorous than their traditional face-to-face counterparts. With accountability to various governing bodies such as the International Reading Association [IRA] (2010) and the National Council for Accreditation of Teacher Education [NCATE] (2008), this fear is warranted. However, research indicates online programs provide similar learning outcomes as traditional face-to-face programs (see Dolezalek, 2003; Galy, Downey, & Johnson, 2011; Means, Toyama, Murphy, Bakia, & Jones, 2009; Simonson, Smaldino, Albright, & Zvacek, 2003).

The demand for more online learning requires attention to three concerns: the needs of the graduate students involved in the program, the need to maintain high content standards, and the need to address results of research about online learning. Drawing on research on effective development and delivery of online courses (Baghdadi, 2011; Bolin, Hough, Krinsky, Saleem, & Stevens, 2012; Desai, Hart, & Richards, 2009; Hsin-Liang & Williams, 2009; West, Jones, & Semon, 2012), as well as from our own experiences, the following issues should be considered when developing and implementing an online learning program:

- Provide well-developed course syllabi—including descriptions of all assignments, their sequence within the course, and how they will be completed and presented;

- Instruction that helps learners understand how to use the various online tools that will be part of the program;
- Establish patterns of course activities and sequence them in ways that build on developing skills – both within and across courses;
- Allow for interaction among learners and the instructor;
- Promote a sense of community;
- Include activities that require real-world application of skills; and
- Include multi-modal forms of instruction

Our Master's in Reading Education Program

Understanding the benefits of online teacher education programs was important to us, as in the spring of 2010, we were charged with moving our NCATE-accredited Masters of Reading Education program online, with a deadline set for Fall 2012 to have all courses fully running online. The main purpose for this move was to increase enrollment, as a web-based delivery format would allow us to reach more students than a traditional face-to-face format. When referring to online learning, we are describing courses in which students and instructors do not meet face-to-face or via distance-learning technology (i.e., live broadcasts of an instructor and students in various locations) and content is learned via multi-modal forms of instruction using web-based tools. Though the majority of the activities included in our courses are asynchronous, which we will describe in detail in later sections, these courses are not to be confused with independent study courses in which the graduate student meets with the instructor individually and works on activities and projects at an individualized pace. Instead, in online courses, graduate students have a set syllabus and are required to participate in specific online activities (e.g., discussion boards, chats) with small groups of their peers at specific times throughout each course.

Our Master's in Reading Education program is an advanced-degree program; that is all the students have already obtained a teaching license as part of their undergraduate degree and are now seeking advanced knowledge in the area of reading instruction. Completion of this program ultimately enables them to work as reading teachers, reading specialists, or as reading coaches. The majority of our students work as classroom teachers while completing this program.

Of the 11 courses in the program, eight are reading courses. The authors, who are also graduate literacy faculty, teach seven of these eight courses (*Children's Literature* is taught by a faculty member in the Teacher Education Department specializing in this content area). While the remaining four courses are vital to our program, they are general requirements for all graduate students, regardless of program, and are taught by faculty outside of the literacy program; the seven literacy courses we teach will be the focus of this article, with specific attention focused on those courses that include extensive fieldwork. Table 1 outlines the literacy courses comprising our Master's program.

Table 1: Reading Courses in the Master of Reading Education Program

Course	Credit Hours	Lab	General Content Focus
Foundations of Reading	3	N/A	Theories of Reading
Foundations of Language	3	N/A	Theories of language acquisition and development
Diagnosis: Reading/Language	3	20 hours with student in grades K-3 or 4-6	Administration and interpretation of various literacy assessments
Reading/Literacy	3	20 hours with a student in grades K-3 or 4-6	Delivery of instruction based on assessment results; writing a case
Children's Literature	3	N/A	Using literature with children across the grade levels
Secondary Reading	3	20 hours with a student in grades 7-12	Working with a struggling reading across content areas, focusing on literacy development
Coaching Classroom Teachers in Reading/Literacy	4	60 hours with a Reading Specialist and K-12 classroom teachers	Modeling instructions; co-planning lessons; using assessment results to plan instruction, creating a professional development program; conducting study group sessions
Master's Research Project	3	N/A	Project development and presentation

Procedures for Going Online

Initial Transition Considerations: Logistics

Just as one would carefully design and plan for a face-to-face course, one has to plan for a course taught online. However, with an online course, there are

special considerations that must be made. With no in-person meetings with your graduate students, how will you be sure they understand what is expected of them as the course progresses? What tools will you use to present course material that ensures students have the same or similar experiences with this online course as they would with one taught face-to-face? How will you make yourself available to students as questions arise? The layout or format of online courses, especially those involving field experiences, are especially important to consider, as it “helps regulate timelines, maintain order, provides cues about expectations for learning, and sets the stage for teachers to embark on their practicum experience” (Frey, 2008, p. 198). As we began the transition to online learning, we asked ourselves these questions and considered Song et al.’s (2004) findings about what online learners perceived to be useful or challenging characteristics of web-based learning. We worked to be proactive in our design and teaching of the courses, hoping to provide a smooth transition for students by providing answers and support before questions arose.

Preparation before Going Online

First, regardless of content, the syllabus and online format for each course must be decided. Second, activities that will support learning must be designed. Finally, web-based tools that can be used to facilitate the activities and maintain the rigor of the course must be identified. The courses we transitioned online had been part of our Master’s of Reading Education program for several years, so our main focus was not on developing the courses but rather on finding an appropriate online format for each course and identifying appropriate activities to support the content. Specific activities will be discussed in detail in later sections.

As we chose new tools to assist in content delivery, we were confronted with the task of not only becoming proficient in the use of them ourselves, but on how to ensure our students were able to use them effectively as well. Before going online, we made sure to include components within the courses that would make students’ use of the materials easier and thus enable them to learn. While there are many tools available to assist learning online, it is important that those tools are clearly explained to graduate students so they may make the best use of them. As Kirkwood (2003) states:

“Problems of low participation in online tutorials and low uptake of recommended online resources can result from [students] lacking the necessary skills that are expected or assumed by their teachers....Learners need to be oriented appropriately for them to know...what they are supposed to do” p. 129).

With this in mind, using Blackboard, the online learning management system used by our university, we organized each reading course in the same way, thus

Preparing to go Online

Before beginning instruction, we ask students to review the syllabus while watching a short video of the instructor presenting it. To create short recordings—audio and/or visual—of various materials such as the review of a syllabus, directions for assignments, or PowerPoint presentations, we used Camtasia software (www.techsmith.com/camtasia.html). Figure 3 shows a still of a video overview of the course and presentation of the course syllabus.



Figure 3: Video overview of course and presentation of course syllabus

We found it important to provide this type of review of the syllabus, similar to one we would provide during a face-to-face class meeting, because it allows us to expand on, clarify, and emphasize activities, as well as set the tone for the course and make it feel more personal for students, thus helping to begin to promote a sense of community. This type of audio/video review was also used for assignments that included multiple parts or employed the use of grading rubrics.

Moving Online: Transitioning our use of Discussion, Activities, and Fieldwork While Maintaining Program Rigor and Meeting Standards

Once we had carefully organized the courses, we had to consider the best way to orient graduate students to the courses and the online tools that would be used. As we looked at the course content, we chose tools the graduate students would need to use to complete assignments. This was done to maintain the rigor of the assessments previously recognized by the IRA as indicators of our program's meeting IRA Standards. Posting audio/video instructions on how to use specific tools is important for students' success with the assignments in which these tools are required (Baghdadi, 2011). Where possible, we provided

direct links to instructional websites where how-to videos and frequently asked questions (FAQs) were provided. We scheduled a webinar to be conducted by a member of one product's company so candidates could learn how to use the product and have their questions answered by an expert; participation in the webinar (multiple sessions were conducted to accommodate schedules) was mandatory. Students learned how to post videos step-by-step and had the opportunity to ask questions about the process, which helped them to become more confident in their use of the tool and made its use during the course much easier. Once the procedural aspects of our online courses were explained and understood, we were able to move onto instruction.

The three main components of our online literacy instruction, regardless of content, are discussion, activities (assignments), and fieldwork. In the following sections, we address how we continued to maintain rigor and meet IRA and NCATE standards.

Discussions and Activities

Discussion has always been an important component of our literacy courses. Discussions may focus on the readings students complete (e.g., textbooks, articles), the work they are performing in the field, or various topics relevant to the course content that have been introduced by the instructor and/or other students. With the move to online course delivery, discussion has had to take a different format. Collaborative online discussions through asynchronous methods (e.g., discussion boards) facilitate learning (Puntambekar, 2006; Schellens & Valcke, 2006; Stahl, 2006; Szabo & Schwartz, 2011). Through the use of discussion boards, we have been able to adapt our discussions to continue to fit the needs of both the course content and our students. Research and experience have shown that students in online programs value sharing ideas and learning and receiving feedback from their peers (Frey, 2008; Kirkwood, 2006). This type of activity also helps to promote a sense of community. Clearly outlining purposes and requirements for posting to a discussion board helps to facilitate its use and to make it a tool from which students can both demonstrate and expand on their knowledge of the topic. Prior to students participating in their first discussion board, they watch a short tutorial prepared by the instructor explaining how to navigate the system, access other students' posts, and post their own comments for discussion. Then based on the schedule outlined in the syllabus, students access the discussion board and respond to prompts provided by the instructor. Figure 4 shows a discussion board posting from a small group of students enrolled in the *Coaching* course.

The screenshot displays the Blackboard Learn interface. At the top, the browser address bar shows the URL: https://blackboard.ohio.edu/webapps/portal/frameset.portal?_afn_group_id=.... The page header includes the Ohio State University logo and navigation links like 'My Ohio', 'My Courses', 'My Organizations', 'My Library', and 'My My Management'. On the left, a 'COURSE MANAGEMENT' sidebar lists options such as 'Control Panel', 'Course Tools', 'Course Links', 'Evaluation', 'Users and Groups', 'Communication', and 'Packages and Utilities'. The main content area shows a discussion board with the title 'Total Posts: 23 Unread Posts: 0'. A list of posts is visible, each with a subject line, author name, and timestamp. The selected post is by Rachel Schwartz, titled 'RE: Your experiences with assessment', posted on Sunday, September 18, 2011 at 2:39:30 PM EDT. The post content includes a survey question: 'Hello Amy I appreciate that you described your experiences with the systems approach. Reading about the systems approach made me think of creating a positive learning environment but not only in the classroom but in the home as well. How do you go on a parent survey to gain more knowledge about the student and the home life. From what I have read I assume that all factors are considered of the student and/or his or her reading difficulty. The systems approach addresses what can be changed to improve student progress, how can the classroom teacher and reading specialist support each other, and how can the home be involved. I know the approach is good and means very individualized since it recognizes all the factors that could possibly be affecting the student's progress and seeks to help the student succeed. This is my first year teaching, and as reading the more I know about each student including what the home life is the helps me to understand and change my instruction if need be to reach the student.'

Figure 4: Small-group discussion board posts

Graduate students are asked in all of the literacy courses to complete several activities, both individually and in small groups. Web-based tools such as Drop Box (www.dropbox.com), Crocodoc (<http://crocodoc.com>), and Google Plus (<https://plus.google.com>) have helped transition these activities from face-to-face to online course delivery. With a shared folder in Drop Box, students can store multiple documents, such as articles in PDF format, the outline of a paper, video or audio clips, and photo files, that group members can access to complete a project or simply share with one another as teaching tools. Crocodoc is a tool that can be used to conduct asynchronous discussions of readings. Instead of asking students to discuss an article and refer in a discussion board post back to notable points within the text, an article can be uploaded directly to this website and students can add comments in the margins, similar to the Track Changes function within a Word document. This tool can also be used to facilitate an interactive discussion about graduate students' written assignments. Figure 5 shows an online discussion of an article using this web tool.



Figure 5: Online discussion of an article using a web-based tool

Graduate students can present projects live to one another using Google Plus. This website supports live video chats (or audio-only, if a candidate does not have access to a webcam) among up to 10 people, and allows participants to post projects for others to see while they are viewing the presentation.

An example of how we have incorporated the use of these tools in our literacy classes comes from the *Coaching* course. Students form small study groups, with members choosing a literacy-related teaching topic of interest. Each group member chooses an article related to his/her chosen topic and prepares a teaching activity to share with the group. During one week of the course, students use Crocodoc to discuss the articles and Drop Box to share information such as lesson plans or teaching tips related to the topic of focus, and during another week, they have a live discussion or give a teaching demonstration of the topic using Google Plus. Students also use these tools to develop professional development projects and present them to teachers and other educators in their schools. In this activity, a student works with the teachers and Reading Specialist in their school to choose a literacy topic to focus on for a professional development session. Students post articles and other resources to Drop Box and use Crocodoc to discuss with teachers a focus article prior to hosting the professional development session. The professional development sessions themselves may be hosted on Google Plus if a face-to-face meeting is not possible. As instructors, we can access any of the materials students have posted, as well as view their presentations. Using these multi-modal tools has made completing activities such as these move seamlessly from the traditional to the online classroom.

We are able to maintain several IRA and NCATE standards using these tools. First, one of the IRA standards asks students to participate in, design, facilitate, and lead professional development programs both internally (among their peers) and externally (with teachers and other reading professionals in the schools). These tools allow graduate students a unique outlet for disseminating information and hosting a professional development session, providing them with the opportunity to practice coaching first in a less challenging environment – among each other – and then moving to the IRA requirement of experiencing coaching in the field with teachers. With the incorporation of these tools, as instructors, we are able to observe some of these coaching activities in which the students are participating, which allows us to monitor their practices and adjust our instruction as needed. Second, several IRA standards require graduate students to incorporate technology in their instruction; students' use of web-based tools with teachers and other reading professionals in the schools helps them meet these standards. Third, these tools foster collaboration, which allows us to maintain NCATE standards related to professional dispositions. For example, the use of these tools allows students to collaborate with one another and with other educators (teachers, Reading Specialists) to discuss relevant literacy topics and complete activities related to teaching reading to K-12 students.

Fieldwork

Field experiences “provide opportunities for teachers to gain valuable classroom experience and learn how to implement new instructional strategies in authentic classroom environments [where] the primary goal is to provide exposure and hands-on experience for the participants” (Frey, 2008, pp. 181-182). Both teacher educators and students perceive fieldwork as being a valuable component of graduate programs (Helfrich & Bean, 2011; Frey, 2008). Extensive fieldwork is a required component in four of our literacy courses as seen in Table 1.

In these courses, graduate students record themselves working in specific contexts with K-12 students, teachers, and/or specialists and post their videos online to Evirx, a secure website to which only their classmates have access (<http://evirx.com>). For example, students record themselves working with a teacher for the *Coaching* course, post their video to the Evirx website, and make it available to their peers. Soon after the videos are posted, students can access and watch each other's postings and comment on the activity. Figure 6 shows a video posting using this web tool.



Figure 6: Video posting of candidate and teacher interaction

We found this tool to be especially beneficial in classes with fieldwork components, as graduate students learn about and apply new skills (e.g., the administration and interpretation of reading assessments, coaching classroom teachers) in the field for the first time. Watching the students' videos helps instructors critique student work. This process is convenient for instructors in online learning, as there is no need to travel to various schools to observe our students in action or rely on field supervisors to provide feedback. It has also shown that it can be used to promote students' sense of community and allows students to apply and share newly acquired skills in the real world. Additionally, whereas before when courses were taught face-to-face, unless several students performed their fieldwork in the same school building or clinic experience, there was little chance they could observe one another working with others. They were also confined to the experiences and the diversity only one school could provide. Now, with online learning and the use of this web-based video tool, students can observe each other working in what may be very different environments, with students and teachers from backgrounds different than those they would encounter in their own field sites.

We are also able to maintain IRA and NCATE standards by using this video tool. We can watch students interacting with students, classroom teachers, and reading specialists in the videos they post of themselves working in the K-12 classroom. As part of their coursework, students are often required to submit lesson plans. We can verify through these plans and their videotaped lessons that graduate students are meeting such IRA standards as using appropriate and varied instructional approaches, using a wide range of texts, using assessments appropriately, and modeling the appropriate use of literacy strategies for teachers and other educators.

An important NCATE standard is diversity. Through our change from face-to-face to online learning in our Master's Reading Program, we are now better able to meet this standard. In rural southeast Ohio, where our university is located, the K-12 student population is 93% Caucasian, with nearly 100% speaking English as their first language. These statistics are also reflected in the teaching force. Poverty is the diversifying factor in our region, where nearly 42% of all K-12 students are eligible to receive free or reduced lunch. The majority of our university's undergraduate and graduate students perform their fieldwork (from observation hours to full-time professional internships) in schools located in this area, so their exposure to students and teachers from diverse backgrounds is limited. With the transition to online learning, however, the opportunity for our students to work with or observe others working with students and teachers from diverse populations has increased. As we make our program available to learners outside the region, we have begun to work with graduate students living and working in urban and suburban areas with student populations different from ours. As part of their coursework, graduate students share with each other their experiences working with students and teachers from different backgrounds. As instructors, we have made it possible for students to share these experiences not only through conversations via discussion boards, but also through observing actual teaching through video presentations. Through the use of this type of tool as a component of online learning, not only can we help to provide learning opportunities for graduate students who are geographically dispersed (Dahlgren, Larsson, & Walters, 2006), we can also make it possible for them to learn from each other by accessing the resources (i.e., schools and student populations) that may be unique to their situation.

Final Notes

Through our transition to online course delivery, we have learned three things. First, it is possible to maintain rigor with an online program. Second, online programs can broaden the experiences of each candidate. Third, it is possible to maintain required standards in a way that allows interaction between the students and the professor and promotes a sense of community. While we agree with Bennet and Lockyer (2004) that "the organizational and communicative demands of [online course delivery] can be more challenging [than face-to-face course delivery] for the online teacher, who must support students distributed in place and time using technology appropriately and effectively" (p. 241), we have found repositioning our graduate reading program to an online program has benefitted both ourselves and our students.

To ensure a successful transition, we had to re-examine our course content and explore various multi-modal web-based tools that would allow us to deliver course material effectively, efficiently, and in a way that maintains rigorous program standards. Graduate students have benefitted from this transition in ways both

broad and narrow. Previously, students who did not have access to a master's level program can now participate in one, as online course delivery allows broad access to learning. Use of the web-based tools we have mentioned previously allow for them to learn not only from us, but from their program peers as well. Use of these types of collaborative tools also allow students to learn about different types of students and learning contexts, bringing what was once considered inaccessible within reach. Additionally, we are able to interact with our students in ways we may not have been as easily able to prior to the transition to online learning. The transition to online course delivery has not always been an easy one, but we believe not only has the move of our courses—while maintaining rigor and program standards—been successful, it has also made our program better.

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AN INVESTIGATION OF CHANGES IN PRESERVICE TEACHERS' ATTITUDES AND CONFIDENCE LEVEL IN TEACHING READING DURING A YEARLONG STUDENT TEACHING PROGRAM

Kyungsim Hong-Nam
Susan Szabo

Texas A&M University-Commerce

Abstract

This study examined preservice teachers' attitudes and confidence level in teaching reading while they were attending seminar courses during their year-long student-teaching experience. The two areas of interest examined were 1) student teachers' attitudes toward teaching of reading in content area classrooms and 2) their self-efficacy levels in applying content strategies in their teaching. The study found that there was a significant change in both their attitudes and their confidence levels in the ability to teach reading after working in K-6 classrooms.

Research has emphasized that classroom teachers should be taught to develop their abilities to select and use appropriate instructional strategies in their content area lessons (Bean, 2001; Fisher, & Frey, 2008; Park & Osbourne, 2006 a, b; Reinking, Mealey, & Ridgeway, 1993). Therefore, many teacher education programs require preservice teachers to take a content area literacy course which assists them in developing content area teaching skills and promotes awareness of the need of teaching reading in content areas. Although preservice teachers take a content literacy method course where strategies are both modeled and used, it is not easy for novice student teachers to effectively implement these instructional content strategies in real lessons (Raine, Szabo, Linek, Jones, Sampson, 2007; Szabo, Sinclair & Boggs, 2008).

Actual application of reading/learning comprehension strategies in to lesson plans may be hampered by many factors (Bean, 2001; D'Arcangelo, 2002; Hollington & Teal, 1991), such as preservice teachers' beliefs and attitudes, classroom setting where the internship takes place, their supervising teachers'

beliefs, or college education experiences (Bean & Zulich, 1992; O'Brien & Stewart, 1990; Szabo, Sinclair & Boggs, 2008). Among the factors, research has continuously reported that there is a close connection between preservice teachers' attitudes toward or beliefs about teaching and their pedagogical practices (Hall, 2005; Hong-Nam & Swanson, 2011; Park & Osborne, 2006 a; Reinking, Mealey, & Ridgeway, 1993).

Field-based Student Teachers' Attitudes and Confidence

Preservice teachers' attitudes and beliefs are influenced by their learning experiences and the knowledge gained from their education coursework including field-based course (Bean, 2001; Hong-Nam & Swanson, 2011; Konopak, 2001). This in turn, has an impact on preservice teachers' decisions, as new teachers, about what to teach and how to teach (Beijaard & De Vries, 1997). In other words, teachers generally align their teaching style with their attitudes toward teaching. Therefore, it is critical for preservice teachers to develop positive attitudes toward and beliefs about teaching reading in content areas.

In fact, a recent study by Hong-Nam and Swanson (2011) demonstrated the positive improvement in preservice teachers' attitudes toward teaching reading. In their study, K-8 preservice teachers reported that they developed positive attitudes toward teaching reading in content areas after a semester of content-area-method coursework, although the change was not statistically significant. Further, preservice teachers' teaching experience and their resistance in implementing literacy strategies in content areas have been found to impact their confidence level in implementing the strategies in content lessons (O'Brien, Stewart, & Moje, 1995; Szabo, Sinclair, & Boggs, 2008). Szabo, Sinclair and Boggs found that preservice teachers were familiar with a wide variety of strategies but implemented very few strategies when actually teaching in their assigned classrooms during student teaching.

The multiple teaching opportunities provided by the field-based student teaching program usually enhances preservice teachers' teaching skills and help them link what was learned in college classes with practices in real classrooms. Therefore, it is important to examine the effectiveness of college education field-based teaching programs periodically to determine if the student teaching program has a positive impact on preservice teachers' attitudes and their abilities to effectively apply instructional strategies into their lessons.

Theoretical Framework

This study is posited in several theories. First, the cognitive learning theory explains that learning occurs when new knowledge is acquired or existing knowledge is modified. In addition, both Piaget and Vygotsky believed that learning is influenced by one's beliefs and/or attitudes (Slavin, 2006). The attitude

theory states that attitudes can be either positive or negative and are used as an evaluative tool which influences intended behavior (Fishbein & Ajzen, 1975; Myer, 2002). This is supported by Bandura's (1997) self-efficacy theory which states that a person's attitude, abilities, and cognitive skills impact one's belief in their ability to do something well. These theories suggest that the preservice teachers' positive attitudes and confidence level (self-efficacy) in their ability to teach reading should help them successfully include reading instructional strategies into their content area comprehension lessons.

Purpose of the Study

A number of studies have reported improvement in K-12 students' content area comprehension when reading instruction was provided in their content area classrooms (Almasi, Garas, & Shanahan, 2006; Bos, Anders, Filip, & Jaffe, 1989; Guthrie, 2004; Ledere, 2000). Therefore, it is imperative to train preservice teachers to incorporate literacy strategies into content area lessons. Even though much is known about secondary inservice teachers' attitudes toward the teaching of reading in content areas (Jackson & Cunningham, 1994; Konopak, 2001), little is known about K-6 field-based preservice teachers' attitudes or opinion about teaching content literacy strategies, their strategy application knowledge, and/or self-efficacy in content area practices. One study conducted by Raine, Szabo, et al (2007) showed K-6 preservice teachers had knowledge of 40 strategies but when teaching only used nine strategies. Moreover, the study showed of the 33 preservice teacher participants, only five incorporated them wisely in their planned lessons (Raine, Szabo, Linek, Jones, & Sampson). Therefore, the current study attempts to investigate the following questions:

1. What are K-6 preservice teachers' reported attitudes in their ability to include reading skills in content areas classrooms before and after a year-long student teaching program?
2. How confident K-6 preservice teachers are in their ability to include reading skills in content areas classrooms before and after a year-long student teaching program?

Methods

Participants

The participants of this study were undergraduate preservice teachers enrolled in a year-long student teaching experience at a Texas university. The 155 participants (152 female and three male) were all seniors majoring in Elementary Education (K-6). The age of the participants ranged from 20 to 52 with mean age of 28.2 years. Caucasians (79%) was the largest ethnic group among the participants followed by Hispanic (13%), African American (5%), Native

American (2%), and Arabic (1%). All participants were placed in a classroom at an elementary school for student teaching.

Student Teaching

The student teaching field-based course was a year-long program and comprised of two phases: the first semester is called *internship* and the second semester is called *residency*. The field-based course was offered through professional development centers (Center for Development of Professional and Technology; hereinafter referred to as “the Center”) which was partnered with a variety of local public school districts. The preservice teachers enrolled in the field-based course met all the requirements for student teaching and received an eligibility clearance from the university. After the university approval, they were interviewed by the Center and the local school district before the internship. The Center and school district decided the number of student teachers to place in each school and informed the student teachers of their internship sites.

Internship. During the first semester of the program, the participants enrolled in the student teaching coursework were referred to as interns. Each intern had two classroom placements (usually one lower grade and one higher grade), so each semester the interns split his/her time equally between each placement. In addition, the interns were required to attend weekly seminar classes led by a center coordinator and university liaisons.

During the internship semester, interns spent two days in their assigned public school classroom. The interns were required to take on some of the responsibilities of classroom teachers, e.g., report to their assigned schools; accompany their mentor teacher during their assigned duties. In addition, the intern participants were encouraged to actively collaborate with their classroom mentor teachers and students. To complete the internship successfully, the intern were asked to plan and teach six formal lessons using the lesson cycle format provided by the university; teaching 3 lessons in each placement. Their formal lessons were observed and evaluated by their mentor teachers, the school principal, and the university liaison.

In addition, the interns were required to attend a weekly seminar class led by the center coordinator and university liaisons. During the seminar classes, the interns were taught various instructional strategies (including content literacy strategies) in reading, writing, science, math, and social studies as well as classroom management techniques. The preservice teachers were encouraged to implement these strategies into their lesson plans when developing their six formal teaching events.

Residency. During the second semester, the interns were considered residents. The residents were required to spend five days a week at their assigned school. In addition, the residents were required to attend eight seminar classes held throughout the semester led by a center coordinator and university liaisons.

During the residency semester, the residents returned to the school and classrooms they were assigned during their internship. The residents were expected to plan and implement their lesson plans and continue to teach as much as possible. The residents were also expected to develop a one-week unit plan for one placement and two-week unit plans for second placement and teach the lessons all day for three weeks in order to successfully complete their residency program. Even though resident continually teach, only six formal lessons were observed and evaluated by their mentor teachers, the school principal, and the university liaison.

During the eight seminar classes, residents shared their teaching experiences, and learned more about classroom management techniques, lesson plan development, and various comprehension strategies for content areas. They also shared their teaching units with classmates.

Instrument

The survey instrument has three sections. The first section of the survey contained six questions asking demographic information (e.g., age, gender, major, academic year, and ethnicity) and concluded with one 5-point Likert-scale question asking them what their overall confidence level is in using strategies while teaching content area subject matter. This one 5 Likert-scale question was asked pre/post (See Appendix).

The second section was a self-reported questionnaire, *A Scale to Measure Attitudes toward Teaching Reading in Content Classrooms* (Vaughan, 1997), which was comprised of 15 statements (6 negative statements and 9 positive statements) that were designed to determine teachers' attitudes toward the teaching of reading in content area classrooms. Vaughan's questionnaire uses a 7-point Likert scale of 1 (Strongly Disagree) to 7 (Strongly Agree). It has shown excellent reliability (.87).

The third section was used to examine confidence levels pre/post of pre-service teachers' abilities to use strategies in content area classrooms. A list of content literacy strategies was developed using the textbook which was required in their content literacy methods course where these strategies were discussed and taught. The questionnaire used a 5-point Likert scale: 1=Very poor at using this one, 2=Poor at using this one, 3=Fairly Confident using this one, 4=Good at using this one, and 5=Very good at using this one.

Data Collection and Data Analysis

This study was a quantitative study which examines the pre/post attitudes and confidence levels of 155 participants. The pretest was administered during the seminar class in the second week of the intern semester. The posttest was administered during the last week of the residency semester. This pre/post design allowed the researchers to determine if there were any differences in these

preservice teacher's attitudes and/or confidence level about strategy application before and after the student teaching experience.

The Statistical Package for the Social Science (SPSS) was used to analyze the quantitative data. Several statistical techniques were employed for data analyses. Descriptive statistics were calculated and if there was a difference, a paired *t*-test was used to determine if the differences were significant.

Results

Attitudes

The instrument, *A Scale to Measure Attitudes toward Teaching Reading in Content Classrooms* (Vaughan, 1997), was used to examine the attitudes of these preservice teachers toward using strategies while teaching reading in content area classrooms. The means and standard deviations of each item on the attitudes questionnaire and paired *t*-test results are presented in Table 1. As shown in Table 1, the results of the paired *t*-test showed a statistically significant difference in these preservice teachers attitude ($t=-3.69, p=0.000$) over the course of the year.

Positive Items. When looking at the results of paired *t*-test on the positively written individual item in the questionnaire, significant differences in attitudes at $p<.05$ were found on several statement items:

- Item 2—strongly believed that technical vocabulary should be pre-taught before students started reading a main passage ($t=-2.81, p=0.005$);
- Item 6—agreed that knowing how to teach reading in content areas should be required for K-6 teaching certification ($t=-1.98, p=0.049$); and
- Item 12—felt it was very important to provide scaffolding during content instruction such as helping student learn to set purposes for reading ($t=-2.82, p=0.005$).

In addition, the resident preservice teachers also showed a significant increased agreement with some of the positive written items at $p<.01$ level on the following statements:

- Item 1—strongly felt that a content area teacher should help students improve their reading ability ($t=-1.81, p=0.071$); and
- Item 4—strongly believed that six years of schooling was not enough for students to learn all they need to know about how to read ($t=-1.72, p=0.086$).

Negative Items. When looking at the results of the paired *t*-test on the negatively written individual item in the questionnaire, significant differences at $p<.01$ were found on Item 3 ($t=-1.99, p=0.047$), 5 ($t=-2.39, p=0.017$) and 14 ($t=-2.89, p=.004$). On items 7 and 9, the mean scores went up, but the change was not significant. However, on item 11, the mean scores went down, but this change was not significant.

Table 1: Summary of Descriptive Statistics and Paired *t*-test of Items on the Attitudes

	Item	Pre		Post		<i>t</i>	<i>P</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
1	A content area teacher is obliged to help students improve their reading ability.	6.37	0.96	6.56	0.92	-1.81	0.071**
2	Technical vocabulary should be introduced to students in content classes before they meet those terms in a reading passage.	5.74	1.33	6.15	1.30	-2.81	0.005*
3	The primary responsibility of a content teacher should be to impart subject matter knowledge.	5.58	1.16	5.87	1.40	-1.99	0.047*
4	Few students can learn all they need to know about how to read in six years of schooling.	3.96	2.01	4.35	2.02	-1.72	0.086**
5	The sole responsibility for teaching students how to study should lie with reading teachers.	2.15	1.23	2.57	1.83	-2.39	0.017*
6	Knowing how to teach reading in content areas should be required for K-6 teaching certification.	5.97	1.23	6.25	1.18	-1.98	0.049*
7	Only English or Reading teachers should be responsible for teaching reading in K-6 classrooms.	2.08	1.31	2.35	1.75	-1.51	0.133
8	A teacher who wants to improve students' interest in reading should show them that he or she likes to read.	6.34	1.24	6.41	1.05	-.544	0.587
9	Content teachers should teach content and leave reading instruction to reading teachers.	2.15	1.40	2.39	1.78	-1.32	0.189
10	A content area teacher should be responsible for helping students think on an interpretive level as well as a literal level when they read	5.94	1.20	6.12	1.19	-1.33	0.185
11	Content area teachers should feel a greater responsibility to the content they teach than to any reading instruction they may be able to provide.	3.85	1.60	3.75	1.83	0.50	0.620
12	Content area teachers should help students learn to set purposes for reading.	5.88	1.06	6.21	0.95	-2.82	0.005*
13	Every content area teacher should teach students how to read material in his or her content specialty.	5.83	1.35	5.86	1.35	-0.25	0.801
14	Reading instruction in K-6 content area classrooms is a waste of time.	1.22	0.62	1.61	1.55	-2.89	0.004*
15	Content area teachers should be familiar with theoretical concepts of the reading process	6.03	1.16	6.02	1.23	1.00	0.924
	Total	4.61	0.47	4.83	0.60	-3.69	.000*

* $p < .05$ (2-tailed test) ** $p < .01$ (2-tailed test)

Confidence Level

The confidence level was determined by examining two sections of the instrument (the last question in the first section of the instrument and the results on the 3rd section). First, as shown in Table 2, which looked at the last Likert-scale question in the first section of the instruction (*Overall, how confident are you in applying content literacy strategies in classroom during your internship?*), the results of the paired *t*-test revealed statistically significant improvement of the resident preservice teachers' confidence in their ability to apply content literacy strategies ($t=-7.29, p=0.000$).

Table: 2 Changes in Confidence Level in Application of Content Literacy Strategy Using the Last Question on the First Section of Instrument.

Item	Pre		Post		t	p*
	M	SD	M	SD		
How confident are you in applying content literacy strategies in classroom?	3.61	0.68 7	4.26 6	0.87	-7.29	0.000
* $p < .05$ (2-tailed test)						

Second, Table 3 shows the results of the 5-point Likert-scale list of content teaching strategies with the paired *t*-test results. The over-all mean scores at the end of the year-long student teaching experience were higher and the *t*-test showed that the change was significant ($t=-5.92, p=0.000$).

Looking at the individual strategies, the mean scores of all the strategies improved but not all the changes showed a significant difference. There was a significant change in the residents' confidence in their ability to use 23 of the content teaching strategies (as seen in Table 3). However, seven teaching strategies (Brainstorming, KWL Chart, Notetaking, Reciprocal Reading, Think Aloud, Visual Aids, and Vocabulary Strategies) showed that the change was not significant.

Table 3: Summary of Descriptive Statistics and Paired *t*-test of Items on Attitudes

	Item	Pre		Post		<i>t</i>	<i>P</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
1	Analogy	2.65	1.22	3.03	1.12	-2.86	.004*
2	Anticipation Guide	2.24	1.13	2.99	1.13	-5.82	.000*
3	Brainstorming	3.78	0.91	3.95	0.87	-1.73	.085
4	Character Quotes	2.86	1.15	3.37	1.05	-4.13	.000*
5	Comparison/Contrast Matrix	3.32	1.10	3.72	0.95	-3.49	.001*
6	Concept Definition Maps	3.00	1.16	3.66	0.96	-5.50	.000*
7	Discussion Web	3.20	1.20	3.63	0.97	-3.43	.001*
8	Double Entry Journals (DEJs)	2.29	1.22	2.75	1.24	-3.27	.001*
9	Guided Imagery	2.34	1.24	2.88	1.23	-3.86	.000*
10	Graphic Organizer	3.57	1.12	3.77	0.94	-1.70	.090**
11	Intra-Act	1.77	1.10	2.30	1.22	-4.00	.000*
12	KWL Chart	3.82	1.13	3.99	.90	-1.45	.149
13	List/Group/Label	3.16	1.35	3.50	1.09	-2.45	.015*
14	Notetaking	3.62	1.12	3.76	0.94	-1.21	.227
15	Previewing	3.28	1.23	3.65	0.98	-2.90	.004*
16	Problem Situations	2.99	1.27	3.49	1.05	-3.76	.000*
17	Questions-Answer	2.70	1.35	3.30	1.11	-4.23	.000*
18	Relationship (QAR)	2.72	1.35	3.08	1.08	-2.61	.010*
19	Quick Write	2.29	1.29	2.92	1.16	-4.49	.000*
20	Question-Generation Strategy	2.69	1.26	2.98	1.12	-2.15	.032
21	Reciprocal Reading	1.83	1.08	2.38	1.11	-4.46	.000*
22	Semantic Feature Analysis (SFA)	1.70	0.99	2.81	1.16	-9.07	.000*
23	SQ3R	2.50	1.27	3.28	1.91	-4.21	.000*
24	Story Impression	3.66	1.00	3.87	0.92	-1.96	.051**
25	Summarizing	3.70	1.04	3.74	0.94	-0.40	.689
26	Think Aloud	2.05	1.21	2.61	1.18	-4.17	.000*
27	Three Level Study Guides	2.18	1.33	3.05	1.25	-5.89	.000*
28	Unsent Letters	3.83	1.06	3.87	0.88	-0.35	.727
29	Visual Aids	3.59	1.09	3.74	0.83	-1.29	.197
30	Vocabulary Strategies	3.52	1.13	3.71	0.89	-1.68	.095**
	Writing prompts	2.89	0.67	3.33	0.61	-5.92	.000*
	Total	2.89	0.67	3.33	0.61	-5.92	.000*

P*<.05 (2-tailed test) *P*<.01(2-tailed test)

Discussion

The findings of this pre/post quantitative study showed preservice teachers reporting that both their attitudes toward and their belief in the ability to use reading strategies while teaching content subject matter had improved. Table 1 also reveals that the scores on the positively written attitude statements showed the preservice teacher students' attitudes toward teaching reading in content area classrooms had significantly improved. The results showed that the preservice teachers believed teachers to be obliged to help their students improve their reading skills (Items 1) as they saw gaining reading skills as a life-long endeavor (Item 4). These findings were consistent with previous researchers' findings

(Hong-Nam & Swanson, 2011; Lloyd, 1990) suggesting that teachers should take responsibility for teaching reading by providing guidance to develop their students' reading skills.

The resident participants' scores also showed a significant difference on several negatively written statements. The resident participants indicated that the content teacher bears the responsibility to teach content (Item 3) and the sole responsibility for teaching students how to study should lie with the reading teachers (Item 5). The results aligned with O'Brien and Stewart's (1990) study which found that English or reading teachers should be responsible for teaching reading. This oxymoron represents a piece of the puzzle that must be understood by university instructors in order to help preservice teachers purposefully plan how to help students read content area textbooks, as content areas may be presented through unique formats potentially requiring differing applications of reading strategies.

While looking at what teachers can do to help students become strategic readers (Paris, Walk, & Turner, 1991) the current study showed that the resident participants recognized the importance of setting a goal or purpose before asking students to start reading (Item 12). In addition, the resident participants understood the importance of preteaching vocabulary words before asking students to read them in texts (Item 2). Preteaching vocabulary words was supported by the moderately high mean score for vocabulary strategies in Table 3. Earlier, Lloyd (1990) found that preservice teachers in a secondary reading methods courses felt that content area teachers should help their students become strategic readers by setting purposes for reading and pre-teaching technical vocabulary. Based on the current findings, students in content area classrooms should be provided strategy instruction for developing the ability to use strategies selectively and to become independent readers.

Further examination of Table 3 showed the resident participants in this study had increased their understanding of all strategies. The growth was statistically significant in many strategies except brainstorming, KWL charts, notetaking, reciprocal reading, think alouds, visual aids, and vocabulary strategies. As these were simple strategies, many preservice teachers might have already known how to use them in the learning process (Szabo, Sinclair, & Boggs, 2008). This belief was supported by the post mean scores, as the majority of the participants showed upper 3 with 5 being high. A possible explanation for the resident participants' higher level of confidence in using all strategies was that they had multiple opportunities to incorporate the strategies in content area lessons through the year-long student-teaching program. Their real classroom teaching experience may have helped them feel confident using the strategies. Fisher and Frey (2008) noted that some instructional strategies such as KWL charts, notetaking, think alouds, and visual aids (e.g., graphic organizers) positively influenced student achievement. The resident participants of the current study might have found

those strategies were useful and important for content learning in elementary classrooms which resulted in a higher level of confidence in using them.

Although the residents reported significant changes in their confidence in using the majority of strategies in Table 3, some strategies showed low pre/post mean scores of middle and upper 2. The resident participants might have found instructional strategies such as Intra-Act, SQ3R, Semantic Feature Analysis, and Three Level Study Guides were too complex for young children and usually required more time and learner independence. The residents themselves might not have been familiar with the strategies or sure about how to implement them in lessons. This circumstance would be consistent with other reports detailing preservice teachers' challenges in using instructional strategies in content area classrooms (Barry, 2002; Lester, 1998)

Limitations

Even though there were some positive findings, several limitations to this study should be kept in mind. First, even though 155 preservice teachers participated, the sample was small. Second, all of the participants were student teaching in northeast Texas, and the sample was limited to preservice teachers who voluntarily participated in the study. Third, all of the data were self-reported. Consequently, readers are cautioned making generalizations of the findings to larger, diverse populations representing different backgrounds.

Conclusion

This year-long student teaching experience, which included built-in seminars and time for using a multitude of strategies within real lessons, did build the resident participants' confidence in the ability to include reading skills in content area topics they taught. In addition, the growth in their confidence levels triggered positive growth in their attitudes about the ability to incorporate strategies into content area lessons. This outcome confirmed that teachers with positive attitudes hold more self-confidence about the ability to affect positively K-6 student learning.

Even though the sample was small, the findings were congruent with past research. Professional knowledge gained from coursework can change teachers' beliefs about themselves and how they teach (Goddard, 2004; Hong-Nam, & Swanson, 2011; Hoy & Spero, 2005). Indeed, preservice teachers gain adequate tools which provide instructional strategies they need to teach literacy across the curriculum.

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Appendix Part 1

Directions: Please write or choose (only one) the most appropriate answer to you after reading each statement.

1. Age _____ 2. Gender: Male _____ Female _____

3. Academic year: Freshman _____ Sophomore _____ Junior _____ Senior _____
Other _____

4. Major: _____

5. What is your ethnic background?

African American _____ Asian/Pacific Islander _____

Caucasian _____ Hispanic/Latino _____

Native American _____ Other _____ Please specify:

6. Overall, how confident are you in applying content literacy strategies in classroom during your internship?

Not at all

Strongly Confident

1

2

3

4

5

**JOY OF LEARNING IN AND
About K-12 Classroom**

STUDENTS' AFFECTIVE ENGAGEMENT IN LITERACY TASKS: OBSERVATIONS OF AND INTERVIEWS WITH SIXTH-GRADE STUDENTS

Seth A. Parsons

George Mason University

Jacquelynn A. Malloy

Anderson University

Allison Ward Parsons

George Mason University

Sarah Cohen Burrowbridge

Fairfax County Public Schools

Abstract

Engagement is an important consideration for students' literacy learning. However, engagement in literacy tasks has received limited attention in the research literature. This study investigated students' affective engagement across various literacy tasks. The researchers conducted classroom observations and student interviews to document students' affective engagement in literacy activities. Data analysis revealed that students were affectively engaged in tasks where they acquired new information and when the activities were perceived to be fun.

Student engagement in reading is closely associated with reading achievement (Guthrie, 2004; Guthrie & Wigfield, 2000; Brozo, Shiel, & Topping, 2008). Similarly, research on exemplary reading teachers found that higher-performing classrooms were associated with higher levels of student engagement than lower-performing classrooms (Bogner, Raphael, & Pressley, 2002; Dolezal,

Welsh, Pressley, & Vincent, 2003; Taylor, Pearson, Clark, & Walpole, 2005). However, the influence of literacy tasks on students' reading engagement is rarely studied.

Research conducted through the National Reading Research Center (NRRC) used an *engagement perspective* of reading motivation to investigate instruction that would develop "motivated and strategic readers who use literacy for pleasure and learning" (Baumann & Duffy, 1997, p. 5). The engagement perspective assumes that desire to read, reading strategies, knowledge, and social interactions are key components to cultivating "highly engaged, self-determining readers who are architects of their own learning" (Alvermann & Guthrie, 1993, p. 135). The NRRC found that social and instructional contexts for learning impact students' reading engagement.

Despite wide recognition of the importance of engagement and the seminal work of the NRRC, the extant research base on reading engagement is limited. For example, the last three *What's Hot* lists created by the International Reading Association have designated motivation/engagement as "Not Hot" but "Should Be Hot" (Cassidy & Cassidy, 2009, 2010; Cassidy, Ortlieb, & Shettel, 2011). Therefore, literacy leaders identified engagement as an important topic, but one that is not receiving the attention it deserves.

Current literature conceptualizes engagement as a multidimensional construct that includes three components: affective, behavioral, and cognitive engagement (Appleton, Christenson, & Furlong, 2008; Fredericks, Blumenfeld, & Paris, 2004). *Affective* engagement emphasizes interest and enjoyment, *behavioral* engagement typically refers to observable time on task, and *cognitive* engagement relates to strategic behavior and metacognition. The research reported here focused on affective engagement in literacy activities.

Affective Engagement

Affective engagement parallels the construct of situational interest. Researchers have traditionally conceptualized interest as either personal interest or situational interest (Hidi & Renninger, 2006). Personal interest is a relatively stable interest in a particular topic (e.g., insects); situational interest, on the other hand, is less stable and is task specific (Schraw, Flowerday, & Lehman, 2001; Wigfield, 1997). For example, students who are not typically interested in writing may be particularly interested in writing letters to a pen pal. They are not interested in the topic of writing letters; rather, they are experiencing situational interest in the task. Because there is an element of personal interest or curiosity that aids in sustaining effort, affective engagement is associated with increased learning (Hidi & Renninger, 2006; Schraw et al., 2001). Similarly, researchers have found that affective engagement is associated with increased reading comprehension (Alexander & Jetton, 1996; Guthrie et al., 2006). Therefore, students' affective engagement in literacy activities is an important consideration.

Purpose of the Study

Because affective engagement is task specific (Wigfield, 1997), the study reported here is rooted in research and theory related to academic tasks, or activities. For the purposes of this research we defined a task as an activity that requires a student response related to an instructional objective. Researchers have identified the task as the central unit of motivational study (Perry, Turner, & Meyer, 2006; Turner, 1995). Blumenfeld, Mergendoller, and Swarthout (1987) demonstrated that academic tasks influence the expectancy and value students place on tasks (Eccles et al., 1983). Therefore, students ask themselves, “Can I do the task?” (expectancy) and “Do I want to do the task?” (value). The second question is particularly relevant to affective engagement.

Researchers have found that particular task components are associated with student engagement: tasks that are authentic, collaborative, appropriately challenging, and student directed (Brophy, 2010; Gambrell, Hughes, Calvert, Malloy, & Igo, 2011; Miller & Meece, 1999; Parsons, 2008; Parsons & Ward, 2011; Pressley, 2006; Teale & Gambrell, 2007). However, few studies have asked students *their* perspectives of academic tasks (Edmunds & Bauserman, 2006). Accordingly, the study reported here builds upon this previous research by using interview methods to document why students were or were not affectively engaged in literacy tasks. The following research question guided this study:

1. How do students describe their affective engagement in literacy tasks?

Theoretical Perspective

While this study builds upon research and theory on engagement and academic tasks, the methods used to study students’ affective engagement are informed by theories of metacognition. Traditionally, metacognition is described as thinking about one’s own thoughts (Flavell, 1976). Hacker (1998) demonstrated that metacognition is an awareness of one’s cognitive or affective state, and this awareness is influenced by situational and/or task demands. Other studies have drawn ties between metacognition and affect, particularly through the phenomenon of metacognitive experiences (Efklides, 2006) or metacognitive feelings (Koriat & Levy-Sadot, 2000). When participating in a learning task, both cognitive and affective regulatory loops are in effect: The cognitive loop assists in regulating the processing of information, and the affective loop influences continued interest and positive or negative feelings regarding the task. These loops interact when feelings of interest and capability support learners in maintaining engagement. Alternately, decreasing interest or increasing frustration with the task may lead to negative feelings, which in turn interfere with a learner’s willingness to continue the effort required for the task (Efklides, 2006). This perspective assumes that students are aware of and act upon their thinking, which is influenced by the particular task they are completing.

Methods

Yin (2012) demonstrates that case studies are appropriate for researching phenomena in real-world contexts. This research is an *embedded* case study because there are multiple units of analysis within the case (Yin, 2012). For this study, the case is one sixth-grade classroom, and the six student participants are the units of analysis.

Setting and Participants

This study took place in a Title I elementary school outside a large urban city in the Mid-Atlantic. The student population is diverse: 76% have limited English language proficiency and 83% receive free or reduced lunch prices. The 21 students in the sixth-grade classroom of this study matched the school demographics. The teacher was a white female in her late 20s. At the time of the study, she had six years of teaching experience. The six student participants were purposefully selected based upon the teacher's perception of their academic performance. Researchers asked her to recommend two high-, two average-, and two low-performing students (see Table 1).

Table 1: Participants

Teacher Designation	Gender	Ethnicity
2 High-performing students	Male Female	Pakistani-American Turkish-American
2 Average-performing students	Male Female	Hispanic African American
2 Low-performing students	Male Female	Hispanic Hispanic

Data Collection

This research occurred in the spring semester (January-May). To answer the research question, observations of and interviews with students were conducted. However, the unpredictability of school-based research had an impact on data collection. For example, sometimes students were unable to be interviewed following observations, and sometimes students were pulled out of classroom instruction and were unavailable for observations or interviews. Therefore, the data presented in this report represents eight observations and 19 interviews following those observations.

Student Observations. Observations allowed the researchers to document the academic tasks taking place during literacy instruction. Each observation lasted for the duration of the literacy instructional block, which was approximately 80 minutes. Literacy instruction, which was organized around instructional units, typically began with a whole-class lesson related to the instructional objective

for the day. Then, students completed authentic independent reading and writing activities in a workshop format (Atwell, 1998). That is, as students worked, the teacher conferred with students about their reading and writing and met with guided reading groups.

Student Interviews. Interviews occurred on the same day as the observation, and all interviews were audiotaped and transcribed for analysis. In the interviews, a researcher described each documented task to the student and asked if they enjoyed the task, following up with “Why?” or “Why not?,” accordingly, to document their affective engagement in the activity.

Data Analysis

The researchers analyzed students’ affective engagement in literacy tasks by displaying the data in a chart that listed the description of the task followed by each student’s response to the questions (Miles & Huberman, 1994). Table 2 shows an example from the displayed data. Researchers used a grounded theory approach (Glaser & Strauss, 1967) to analyze the displayed data. Researchers read and reread the data in order to identify segments of text relevant to the research question, and worked until all researchers agreed on themes and patterns within the data.

Table 2: Example of data from interviews

TASK 6.21—Listen to the teacher read <i>Three Little Wolves</i> aloud and together summarize the story.
<p>Student B</p> <p>I: Did you like doing that?</p> <p>B: Yeah, it was, it was better because like we had to listen to the story and write the events down.</p> <p>I: But you enjoyed it?</p> <p>B: Yeah.</p> <p>I: Why did you enjoy it?</p> <p>B: Cause it was, it was it was more easier. Cause we didn’t have to put it in our notebook. We just have to get a paper and fold it and it was easier.</p> <p>I: So you liked the fact that you were writing on the folded paper instead of writing this like in paragraph form? And that was that easier for you to understand?</p> <p>B: Yeah.</p>

Student G

I: Did you like doing that?

G: Yeah.

I: Why did you like doing that?

G: Because before I did not know where like the next, then, the finally. I normally just take notes.

I: Okay, so what you learned was to use next, then, and finally?

G: Yeah.

I: But you enjoyed doing that?

G: Yeah.

I: So the reason you liked it is cause you learned?

G: Yeah.

I: Is there any other reason you liked it?

G: No.

Results

Throughout the observations, the teacher implemented two different instructional units. The first unit focused on personal narratives, and the second focused on poetry. Within these units the teacher provided instruction on reading and writing skills and strategies. For example, the personal narrative assignment focused on cause and effect. The topic of the personal narrative was a time that changed your life. Therefore, cause and effect was emphasized, but the teacher also included mini-lessons on descriptive language, visualizing, hyperbole, sequencing, and summarizing. In the poetry unit, the teacher taught mini-lessons on comprehension, poetic devices, descriptive language, and using context to figure out unknown words. In addition, the teacher implemented guided reading, independent reading, and independent writing throughout both units. Themes from the interviews indicated that students were affectively engaged in activities when they acquired new knowledge and when they thought the activity was fun.

Students reported increased learning as a reason for affective engagement. For example, in one observation students studied cause and effect. They received a series of causes and had to supply the effect. A high-performing student reported, "I liked it because you got to learn something new. And you might, like, get to use it one day." This student demonstrated that she liked learning and she saw applicability of the learning important. In response to this same task, an average-performing student reported that she was affectively engaged in the activity "because it makes you understand more things than you usually do. And when you read it, it makes you understand it." The next activity in this same observation was for students to write a cause on a sentence strip, which they switched with partners who had to create an effect. The average-performing

student reported interest in this activity because “it makes you understand more things than you usually do.” During independent reading in another observation, a low-performing student followed along in the text as he listened to the audiotape. He was interested in this activity because “it’s telling me tough words—how to sound out and read with fluency.”

During a different observation, the teacher emphasized the importance of using descriptive language. After an introductory activity, the students’ task was to revise their writing, looking for places to add descriptive language. A high-performing student reported interest in this activity “because it will make our writing better.” Similarly, in a later observation, students focused on sequencing events to summarize what they read. The teacher read a picture book aloud and the students completed a graphic organizer that included the sections *first*, *next*, *then*, and *finally*. They used the graphic organizer to write a summary of the book. An average-performing student reported affective engagement in this activity “because before I did not know where, like, the *next*, *then*, the *finally*. I normally just take notes.” This student was interested in this activity because he learned a new tool for summarizing text. During another lesson in the poetry unit, the teacher conducted a lesson on making connections to poems. In a read-aloud, she modeled making connections as well as using context and repeated readings to figure out unknown words. Next, the students read poems in groups and wrote down their reactions, connections, and questions. A low-performing student reported affective engagement in this activity “because I learned a lot of the words.”

Students also reported affective engagement in activities that they found fun. For example, an average-performing student reported affective engagement in independent reading because “it’s fun and entertaining.” Similarly, a high-performing student reported affective engagement in reading poetry “because I like reading poems.” A low-performing student reported interest in independent reading during guided reading “because the books were interesting and I’m getting more to read.” These students, then, were interested in reading for the joy of reading and due to the type of text being read.

Students were also affectively engaged in writing. An average-performing student reported that he was interested in writing his personal narrative “because I like to write a lot” and “because we like to express ourselves.” A high-performing student reported that she was interested in the activity “because I like the story we’re writing. It’s about this one moment that was, like, something really huge for us.” Therefore, these students reported affective engagement in the activity because they enjoyed writing, particularly about this specific topic. However, this opinion was not unanimous. A low-performing student simply stated that she does not like writing. A high-performing student reported that he disliked writing the personal narrative because he thought the moment he had chosen to write about was embarrassing and he did not want to share it with the class. Likewise, the

average-performing student above who liked to express himself lost interest in writing as the unit progressed because he did not like writing multiple drafts.

Students provided additional reasons for being disinterested in tasks. Two students reported that they were not interested in tasks because they did not see the applicability of the activity. For example, an average-performing student reported that he was disinterested in an activity where groups sorted their descriptive words from most descriptive to least descriptive: “I didn’t get the point.” A low-performing student was not interested in this activity “because you have to think.” In addition, a high-performing student reported that she did not like using sticky notes during independent reading “because you have to like write down your thinking while you’re reading. It kind of stops you reading when you’re having a good time.” Finally, a low-performing student reported that a lesson that required students to write down what they visualized was “boring.”

Discussion

This research aimed to document students’ affective engagement in literacy tasks. Affective engagement is an important consideration because it is associated with increased learning (Alexander & Jetton, 1996; Guthrie et al., 2006). However, little research has documented students’ affective engagement in literacy tasks using interviews. Hearing students’ perspectives on their interest in literacy tasks adds to the research literature on enhancing students’ engagement in literacy activities.

This study found that students reported being affectively engaged in tasks where they were successful at learning new things. This finding is encouraging and corroborates previous research, which found that students enjoy experiencing success (Brophy, 2010; Pressley, 2006). This study also found that students reported affective engagement in activities they perceived to be fun and worthwhile. Students identified both activities and topics as meaningful and fun. For example, students reported interest in independent reading because they enjoy reading as an activity. Likewise, a student reported, “I like to write.” Students also reported interest in reading a particular genre—“I like reading poems”—and writing about a particular topic. Therefore, even though this study was framed within the perspective of situational interest, students described not only situational interest (i.e., interest in specific activities) but also personal interest in particular topics.

Interestingly, a few of the findings in this study contradict previous research. For example, having an authentic audience for students’ writing is a standard recommendation as a best practice for writing pedagogy (e.g., Bromley, 2011). However, one student in this study did not like a writing activity because it had an authentic audience. It is believed this situation was unique, as the boy had chosen to write his personal narrative about an embarrassing moment in his life, and he did not want to share this moment with his peers. When the teacher learned that he did not want to share the story, she explained that he did not have to share it if he did not feel comfortable. Nonetheless, it is important to remember that writing

is deeply personal and students may not want to share their writing with authentic audiences. In addition, having students track their thinking on sticky notes is a common recommendation for developing students' comprehension (e.g., Harvey & Goudvis, 2007). However, a student in this study reported that this practice ruined her reading time. These findings are reminders that recommendations for best practice are not universal.

Also noteworthy is what did not emerge from the interview data. Previous research on engagement has identified authenticity, collaboration, and student choice as aspects of tasks that enhance engagement (Brophy, 2010; Gambrell et al., 2011; Miller & Meece, 1999; Parsons, 2008; Parsons & Ward, 2011; Pressley, 2006; Teale & Gambrell, 2007). The students in this study participated in authentic and collaborative tasks where they had choices. However, they did not identify these aspects of tasks as reasons for enjoying activities. The concept of relevance, which is related to authenticity, came up several times. Students reported not enjoying tasks where they "didn't see the point." Importantly, students mentioned being affectively engaged when they might use newly learned information in the future.

We acknowledge the limitations of the study, which might have contributed to these task components not being found in this research. This study is limited because it only used interview data with six students in one classroom. Future research exploring similar questions with multiple data sources and a larger population will build upon this exploratory study. For example, a study currently underway is examining students' engagement more holistically by collecting multiple data sources to examine their affective (interviews), behavioral (observations), and cognitive (interviews, student work samples, and student results on standardized tests). Despite these limitations, this study addresses a gap in the literature by hearing students' reflections on their affective engagement in literacy tasks.

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TRANSFORMING LITERACY INSTRUCTION IN URBAN SETTINGS: COMBINING PROFESSIONAL DEVELOPMENT AND INSTRUCTIONAL COACHING TO IMPROVE STUDENT ACHIEVEMENT

Maureen Spelman

David Bell

Saint Xavier University-Chicago

Abstract

This two-year study examined the impact of professional development and instructional coaching support on classroom quality and students' achievement in two inner-city Catholic elementary schools. The overall classroom environment improved; there was significant positive impact on the instructional support provided in the participating classrooms; specifically the largest gains were in the dimensions of language modeling, quality feedback, and concept development across the nine classrooms observed. In addition, the data suggest there was substantial progress toward eliminating the achievement gap in the skill areas of phonemic segmentation fluency and nonsense word fluency.

According to the National Catholic Education Association (NCEA), between 2000 and 2012 the number of Catholic schools fell from 8,146 to 6,980, a loss of 117 schools every year. Combined primary and secondary school enrollment also declined 22 percent, from 2,647,301 to 2,065,872 (Ziegler, 2011). These declining numbers have been the topic of numerous conversations. Smarick (2011) pointed to a number of possible factors; for one, he argued that Catholic educators lack significant experience. In addition, he stated “Catholic schools seldom have coherent content standards, accountability systems based on assessments of student academic growth, or an ethic of making publicly available the performance data that do exist” (Smarick, 2011, p. 5). To prevent further declines and meet the challenges of the 21st century, teachers in Catho-

lic schools need ongoing professional support. This two-year study examined the impact of professional development and instructional coaching support on classroom quality and, subsequently, student literacy achievement in two inner city Catholic schools.

Theoretical Framework

Adult learning theory is supported by scholars who have examined the ways in which adults seek and apply new information. Knowles (1980), for example, discussed the assumptions underlying andragogy, the art and science of helping adults learn. Mezirow (2000) contended that unless learning is transformed through expanded awareness, critical reflection, validating discourse, and reflective action, adult learners remain focused on merely accessing information. Transformational learning, however, seeks changes in the core assumptions, beliefs, and ways in which individuals make sense of learning experiences (Kegan, 1994, 2000). The focus has shifted from *what* a person knows to *how* a person knows. Kegan (1982, 1994) referenced this shift as the constructive-developmental view of adult growth and development.

Kegan's (1994) constructive-developmental theory joined together two powerful lines of intellectual discourse. His theory posited that the systems by which individuals learn and change occurs over the course of a lifetime, implying that individual's experiences are unique, and that affects the way one understands. Professional developers, then, must take these ways of knowing into consideration as they design professional development programs to support and challenge adult learners (Drago-Severson, 2011).

Review of the Literature

Professional Development

Schein (2004) argued that sustainable transformation almost always involves change. Long-term sustainable change efforts require creating a school climate that motivates teachers to embrace the benefits of change (Hargreaves & Fink, 2003). Research in effective professional development points to the importance of building a shared vision, collecting and synthesizing data on student achievement, identifying gaps between current and desired performance, and collaboratively building an action plan (Nidus & Sadler, 2011).

Knight (2007) suggested that teachers do not resist change so much as they resist poorly designed change initiatives. Therefore, successful change requires the design of continuous professional development programs that are contextualized, build a strong teacher knowledge base, create a community of learners, and, most importantly, are focused on student achievement as the common goal (Darling-Hammond & Sykes, 1999; Joyce & Showers, 2002; Reeves, 2010).

Classroom Environment

Research has revealed that the quality of early childhood programs impact children's academic growth and development (National Research Council, 2000). Lambert, Abbott-Shim, and Sibley (2005) identified five dimensions that relate to classroom quality with three focused on classroom dynamics, classroom structural variables, and classroom staff characteristics (Lambert, Abbott-Shim, & Sibley, 2005). Further an effective program has been found to include:

- An emotionally supportive classroom, which fosters healthy relationships and some level of student autonomy (Curby et al., 2009; Pianta, LaParo, & Hamre, 2008).
- A well-organized classroom that provides opportunities to maximize student learning, establishes order, and engages students in the learning experience (Emmer & Stough, 2001; Pianta et al., 2008).
- An instructionally supportive classroom provides constructivist-learning experience that assist students in making significant connections to the real world (Pianta et al., 2008; Wadsworth, 2004).

Thus the dimensions examine the interaction between teachers and students in the classroom rather than evaluating the presence of materials, classroom environment, or the type of curriculum that exists within a school (Pianta, et. al, 2008).

Coaching

Teachers hold the key to student achievement (DuFour, 2007; Guskey, 2000; Roy & Hord, 2003). However, change in teacher practices is more likely to occur if teachers are provided with a mentor or coach that is physically present and engaged in supporting, encouraging and guiding them (Bloom, Castagna, Moir, & Warren, 2005; Knight, 2007; Reeves & Allison, 2009). Reeves and Allison (2009) offer one coaching model to achieve sustainable change. This framework has seven elements:

1. Recognition—finding patterns of toxicity and renewal
2. Reality—confronting change killers in work and life
3. Reciprocity—coaching in harmony
4. Resilience—coaching through pain
5. Resonance—coaching with emotional intelligence
6. Relationship—nurturing the personal elements of coaching
7. Renewal—creating energy, meaning and freedom to sustain the journey

Sustainable change is not easy to achieve, as it requires “changing our habits and creating new routines. “If teachers are emotionally fatigued by the pressing immediacy of their professional life..... it is of no surprise they are not quick to pick up a practice and make it a routine in their classroom” (Knight, 2007 p.5). Knight proposed a partnership approach to support sustainable

change. This partnership, defined as instructional coaching, was built around the core principles of equality, choice, voice, dialogue, reflection, praxis, and reciprocity (See Appendix A for a complete description). The role of the coach in this particular study was designed to encourage classroom teachers to reflect, improve upon efforts to put theory into practice, as well as being open to change (Elmore, 2011).

Methods

Context and Purpose of Study

This two-year study analyzed the impact of a professional development and instructional coaching model on classroom quality and student literacy achievement. Following a team building and coaching model, this interactive professional development effort engaged classroom teachers in the administration of formative, benchmark assessments as well as progress monitoring for at-risk students. The study was guided by two primary research questions:

1. Will a literacy-focused professional development and instructional coaching model have a positive impact on classroom quality?
2. Will a literacy-focused professional development and instructional coaching model have a positive impact on student achievement?

This project aimed to provide ongoing professional development and instructional coaching designed to support teachers in improving instructional delivery and the overall classroom environment. Monthly professional development sessions were provided to support content knowledge in literacy instruction. In these sessions teachers were introduced to literacy strategies that support the development of proficient readers (Pearson, Roehler, Dole, & Duffy, 1992). Professional development sessions also addressed classroom environment issues that might impact the delivery of quality literacy instruction. Because professional development alone might leave teachers without the support needed to apply knowledge in actual practice (Knight, 2007), instructional coaching was added as a means to support teachers in the application of this new knowledge in the classroom. In this study, instructional coaches observed, provided feedback, and engaged in problem solving with teachers on a monthly basis; the ultimate goal was to improve classroom quality and support the implementation of proficient reader strategies.

Participants

Inner-city Catholic schools work with children who are facing monumental challenges. Such schools are partially supported through private foundations; they are primarily located in urban neighborhoods where often less than two-thirds of young people graduate from high school and most families qualify for

the federal free or reduced lunch program. In this study, a total of ninety-four students were enrolled in the combined classrooms from School “N” and School “S”. Students at these schools were primarily of African American ethnicity and qualified for either free or reduced lunch status. The data in Table 1 displays the breakdown by school and by grade level.

Table 1: Student Demographics by School

# of Students	School “N”	School “S”
Students in Kindergarten	9	7
Students in Grade One	12	9
Students in Grade Two	14	17
Students in Grade Three	11	15
Caucasian	1%	0%
African American	99%	100%
Free/Reduced Lunch	83%	61%

A total of nine K-4 teachers (School “N” one teacher per grade level K-4; School “S” one teacher per grade level K-2 and a $\frac{3}{4}$ split) were invited to join in this unique university/school partnership. The demographic showed there were five Caucasian teachers and four African–American. The number of years of teaching experience varied across the schools: School “N” ranged from 0-10 years of experience; while the experience of teachers at School “S” ranged 8-30 years. Three of the nine participating teachers did not hold a current certified teaching certificate. For the purposes of this study, the data from both schools were collapsed and analyzed to understand the impact of professional development and instructional coaching.

Data Collection Instruments

During year one the emphasis was on consensus building and training participants on the administration, scoring, and interpretation of the *AIMSweb* assessment system. As a means of collecting baseline data to guide the design of the professional development and coaching activities, the Classroom Assessment Scoring System (CLASS) was implemented in year two (Pianta et al., 2008). The CLASS observation system is divided into three major domains: emotional support, classroom organization and instructional support. Within each domain there are specific dimensions that are used to observe teacher behavior (See Appendix B). Each dimension was scored by the observers using a 7-point scale that ranks the level of dimensions observed: Low (1, 2), Middle (3, 4, 5), or High (6, 7). The CLASS instrument was developed from the literature as well

as scales used on large classroom observation studies in the National Institute of Child Health and Human Development Study of Early Care (Pianta, LaParo, Payne, Cox, & Bradley, 2002).

AIMSweb Curriculum-Based Measurements (CBM) were used to collect benchmark literacy assessments three times yearly to track the students' achievement and rate of improvement in Early Literacy, Reading Curriculum-Based Measurement (R-CBM), and Reading Maze (See Appendix C). *AIMSweb* is comprised of formative assessments designed to complement summative (high stakes) assessments. Shinn and Shinn (2002) state, "The *AIMSweb* formative assessment model informs the instructional process as it occurs by identifying at-risk students as early as possible and importantly, those students who are learning and those who are not progressing satisfactorily" (p.3). The *AIMSweb* Early Literacy Measures for kindergarten and first grade are one minute probes that are conducted one-to-one. The R-CBM are one-minute probes that are administered to individual students in grades one, two, three, and four; the Maze is a silent reading assessment that first, second, third, and fourth grade students take in small groups. These probes provide an indication of how well students are learning and help to plan lessons, which accelerate progress toward annual goals (Herman, Osmundson, & Dietel, 2010).

Data Collection

Observations using the CLASS instrument were conducted in nine classrooms between September 2009 and March 2010. Baseline observation data was collected in September and October and compared to data collected during the professional development experience (November thru March). In addition, *AIMSweb* literacy benchmark assessment data was collected in fall, winter, and spring yearly.

To ensure the reliability of the CLASS data collected, two researchers conducted separate observations (usually on separate days); each teacher was observed at least twice each month for a minimum of 20 minutes. The CLASS observation sheet and CLASS dimensions rubric were used to make judgments and arrive at scores. The researchers supported their quantitative rating with qualitative notes that described the strengths and challenges of each unique classroom environment. The researchers met regularly to examine observation data as a means of informing professional development planning, and to ensure inter-rater reliability.

To understand the impact of the program on student outcomes *AIMSweb* benchmark data was gathered in each classroom in fall, winter, and spring yearly. Classroom teachers were trained in the administration, scoring, and interpretation of the *AIMSweb* literacy benchmark instruments. Coaches and classroom teachers met as a problem-solving team following each benchmark

assessment administration to examine the data and plan instructional interventions. Subsequent professional development sessions were designed to increase teacher knowledge in literacy skills and strategies aligned with student needs as indicated in the benchmark data.

Data Analysis

CLASS data were examined to obtain composite scores across cycles within the pre and post data collection periods; individual cycles for each dimension were averaged across the number of cycles of observations completed (Pianta et al., 2008). Scores for subareas (dimensions) in each of the three domains (See Appendix B) were obtained by averaging the related dimensions within each domain. Negative climate is scaled in the opposite direction of the other CLASS scales. Higher negativity indicates lower quality. Thus the average score for negative climate is reversed; “to reverse the score, subtract the average NC from 8” (Pianta et al., 2008 p. 19).

A *t*-test was used to compare the pre and post data collected for each domain. Student outcome *AIMSweb* data were compared to determine if students met or exceeded benchmark target and/or growth rate. The growth rate was then calculated by subtracting benchmark scores and dividing the number by the number of weeks of school completed - 18 weeks in Winter and 36 weeks in Spring.

Results

A Chronbach alpha test was conducted to determine the reliability of the data collected on the instrument. Results indicate an alpha level of .89 showing internal consistency of the items on the survey. An analysis of the combined average rankings and the descriptive data suggests that classroom practices improved in each of the three domains.

Table 2 indicates that the major domain of Instructional Support with an initial average of 3.35 (pre) demonstrated the largest gain with a final mean of 4.23 (post). The domain of Instructional Support also demonstrated the lowest combined average prior to the interventions implemented during the professional development and instructional coaching experience.

Table 2: Descriptive Statistics Analyzing Three Domains across Both Schools

Major Domains	Category	Mean	Standard Deviation	N
Emotional Support	pre	3.52	.725	33
	post	3.95	.895	38
Classrm Organization	pre	3.93	1.25	33
	post	4.43	1.40	38
Instructional Support	pre	3.35	1.19	33
	post	4.23	1.51	38

Note. n = the number of observations

As seen in Table 3, the *t*-test revealed a significant difference when comparing pre and post test results for the domain of instructional support and classroom organization. Cohen's (*d*) was calculated to determine the effect size and the results indicate a moderate difference in comparing the pre and post data results within Instructional Support and Emotional Support.

Table 3: T-Test and Effect Size by Domains across Both Schools

Major Domain	F	Df	p	Cohen (d) Effect size-r
Instructional Support	2.46*	69	.009	.64/.31
Classroom Organization	.716	70	.102	.39/.18
Emotional Support	1.49*	70	.031	.52/.25

Note. * $p < .05$

Since each major domain has several dimensions (see Appendix B) it was important to understand which sub-areas were impacted by project activities. Although there was evidence of improvement from the pre and post data collected, *t*-test indicated no significant impact on the specific dimension within the major domain of Emotional Support.

An analysis of the three dimensions of Instructional Support revealed that concept development and language modeling showed the overall lowest averages (3.30 and 3.36) respectively prior to any intervention (pre). Those same dimensions demonstrated the largest increase when comparing the pre and post data results. Table 4 displays the complete descriptive statistics.

Table 4: Descriptive Statistics Analyzing the Dimensions within the Instructional Support Domain

Instructional Support Dimensions	Category	Mean	Standard Deviation	N
Concept Development	pre	3.30	1.311	33
	post	4.17	1.636	
Quality Feedback	pre	3.39	1.273	33
	post	4.23	1.573	
Language Modeling	pre	3.36	1.270	33
	post	4.49	1.579	

Note. n = number of observations

The data displayed in Table 5 suggests there were significant differences when analyzing the various dimensions within Instructional Support (pre and post data averages across schools). The results of the *t*-test revealed significant positive gains after the professional development experience in the dimensions of language modeling, quality feedback, and concept development. To examine the relative strength (effect size) in comparing the pre and post test data results, the Cohen (*d*) was calculated. The results indicate a moderate difference in comparing the pre and post data results within the dimension of quality feedback and concept development.

Table 5: T-Test and Effect Size Showing Impact of Activities on Instruction

Instructional Support	F	df	p	Cohen (<i>d</i>) Effect size-r
Language Modeling	1.168*	67	.002	.33/.16
Quality Feedback	.739*	68	.018	.58/.28
Concept Development	1.597*	68	.026	.58/.28

Note. **p* < .05 equal variances assumed

In addition to the classroom environment data it is critical to understand how students progressed overtime when comparing the target rate of growth to the average classroom growth rate with respect to skill and service code (General Education). The expectation would be that each grade should exceed the growth rate, especially if the average score is less than the initial benchmark score, in order to close the gap in average performance. If the target growth rate declines overtime it may be an indication of variables that impact quality instruction.

Students either met or exceeded the *AIMSweb* spring target benchmark Early Literacy scores each year with the exception of the subareas of phone-

mic segmentation, fluency, and nonsense word fluency. In 2009 students scored less than the target score for phonemic segmentation fluency, but by the spring benchmark score the average growth rate exceeded the target growth rate. In 2009 kindergarten students (K) and first grade students (1st) scored below the target score in nonsense word fluency, but exceeded the benchmark target score by the spring administration. In 2010, the average phonemic segmentation fluency skills (49) exceeded the target winter goal (27) but by the spring administration the average growth rate decreased (-.3); this was lower than the expected target growth rate of (1.0). Table 6 provides complete details of the results.

Table 6: Early Literacy Test Results

School Year	Fall	Winter	Spring	Growth Rate
Letter Naming Fluency—K				
Target	16	39	48	.9
2009	27	39	59	.9
2010	49	62	80	.9
Letter Sound Fluency—K				
Target	4	23	36	.9
2009	5	21	42	1
2010	18	43	60	1.2
Phoneme Segmentation—K				
Target		27	45	1
2009		4	29	1.3
2010		49	43	-.3
Nonsense Word Fluency—K				
Target		21	34	.8
2009		13	48	1.9
2010		33	61	1.5
Nonsense Word Fluency—1st				
Target	29	49	62	.9
2009	23	67	86	1.8
2010	29	65	97	1.9

Note. Fall, winter, and spring are benchmark scores. Growth rate is calculated as spring score minus fall score (or winter minus fall) divided by 36 weeks (or 18 weeks).

An examination of the Oral Reading Fluency (R-CBM) data revealed that first grade students on average were able to exceed target benchmark scores in 2009 and 2010. Second grade students fell below expectations in 2009, but second grade students exceeded spring target scores in 2010. Third grade students, however, did not meet the target spring benchmark scores in either 2009 or 2010.

Following the progress of students over the two-year period revealed that 2009 first grade students exceeded spring targets that year as well as in second grade the following year. Second graders in 2009 consistently fell below expectations, and that pattern continued as third graders in 2010. Students who were in third grade in 2009 failed to reach spring targets, however, these same students were able to exceed the 2010 spring target scores.

Table 7: R-CBM Results

1st Grade	Fall	Winter	Spring	<i>Growth Rate</i>
Target		30	61	1.7
General Ed.09		46	75	1.6
General Ed.10		50	95	2.5
2nd Grade	Fall	Winter	Spring	<i>Growth Rate</i>
Target	60	85	102	1.2
General Ed.09	52	77	87	1.0
General Ed.10	47	88	111	1.8
3rd Grade	Fall	Winter	Spring	<i>Growth Rate</i>
Target	83	105	120	1.0
General Ed.09	72	98	100	.7
General Ed.10	68	85	105	1.0
4th Grade	Fall	Winter	Spring	<i>Growth Rate</i>
Target	103	119	132	.8
General Ed.10	118	132	140	.6

Note: Fall, winter, and spring are benchmark scores. Growth rate is calculated as spring score minus fall score (or winter minus fall) divided by 36 weeks (or 18 weeks).

Maze (silent reading comprehension) data results indicate the majority of students exceeded the target score by the spring benchmark in first, second (2010 only), and fourth grade. Results also indicate that when comparing the impact of a two-year period, most students either met or closed the gaps by the benchmark testing in spring 2010. One exception was the group of 2009-second grade students; they did not meet the spring 2010 expectations as third graders.

Table 8: Maze Data Results

School MAZE	Fall	Winter	Spring	<i>Growth Rate</i>
1st Grade				
Target		3	8	.3
2009		8.5	13	.5
2010		10.2	17	.4
2nd				
	Fall	Winter	Spring	<i>Growth Rate</i>
Target	4	10	14	.3
2009	5	9	11	.2
2010	3	11	17	.4
3rd				
	Fall	Winter	Spring	<i>Growth Rate</i>
Target	12	15	16	.1
2009	11.5	14	15	.1
2010	8	13	11	.1
4th				
	Fall	Winter	Spring	<i>Growth Rate</i>
Target	13	19	19	.2
2010	13	29	22.3	.3

Note: Fall, winter, and spring are benchmark scores. Growth rate is calculated as spring score minus fall score (or winter minus fall) divided by 36 weeks (or 18 weeks).

Limitations

This particular study explored two years of a professional development project that focused on a sample of only two small private Catholic elementary schools; the participants included nine teachers and ninety-four students in kindergarten through grade four. The sample of participants was not randomly selected, and so the results of this study cannot be generalized to a larger population; however, the result may allow others to benefit from what the researchers have learned. Given that the first year of this project was focused on consensus building and training participants to use the *AIMSweb* assessment system, perhaps there was not sufficient time to see significant gains. Future work is needed that includes samples with a larger number of classrooms as well as more time. Longitudinal data on both the quality of classroom environment and student outcomes will be needed to fully understand the impact of this professional development and coaching model.

Discussion

To meet the challenges of 21st century schools, professional development providers need to explore various avenues to support the growth and development of adult learners. Just as effective teachers adapt instruction to address

the diverse needs of children, professional development providers need to differentiate practices to attend to differences in how professional educators learn and what is needed to support professional growth in each particular context (Drago-Severson, 2009). Supporting the learning of teachers is not only important for its own sake, but also because of the impact teacher knowledge has on student achievement (Drago-Severson, 2011; Guskey, 2000).

Recent research in effective professional development points to the importance of building a shared vision, collecting and synthesizing data on student achievement, identifying gaps between current and desired performance, and collaboratively building an action plan to close those gaps (Nidus & Sadler, 2011). Throughout the two-years of this partnership, professional development activities were focused on building teacher knowledge and creating problem-solving teams focused on student achievement. Professional development meetings that followed benchmark assessment administrations were focused problem-solving conversations that allowed teachers and coaches to have rich and meaningful data-driven conversations targeting students' areas of weakness. The student data also served as the basis for the continuous professional development presentations and coaching conversations; thus recognizing the need to match the specific needs of the participants in this particular context.

The first question guiding this study asked if a literacy-focused professional development and instructional coaching model would have a positive impact on classroom quality. The results here revealed that an immediate impact on classroom quality can happen after two years of a continuous and sustained professional development and instructional coaching. Specifically, the data demonstrates positive growth in the three dimensions of the instructional support domain: concept development, quality of feedback, and language modeling. Pianta (2008) noted that the domain of instructional support is the most consistent predictor of student growth across time. The three dimensions form an index of the instructional value of the classroom that predicts student functioning in literacy as well as general knowledge (Howes, et al., 2008).

Although the data does not show significant improvement in all areas examined, the results do confirm that the participating teachers demonstrated evidence of change; particularly in the instructional support provided to students. However, the design of this study did not capture which particular aspects of the professional development and coaching impacted teacher growth.

The second research question examined whether a literacy-focused professional development and instructional coaching model would have a positive impact on student outcomes. The Early Literacy data demonstrates that this professional development and coaching model did have a positive effect on scores of kindergarten students. In particular, letter naming and letter sound fluency scores consistently exceeded spring benchmark expectations. Letter naming fluency has been identified as the single, best indicator for reading failure;

while letter sound fluency has demonstrated equally strong predictive abilities regarding general reading skills (Elliot, Lee, & Tollefson, 2001; Hintze, Ryan, & Stoner, 2003). Nonsense word fluency scores lagged at the 2009 and 2010 winter benchmarks, but both kindergarten and first grade students closed the gap by the spring administration of assessments. Phoneme segmentation is the only Early Literacy area that did not demonstrate improvement. The phoneme segmentation results suggest the need for increased support in this area. The need for further professional development, coaching, and a curriculum focused on explicit phonemic awareness instruction may be the next step here.

The data related to oral fluency, R-CBM, demonstrated mixed results. In particular, second graders in 2009 consistently fell below expectations, and that pattern continued as third graders in 2010. The oral fluency progress of all other students, however, proved to be positive over time. The fact that one particular group of students have struggled over the two years of this study is a cause for concern and deeper investigation. In recent years, oral fluency has come to be seen as an integral component in the development of reading proficiency. Kuhn and Rasinski (2011) argue that it is not clear whether improvements in comprehension result from strong oral fluency or if there is some interaction between the two that supports improvements in both.

The MAZE data suggests that the professional development and coaching model has had a positive impact in the area of comprehension; the majority of the student participants met or exceeded target scores by the spring 2010 administration of benchmark assessments. However, the same group of students (2009 second grade—2010 third grade) failed to meet target scores on the MAZE comprehension assessments; it is possible that underdeveloped Early Literacy skills have impacted performance on these higher-level literacy skills. Further diagnosis and support for this particular group of students would be next on the professional development and coaching agenda. The MAZE has been referenced as a corroborative measure, but not necessarily one that can provide the complete picture of reading skills (Shinn & Shinn, 2002).

Conclusion

The data seem to suggest two conclusions that can be drawn from this limited study. First, the combination of professional development and instructional coaching can be an effective design for increasing the instructional support provided by teachers. The key was a focus on the interaction between teachers and students in the classroom, regardless of materials or curriculum. Second, this study showed that the intense and consistent support provided in this model did positively affect literacy scores for the majority of student participants. It appears that the quality of the classroom environment does contribute to student learning. Guiding teachers to examine and improve the various dimensions of classroom quality may be the first step in improving student outcomes.

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Appendix A

Core Principles of Instructional Coaching

Equality—Involves a relationship between equals. Each person's thoughts and beliefs are held to be of great importance. This means collaborating with teachers who are recognized as equal partners.

Choice—The decision are made collaboratively. Thus teacher choice is implicit in every communicative act especially in what and how they learn.

Voice—All individuals in a partnership must have an opportunity to express their opinions. Teachers are free to express their ideas about what is being learned.

Dialogue—Partners engage in a conversation that encourages a respective dialogue.

Reflection—Instructional Coaches encourage teachers to consider ideas before adopting them.

Praxis—Instructional Coaches are collaborating with teachers on how to implement the ideas or practices in the classroom.

Reciprocity—Instructional Coaches believe that teacher's knowledge and expertise are important as their own. They believe teachers have the knowledge and skills to apply new ideas in their classroom.

Appendix B

CLASS Observation Instrument

Domain: Emotional Support

Dimensions:

- Positive Climate—the emotional connection between teacher and students
- Negative Climate—the level of negativity (anger, frustration, etc) exhibited by teachers and/or students
- Teacher Sensitivity—teachers’ awareness of and responding to students concerns (academic or emotional).
- Regard for Student Perspectives—the degree to which teachers’ interactions with students and classroom activities place an emphasis on students’ interests.

Domain: Classroom Organization

Dimensions:

- Behavior Management—how effectively teachers are able to monitor, prevent, and redirect behavior.
- Productivity—how well the classroom runs with respect to routines and the degree to which teachers organize activities to maximize student learning.
- Instructional Learning Formats—how teachers facilitate activities and provide interesting materials so that students are engaged and learning opportunities.

Domain: Instructional Support

Dimensions:

- Concept Development—how teacher use instructional decisions and activities to promote student critical thinking skills.
- Quality of Feedback—how teachers extend students’ learning through their responses to students ideas, comments and feedback.
- Language Modeling—the extent to which teachers facilitate and encourage students language.

Appendix C

AIMS Web Benchmark Literacy Assessments

Early Literacy Measures

Letter Naming Fluency (LNF)—requires students to identify as many upper and lower case letter names as they can in one minute.

Letter Sound Fluency (LSF)—requires students to identify as many lower case letter sounds as they can in one minute.

Phonemic Segmentation Fluency (PSF)—requires students to say the sounds in words presented orally by the examiner.

Nonsense Word Fluency (NWF)—requires students to identify and say the sounds in non-real words for one minute.

Reading Curriculum-Based Measurement (R-CBM)

Oral Reading Fluency (R-CBM)—requires students to read aloud for one minute from meaningful, connected, and graded passages.

Reading Maze

Silent Reading Comprehension—is a multiple-choice cloze task that students complete as they read narrative fiction passages silently for three minutes.

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THE INSTRUCTION AND ASSESSMENT OF EXPOSITORY TEXT: A CONTENT ANALYSIS OF FIFTH GRADE READING AND SCIENCE STATE ADOPTED TEACHER'S MANUALS

Alison A. Jones

Mary Beth Sampson

Wayne M. Linek

Texas A&M University-Commerce

Abstract

Research has shown that students must be able to read narrative and expository text in order to be successful in today's global society. In order to learn how to read different types of text, teachers must have materials that fully cover the standards that the state has developed for each grade level. The purpose of this study was to examine the teacher's editions of state adopted science textbooks and basal readers for fifth grade. The data sources were examined to determine how and with what frequency precise directions were given to the teacher concerning the instruction or assessment of expository text. The study also sought to determine whether an alignment existed between the data sources. The results indicated that publishers of science series have heard the call of educators, researchers and practitioners who emphasize that teaching materials need to contain explicit teaching directions for the instruction and assessment of expository text. Additional research should be conducted on newly developed state adopted series.

The purpose of this study was to review the teacher's manuals of the fifth grade state adopted basal readers and science textbook series in order to determine how and with what frequency precise guidelines for the instruction and assessment of expository text were present in the adopted reading and science series. Additionally, data were analyzed to determine whether an alignment existed between these texts.

Theoretical Framework

Successful reading has been defined as the ability to engage in a complex transaction between text and reader that involves the conversion of symbols into meaning that can be utilized, synthesized, and/or communicated to others (Robeck & Wallace, 1990; Rosenblatt, 1978). Text has been broadly categorized as narrative or expository. Narrative text is usually considered fictional and often presented as stories or the retelling a series of events in a story format which contains characters, settings, themes, and problems to be solved (Durkin, 1993; Roe, Smith, & Burns, 2005). In contrast, expository refers to nonfiction text that presents facts or explains concepts (Jacobson, 1998; Moore, Readance, & Rickleman, 1983; Weaver & Kintsch, 1996).

Research has shown that the structure and design of expository and narrative text are different (Durkin, 1993; Jacobson, 1998; Roe, Smith, & Burns, 2005; Weaver & Kintsch, 1996). As a result, a student who easily comprehends narratives may experience difficulty with expository texts. Researchers and practitioners have concurred that it is imperative that students be able to comprehend both narrative and expository text (Manzo, Manzo, & Estes, 2001; Roe, Smith, & Burns, 2005; Tompkins, 2003). The academic language in expository text is a specific language register, which is different than that of narrative text (Cummins, 2000; Gee, 2004, Krashen, 1993). Therefore, instruction that addresses comprehension of both types of text is necessary to ensure academic success. Traditionally, however, the majority of time and instructional materials in elementary school reading instruction have been focused on narrative texts (Afflerbach, Pearson, & Paris, 2008; Alexander & Jetton, 2000; Jacobson, 1998; Moore, Readance, & Rickleman, 1983; Pressley, 2000; Rosenblatt, 1978; Weaver & Kintsch, 1996).

For more than a decade educators have voiced concerns regarding what will happen regarding students' exposure to expository text in content subjects such as science and social studies in an educational environment where high stakes testing has tended to focus on reading and mathematics. The International Reading Association (IRA, 1999b) cautioned that excessive testing of specific content areas could cause a "narrowing of the curriculum." Concern has increased that courses of study not typically the focus of testing such as science and social studies would not be considered as important to student learning (Johnson & Johnson, 2002; Manza, 2005). Authorities in the field have articulated fears that instruction would focus on the tested subjects and students could lose essential opportunities to learn how to attain knowledge from expository texts in all subject areas (Hadaway & Young, 1994; IRA, 1999a; Rasinski & Padak, 2004).

As a result of the passage of No Child Left Behind Act ([NCLB], 2002) the focus on student achievement, particularly in reading and content areas such as math and science, increased. States were required to ensure curriculum standards were adopted and teaching materials and assessments aligned with those standards were available to all teachers. The policy makers seemed to

assume that the mandated materials would be resources for teachers not only for the basic information about a subject but for instruction that would enhance students' comprehension of text and academic achievement (Alvermann, Swafford, & Montero, 2004).

Throughout the years, researchers and practitioners have concurred that basal reading programs are used in elementary classrooms throughout the United States approximately 80-90% of the time (Allington, 1993; Canney & Neuenfeldt, 1993; Komoski, 1992; Moss & Newton, 2002; Pilonieta, 2010; Vacca, Vacca, & Gove, 2010). In addition, elementary science curricula typically have used a science textbook as its core (Eisner, 1992; Frey & Fisher, 2007; Tolman, Hardy & Sudweeks, 1998). However, research is lacking regarding how these materials address the instruction of expository text (Duke, 2004; Eisner; Gee, 2004; Moss & Newton, 2010; Pilonieta, 2010; Tolman, Hardy & Sudweeks). For example, the academic language in expository text is a specific language register (Cummins, 2000; Gee, 2004, Krashen, 1993; Lemke, 1990). Therefore, this study examined a state's adopted basal reading and science teacher's editions to determine how and with what frequency the instruction or assessment of expository text were addressed.

Methods

Data Sources

Based on compliance with the NCLB (2002), the State Board of Education (SBOE) for Texas was required to provide each school system with a selection of textbooks. Conforming state adopted textbooks were defined as "... instructional materials submitted that meet manufacturing standards adopted by the SBOE, material covering each element of essential knowledge and skills and are free of factual errors" (Texas Education Agency ([TEA], 2006, p.1). The textbook division of the State Board of Education (SBOE) was responsible for selecting the conforming state adopted textbook series using the state adoption process (TEA, 2004). Materials for each of the series consisted of a student textbook as well as a teacher's edition that provided directions for instruction and assessment. While each textbook series had additional supplementary materials, these supplements were only available if the district assumed the extra cost. As a result, materials available to all students in the state without additional cost to the school districts were the students' texts. Therefore only the pages in the teachers' editions containing instructions relating to the facsimiles of the student texts were analyzed.

The five adopted conforming state basal reading series adopted for 2000 through 2010 were: (a) *Collections*, (Abrahamson, et al., 2002) (b) *McGraw-Hill Reading, Macmillan/McGraw-Hill Edition*, (Flood, et al., 2001) (c) *SRA/Open Court Reading, Grade 5 Classroom System for 25 Students*, (Adams, et al., 2000), (d) *Scholastic Literacy Place*, (Block, et al., 2000), and (e) *Scott*

Foresman Reading: Fantastic Voyage, (Afflerbach, et al., 2000). The four state adopted science series examined were: (a) *McGraw-Hill Science*, (Baptiste, et al., 2000), (b) *Harcourt Science: Texas Teacher's Edition*, publisher (Jones, et al., 2000), (c) *Houghton Mifflin Science Discovery Works—Grade 5*, (Badders, et al., 2000), (d) *Scott Foresman Science*, (Cooney, et al., 2000), and (e) *The Full Option Science System (FOSS)*, (FOSS, 2000).

Procedures

Researchers utilized content analysis to analyze the data sources. The researchers adapted a five-phase system developed by Harmon, Hendrick, and Fox (2000) to collect information from each data source. The five phases used in this study were:

Phase 1. The primary researcher identified and verified the expository text selections in the science and basal reader teacher's editions. Since basal readers contained both narrative and expository selections, the primary researcher examined the table of contents and the beginnings of the selections to identify the expository texts. The primary researcher examined the table of contents and beginning of the selections in the science teacher's edition to verify all selections were expository text.

Phase 2. After identification and verification of expository text selections, the primary researcher examined all expository text selections in the conforming state adopted basal reader teacher's editions and the science state adopted teacher's editions to identify expository text message units. A text message unit is defined as an identifiable communication component, "(a) which serves as the basis for identifying the population and drawing a sample, (b) on which variables are measured, or (c) which serves as their basis for reporting analyses" (Neuendorf, 2002, p. 71). In this study, the expository text message units were defined as words, phrases, or groupings of words that gave an explicit direction or directions for the instruction or assessment of expository text. In order to ensure the directions explicitly referred to reading, expository text message unit were also defined as having a reference to the state reading standards. The FOSS series had no reference to the state standards; therefore, the series was not included in additional analysis.

While facsimiles of chapter and unit tests were in the teacher's editions, copies of the tests were available only in supplemental materials at an additional cost. Therefore chapter and unit tests were not included in the analysis.

Phase 3. The researcher identified and recorded each expository text message unit onto a coding sheet utilizing Microsoft Excel for the specific text. In addition, the unit title, unit section title, and page number(s) were included. Additional thoughts of the researcher concerning the expository text message units were also recorded.

The researcher identified categories relating to the instruction or assessment of each text as they emerged from the data. Each expository text message unit was placed in an existing category or a new category was formed.

Phase 4. After all teachers' editions were examined, researchers conducted a recursive examination of the data in order to verify categories and collapse categories. In addition the researchers met with two inter-coders to discuss data collection, analysis procedures, and coding procedures. Two independent coders were each responsible for reading 10% of the data sources and identifying message units. They categorized the message units using the researcher's data collection instrument. After categorizing the message units, the inter-coders coded the entries using the researcher's categories. The inter-coders' findings were discussed with the primary researcher to verify that there was an agreement as to the expository message units chosen, their placement in categories, and the coding used. The researchers and inter-coders continued to discuss their choices until consensus was reached.

Phase 5. After the categories were verified and collapsed, an overall frequency count of the expository text message units was conducted. In addition, frequency counts by category and text were completed. The following information is a summary of the findings from this study.

Results

The science teacher's editions had 2,619 pages of expository text. Basal reader teacher's editions contained 2,302 expository text pages. Within these pages the science teacher's editions contained 3,289 expository text instruction and assessment message units, while the basal reader teacher's editions contained 1,893.

Initially 28 categories of expository text message units emerged from the data. Through recursive analysis the 28 categories were collapsed into eight: a) Word and Concept Development, b) Word Analysis/Decoding, c) Pre Reading, d) Reading Skills, e) Reading Strategies, f) During/Post Reading, g) Individual Needs, and h) Informal Assessment. See Appendix A for definitions of the final collapsed categories with sample expository text message units.

The frequency count and percentage of the total expository text instruction and assessment message units in basal reader teacher's editions are shown in Figure 1 by category. The highest frequency of expository text message units was in Individual Needs (469/24.78%) category. Word Analysis/Decoding (94/4.97%) had the lowest frequency.

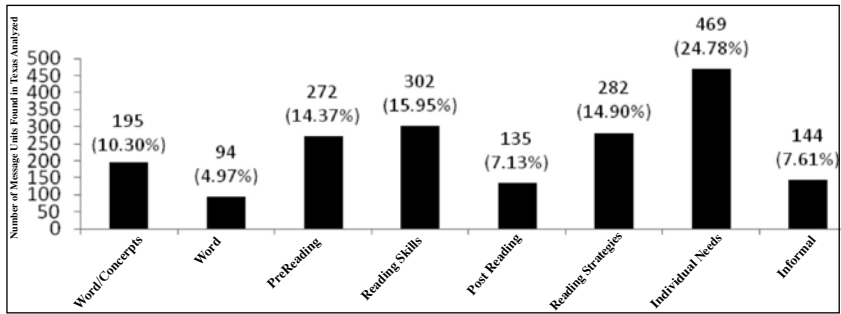


Figure 1. Total Expository Text Instruction and Assessment Message Units by Category in the Basal Reader Teacher’s Editions for Fifth Grade.

Note: Percentages are based on the total (n = 1,893) of expository text message units in the basal reader teacher’s editions.

Figure 2 portrays the frequencies and percentages by category of the total expository text message units in the science teacher’s editions. The highest frequency was in the Reading Skills (1,116/33.93%) category, while the lowest was in the Word Analysis/Decoding (7/0.21%).

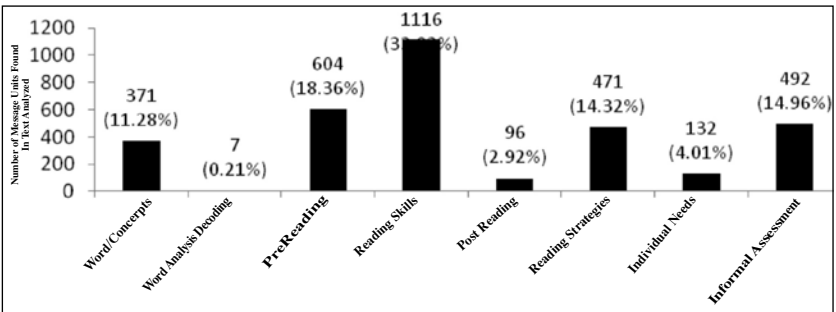


Figure 2. Total Expository Text Instruction and Assessment Message Units by Category in the Science Textbook Teacher’s Editions for Fifth Grade.

Note: Percentages are based on the total (n = 3,289) of expository text message units in the science teacher’s editions.

Figure 3 below portrays the frequency of total expository text message units by basal series. The basal reading series with the highest number of expository text message units 466 units was Open Court Reading.

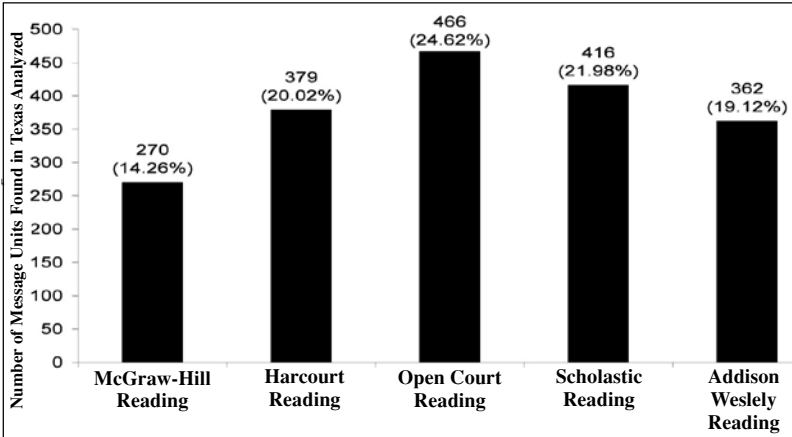


Figure 3: Total Expository Text Instruction and Assessment Message Units in the Basal Reader Teacher’s Editions for Fifth Grade.

Note: Percentages are based on the total (1,893) of expository text message units in the basal reader teacher’s editions.

Figure 4 below shows the frequency of expository text message units for each science series. McGraw-Hill science series had the highest frequency with 1,397 expository text message units.

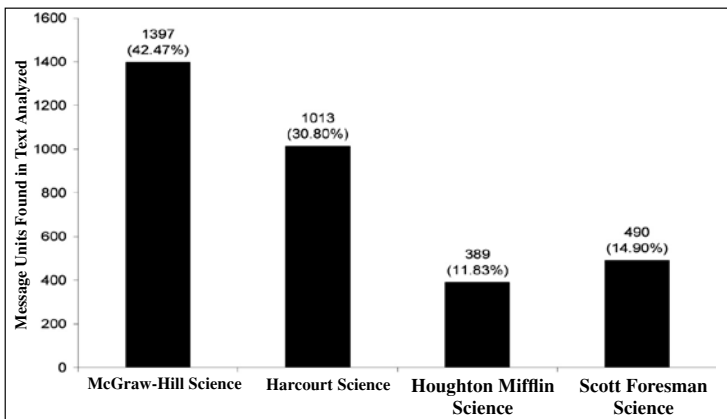


Figure 4: Total Instruction and Assessment Message Units Found in the Science Textbook Series for Fifth Grade.

Note: Percentages are based on the total (3,289) of expository text message units in the science teacher’s editions.

Table 1 shows the frequency of expository text message units in each category within the separate basal and science series. The combined total for science and basal teacher's editions are shown. In addition the frequency totals are provided for science and basal reader for each category. Percentages within each category are based on the combined frequency totals for the expository text message units in science and basal teacher's editions for the specific category.

Table 1: Frequencies and Percentages of Text Message Units by Category for Each Science and Reading Series

Category	Science Series	Frequency Message Units	Percentage Category (Science and Basal)	Reading Series		Overall Frequencies and %
Word Analysis/Decoding	Scott Foresman	7	6.93%	Open Court	62	61.39%
	McGraw Hill	0	0%	Scholastic	14	13.86%
	Harcourt	0	0%	Harcourt	8	7.92%
	Houghton Mifflin	0	0%	McGraw Hill	7	6.93%
				Scott Foresman	3	2.97%
	Total	7			94	101(1.9%)
Word/Concept	Harcourt	205	36.23%	Scholastic	45	7.95%
	McGraw Hill	113	19.97%	Open Court	44	7.77%
	Scott Foresman	51	9.01%	Harcourt	44	7.77%
	Houghton Mifflin	2	0.35%	McGraw Hill	42	7.42%
				Scott Foresman	20	3.53%
	Total	371			195	566(10.9%)
Pre-Reading	McGraw Hill	274	31.28%	Harcourt	73	8.33%
	Harcourt	203	23.18%	Open Court	61	6.96%
	Houghton Mifflin	86	9.82%	Scott Foresman	50	5.71%
	Scott Foresman	41	4.68%	McGraw Hill	49	5.59%
				Scholastic	39	4.45%
	Total	604			272	876(16.9%)
During and Post Reading	McGraw Hill	60	25.98%	Open Court	39	16.88%
	Scott Foresman	18	7.79%	Scholastic	30	12.99%
	Houghton Mifflin	12	5.19%	Harcourt	28	12.12%
	Harcourt	6	2.60%	Scott Foresman	22	9.52%
				McGraw Hill	16	6.93%
	Total	96			135	231(4.4%)
Reading Strategies	McGraw Hill	219	29.09%	Scott Foresman	80	10.62%
	Scott Foresman	106	14.08%	Harcourt	72	9.56%
	Harcourt	97	12.88%	McGraw Hill	55	7.30%
	Houghton Mifflin	49	6.51%	Open Court	49	6.51%
				Scholastic	26	3.45%
	Total	471			282	753(14.5%)
Individual Needs	McGraw Hill	56	9.02%	Scholastic	156	25.11%
	Harcourt	45	7.25%	Open court	131	21.11%
	Scott Foresman	31	4.98%	Harcourt	85	13.69%
	Houghton Mifflin	0	0%	Scott Foresman	67	10.79%
				McGraw Hill	50	8.05%
	Total	132			489	621(11.9%)
Informal Assessment	Scott Foresman	193	30.35%	Scott Foresman	59	9.28%
	Harcourt	180	28.30%	Scholastic	31	4.87%
	Houghton Mifflin	119	18.71%	Harcourt	22	3.46%
	McGraw Hill			Open Court	20	3.14%
		0	0%	McGraw Hill	12	1.89%
	Total	492			144	636(12.2%)
Total		3289			1913	5202 100%

Discussion, Conclusions, and Implications

The science teacher's editions contained 3,289 expository text message units, almost twice as many as the basal teacher's editions, which contained

1,893. The difference cannot be attributed to science texts consisting solely of expository text selections because the number of pages of expository text in the basal (2,302) and science (2,619) teacher's editions were similar. With a page count difference of only 317 pages, the difference must be attributed to other reasons.

Findings seem to indicate science publishers were attending to address the call from researchers, practitioners, and policymakers for increased emphasis on expository text by providing teachers with materials containing explicit directions regarding the instruction of expository text. This emphasis becomes even more evident when noting the top two categories of expository text message units in the science teacher's editions were Reading Skills ($n = 1,116$) and Pre-reading ($n = 604$). In addition, the science teacher's editions had 1,116 message units in the Reading Skills category out of the 1,418 total for both science and basal teacher's editions.

The basal teacher's editions had the most expository text message units in only three (Word Analysis/Decoding, Individual Needs, Post Reading) of the eight categories. All basal reading series had entries in the Word Analysis/Decoding category with a total frequency of 94. In contrast only one of the science series had seven occurrences in the Word Analysis category.

Within the basal readers, Open Court had the highest Word Analysis/Decoding frequency. For example, one teacher's edition instructs the teacher in the following manner: *Long I and Long O. Say the words arrived and time on page 85. Have students identify the letters that produce this long i sound (ie). Have students pronounce the words Olympic and Rome ... Have them identify the letters that produce this long o sound (oe). Then have them find two words that contain the long o sound in the third paragraph (gold, tornado)* (See Appendix A). These findings raise the question as to whether the science teacher's editions may have better alignment than basal readers with regard to the thoughts of researchers and practitioners (Chall, 1996; Vacca & Vacca, 2002; Zemelman, Daniels, & Hyde, 2005) who have concurred that word analysis/decoding skills are best learned in the primary grades within the context of "real" reading. They also agree that readers at upper levels increase their skills through utilizing them when encountering a word they may not know rather than by isolated instruction.

The second category in which the basal reading series had a higher frequency of expository text message units was Individual Needs. The Individual Needs category had the largest frequency of the total message units (469) and accounted for approximately one-fourth of the expository text message units in the basal readers. Researchers and educators (Aldridge & Goldman, 2002; McNeill, 2000; Ohanian, 1999) have stressed that effective reading instruction must address the needs of diverse populations. In order to be in compliance with the NCLB (2002), states have been required to make provision for all students,

including those with specialized learning needs. Within this study, the Individual Needs category included any student population that required help with work other than that which is conducted in the regular classroom. This included such groups as ESL, ELL, and all levels of students with special needs.

These findings indicate that the publishers of the basal readers have recognized the necessity for all students to receive instruction in expository text. However, it should be noted that a variety of diversity was included in this category. Therefore, additional research should be conducted to determine if the instruction and assessment message units are appropriate for the specific populations.

The third category in which the frequency and percentage of expository text message units in the basal teacher's editions ($n = 135$; 7.13%) were slightly higher than those of science ($n = 96$; 2.92%) was Post Reading. In order to be categorized as Post Reading, a message unit provided specific instructions that the instruction occurred after reading a text or portion of text.

The parameters for message units to be categorized as Pre Reading were similar to Post Reading but with the timing of instruction being prior to reading the text. While it was encouraging to find expository text message units in both the science and basal teacher's editions specifically addressing instruction before and after students read a text, it was somewhat surprising that the science teacher's editions ($n = 604$) provided more than twice the number of Pre Reading directions than basals ($n = 272$).

Afflerbach, Pearson, and Paris (2008) voiced concern that educators used the terms *skills* and *strategies* inconsistently when describing instruction and learning. As described previously and in Appendix A, the researchers utilized terms in the expository text message units and the specific state standards connected to the directions in categorizing the text and found that the teacher's editions of basal reader and science textbooks do the same. The terms were interchanged in the different series with a direction being referred to as a strategy in one text and a skill in another. Afflerbach, Pearson, and Paris stressed the importance of correctly defining the two terms since confusion can affect how the instruction of text is conducted. Findings from this study add to the body of evidence that the differences between the two terms are not clear in educational materials.

While it was encouraging to find that the science teacher's guides addressed expository text instruction, it was also a concern that more instruction of expository text was not included in basal readers. Since basal readers still remain the mainstay for teaching reading in many classrooms these instructional materials often define the reading program. This research suggests that a continued review of the state adopted conforming state basal readers and science textbooks be conducted in order to determine if and how they address the instruction and assessment of expository text.

Durkin examined basal readers in 1981 and found that the explicit instruc-

tions to the teacher concerning implementation of comprehension instruction were lacking. The findings in this current study indicate that even though the basal readers had similar number of pages of expository text as the science series, the basals were still lagging in explicit instructions for the teaching of expository text. As students' progress through the grades, they will experience an increasing amount of expository text and comprehension of the text will be key to their academic success (Chall, 1996; Jacobson, 1998). Therefore, research should continue to be conducted to examine basal readers and content series at various levels to determine how both the quantity and the quality the instruction and assessment of expository text are addressed. Ongoing research and vigilance are needed to ensure students have access and exposure to expository text and teachers have information regarding effective instruction.

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Appendix A

Expository Text Instruction and Assessment Message Unit Category Definitions and Examples

Category	Definition	Examples from Message Unit Instrument
Word/Concept Development	Any message unit relating to understanding the meaning of a word or concept	<p>Basal Reader: Vocabulary—Discuss word meanings—Discuss with students the selection vocabulary words. Provide definitions or ask students to look up the definitions in the glossary (Afflerbach, et al, 2000, p. 148B).</p> <p>Science Textbook: Students compare the meaning of the words “element elementary school”. Element is a building block like elementary education is a foundation of learning (Cooney, et al., 2000, p. B9).</p>
Word Analysis /Decoding	Any message unit relating to understanding how a word was to be pronounced; utilizing the term <i>decoding</i> ; giving specific directions for phonetic instruction	<p>Basal Readers: Phonics-Long I and Long O—Say the words arrived and time on page 85. Have students identify the letters that produce this long <i>i</i> sound (<i>ie</i>). Have students pronounce the words Olympic and Rome on page 85. Have them identify the letters that produce this long <i>o</i> sound (<i>oe</i>). Then have them find two words that contain the long <i>o</i> sound in the third paragraph (e.g., gold, tornado) (Flood, et al, 2001, p. 85).</p> <p>Science Textbooks: Word Knowledge—Decoding—Write the word <i>kilowatt</i> on the chalkboard. Draw a line separating <i>kilo</i> from <i>watt</i>. Discuss other words that start with kilo (Cooney, et al., 2000, p. B118).</p>
Pre Reading	Any message unit providing specific direction for activities used prior to reading a text for the purpose of providing, activating, or enhancing students’ pre knowledge of the content in the text	<p>Basal Readers: Set Reading Purpose—Have students think about heritage and how ancient traditions can be incorporated into a modern lifestyle (Afflerbach, et al., 2000, p. 2441).</p> <p>Science Textbooks—Preview-Students scan the illustrations and captions in the chapter (Jones, et al., 2000, p. C3).</p>
Reading Skills	Any message unit relating to...“information-processing techniques that students use automatically and unconsciously as they construct meaning” (Tompkins, 1998, p. 31). Identified as a reading skill in the state standards or teacher’s edition.	<p>Basal Readers: Cause/Effect-Write the following sentence on the chalkboard and read it aloud: <i>They lightened their load because the oxen became tired.</i> Suggest students ask the following questions to identify the cause-and-effect situation in the sentence (Block, et al. 2000, p. T295).</p> <p>Science Textbooks: Note Taking-Students are instructed to first make a list of examples of matter and energy then make notes to recall the differences between them (Badgers, 2000, p. C12).</p>

<p>Reading Strategies</p>	<p>Any message unit relating to "...a systematic plan, consciously adapted and monitored, to improve one's performance in learning." (Literacy Dictionary, 2005, p.244. Identified as a reading strategy in the state standards and/or teacher's edition.</p>	<p>Basal Readers: Context Clues-Have students read Words to Know and think about the meaning of each word. Then ask them to read "Flood." Model using descriptions and language structure as a context clue to figure out the meaning of downpour (Afflerbach, et al., 2000, p.244) Science Textbooks: Sequencing-Have students act out the order of events to practice storm safety (Baptiste, et al., 2000, p.170).</p>
<p>Individual Needs</p>	<p>Any message unit providing explicit directions instruction regarding the text for a specifically identified population (e.g., ESL, ELL, gifted, special needs).</p>	<p>Basal Reader: Intervention-Clarifying-If the student is having difficulty clarifying why it would have been "political suicide" for Lincoln to express his abolitionist view, have them reread the paragraph where the expression appears and identify where the points of confusion are. Have them look up unfamiliar terms in the dictionary (Adams, et al., 2000, p.356). Science Textbook: ESL-Students are helped to learn the meaning of renewable, reusable, and nonreusable resources by making a three column chart and paste pictures from catalogs or magazines in the column that represents the vocabulary words (Jones, et al., 2000, p. C37).</p>
<p>Informal Assessment</p>	<p>Any message unit specifically designated by teacher's edition as assessment relating to a student's or students' reading of text.</p>	<p>Basal Reader: Close and Assess-Graphic Sources-To see if students understand how to use graphic sources, invite them to return to the photographs on pages 156-159. Ask: How did each of these photographs help you better understand the effects of a hurricane? (Afflerbach, 2000, p. 161) Science Textbook: Close/Assess- Students will answer questions about the selection concerning plant growth and mass and how data helped them establish the reason for the increase in mass-TAAS practice (Baptiste, et al., 2000, p. S5).</p>

