Balance, Literacy Acceleration, and Responsive Teaching in a Summer School Literacy Program for Elementary School Struggling Readers

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Abstract:

The purpose of this research was to examine the effects of a balanced, accelerated, and responsive literacy program on the reading growth of elementary school struggling readers. The participants in this study were 10 second-grade children identified as underachieving in reading who were enrolled in an elementary school summer program. This study was conducted as a formative experiment, an emerging research design in which quantitative and qualitative data are collected and analyzed in relation to an established pedagogical goal. An analysis of the data revealed that students grew in their word identification abilities, fluency, strategic comprehension abilities, perceptions of themselves as readers, attitudes toward reading, and instructional reading levels. The importance of educators implementing self-constructed balanced literacy programs was discussed. The accelerated progress of students was detailed, and the importance of implementing responsive reading programs was considered. Implications for future reading research and instruction were provided.

Article:

There is so much more to teaching reading than teaching reading. It's teaching children to read. Children with complex needs, many of which you just can't address. It's teaching children in a place where you don't have enough materials, where you are constantly being told what you must do... Maybe the key to teaching children to read is just that--teaching children to read, not teaching reading, or teaching reading in the content areas, or teaching critical literacy.... There is nothing more difficult than helping children learn to read and learn to want to read.

I wrote this entry in my teaching and research journal following a particularly challenging twelve-hour day during which my students did not seem to be progressing in reading to my satisfaction. These musings revealed some of the complexities and issues that I wrestled with during my involvement as a "scholar teacher" (Moss, 1994) in a summer program for elementary school struggling readers. In this research, I examined the effects of a balanced, accelerated, and responsive literacy program on the reading growth of students in my classroom, and I gained many insights into reading research and practice.

In Educating the Reflective Practitioner, Schon (1987) described the "varied topography of professional practice" as consisting of a "high ground" and a "low ground." He argued that "on the high ground, manageable problems lend themselves to solution through the application of

research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution" (p 3). In this research, I combined Schon's "high ground" and "low ground" principles by conducting a formative experiment, an inquiry implemented in an ecologically valid context in which quantitative and qualitative data are utilized to determine how effectively an intervention or program meets an instructional goal. This emerging research design takes into account the complexities of classroom life (Reinking & Pickle, 1993). Through my formative experiment, I addressed the "low land" problem of teaching elementary school struggling readers through a "high ground," empirically-based literacy program.

This research was based on four key principles. First, this study was informed by my personal, practical, and professional literacy-based knowledge (Vacca, Vacca, & Gove, 1995, chap. 1). Thus, my beliefs about instruction, former teaching experiences, and knowledge and interpretations of literacy research affected my inquiry. Second, it was my goal to accelerate rather than remediate the reading development of struggling readers (Clay, 1993a). Third, I employed an expanded framework for balanced literacy instruction (Fountas & Pinnell, 1996). Finally, I conducted this research from the dual role of researcher and teacher.

RATIONALE AND EDUCATIONAL SIGNIFICANCE

This study has the potential to make several contributions to the field of literacy education. First, this study provides an example of an elementary school summer reading program from which other educators can learn. Second, some of the principles of instruction in this program may also apply to aspects of yearlong reading programs designed for all types of learners. Third, I see the proposed study as contributing to the growing literature on formative experiments. Finally, alluding to Schon's (1987) "swamp" and "high ground" metaphor, Mosenthal (1989) argued that "reading researchers have held tight to the high ground: few toes have been muddied in the swamps. While this may have benefited researchers and volume binders, we need to question what significant, real world teaching problems have actually been solved through research" (p. 719). It was the purpose of this research to address the "significant, real world teaching problem" of accelerating the reading growth of elementary school struggling readers.

REVIEW OF RELATED RESEARCH

The concepts of balanced literacy instruction, literacy acceleration, and responsive teaching form the theoretical underpinnings of this study. In this section, I provide a synthesis of research on each of these concepts.

BALANCED LITERACY INSTRUCTION

There are many definitions and interpretations of balanced literacy instruction (Freppon & Dahl, 1998; Spiegel, 1998). Drawing on these conceptions, I define balanced literacy instruction as an eclectic, modifiable, research-based approach to language arts instruction that is designed to address students' needs and strengths through the teacher's principled provision of explicit instruction in conjunction with predominantly uncontrived reading and writing experiences.

Within the past five years, balanced literacy instruction has been described in many ways. Initially conceived of as a balance of "whole language" and "phonics" (McIntyre & Pressley, 1996), balanced literacy instruction was expanded to many other dimensions, including curriculum control, text genres, independent and assisted learning, text and task authenticity, and

reading skills instruction and literature response (Pearson & Raphael, 1997). Today, this short-lived era of balanced literacy instruction may already be waning (Spiegel, 1998).

The concept of balance has been applied to instruction in individual tutoring (Clay, 1993a), small-group instruction (Roller, 1996), and elementary school classroom reading programs (Baumann & Ivey, 1997). Reading Recovery teachers achieve instructional balance through the inclusion of connected text reading, writing, and explicit phonemic awareness instruction (Spiegel, 1995). Roller (1996) described her work in a university-based summer reading clinic program in which struggling readers received reading instruction in both a small group reading and writing workshop structure and in tutoring sessions. Baumann and Ivey (1997) employed "delicate balances" of literature and strategy instruction, and teacher-directed and student-responsive instruction in a diverse, second-grade classroom.

There is little published research on balanced literacy instruction in general (Freppon & Dahl, 1998) and even less on balanced instruction with struggling readers. The research of Baumann and Ivey (1997) does detail the progress of elementary school students in reading and the changing, balanced environment over time, but this research does not focus exclusively on the progress of struggling readers.

Purcell-Gates (1997) concluded that there is no "issue more in need of information, or data, than the role of explicit skills teaching in process-based language arts classrooms" (p. 282). This research adds to the literature through detailing the specific progress of struggling readers in a balanced literacy program. The multiple balances utilized in this research differ from other iterations of balanced literacy programs described in the literature. In this research, I describe how these multiple balances were employed and detail specific student outcomes as they related to their participation in this program.

LITERACY ACCELERATION

Marie Clay (1993a) characterized the literacy progress of students in Reading Recovery as being accelerated rather than remediated:

> The child requiring help with early reading and writing has been making very slow progress and has been dropping further and further behind his classmates. In order to become an average-progress child he would have to make fast progress, faster than his classmates, to catch up to them. Acceleration refers to this rate of progress.... Acceleration is achieved as the child takes over the learning process and works independently, discovering new things for himself inside and outside the lessons (pp. 8-9).

Drawing on Clay's definition, I define literacy acceleration as instruction that enables struggling readers to make rapid progress and read as well as or better than their peers not struggling in reading, as opposed to "remedial" instruction which often slows down and decontextualizes instruction, resulting in struggling readers making little progress (Allington, 1991a; 1991b).

Reading educators have learned much about how the literacy progress of elementary school struggling readers can be accelerated in one-on-one tutoring settings (Clay, 1993a; Morris, 1992). The effectiveness of tutoring programs in accelerating the literacy progress of struggling readers and enabling them to read grade-level texts has been well described in the literature

(Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994; Wasik & Slavin, 1993). Despite the effectiveness of reading tutoring programs, however, one-on-one instruction for students struggling in reading rarely occurs (Walmsley & Allington, 1995). The need for translating "what works" in terms of literacy acceleration in reading tutoring to group settings is needed (Shanahan, 1998). Several studies (e.g., Juel, 1994; Juel, 1996; Spiegel, 1995) have suggested general ways in which aspects of effective tutoring programs for struggling readers can be applied to accelerating their reading in group settings. Missing from these descriptions, however, are specifics on how these principles, guidelines, and theories can be translated into accelerating students' reading progress in small-group or classroom reading programs.

Several recent small-group reading interventions have been described as being successful in improving the reading achievement of struggling readers (e.g., Hiebert, 1994; Hiebert, Colt, Catto, & Cury, 1992; Taylor, Short, Frye, & Shearer, 1992; Taylor, Short, Shearer, & Frye, 1995; Taylor, Strait, & Medo, 1994). In many of these programs, however, the progress of struggling readers was described primarily through standardized test data, with limited descriptions of how these students performed on more authentic reading and writing tasks. These programs varied in terms of how well they supported the enrolled students in achieving grade-level proficiency in reading.

Allington (1998) characterized summer school programs as having the potential to accelerate the reading development of struggling readers. He provided a summary of summer school organizational structures that may serve to meet the goal of accelerating reading development. However, research that specifies the literacy instructional environment and the progress that struggling readers can be expected to make in summer school programs is limited (e.g., Dunlap & Bruneau, 1992; Elish-Piper, 1996/1997; Roller, 1996).

In order for elementary school struggling readers to make accelerated progress in their reading development, they need quality instruction in their regular classroom reading programs (Allington & Walmsley, 1995; Hiebert & Taylor, 1994; Shanahan, 1998; Walmsley & Allington, 1995). Research has provided descriptions of classroom reading programs that support students with reading difficulties (Duffy-Hester, 1999), but these programs vary greatly in how well they actually enable these students to read on grade level with their peers. The concept of literacy acceleration has not been applied systematically to classroom reading programs for struggling readers.

The present research adds to the literature on literacy acceleration in three ways. First, it explores how literacy acceleration can be implemented in a group setting for struggling readers. Second, it provides one perspective on the progress that can be achieved with small groups of students in a short-term literacy program. Third, this research specifies the nature of the successes that one group of struggling readers achieved in a summer reading program.

RESPONSIVE TEACHING

Responsive teaching is scaffolded instruction that the teacher continuously modifies and attempts to improve based on his or her ongoing observations and assessments of the needs and progress of his or her students. This definition draws on the research of Stremmel and Fu (1993), who conceive of responsive teaching as being based on the Vygotskian zone of proximal

development concept (Vygotsky, 1978) and as sharing some conceptual similarities with reflective teaching, in which practitioners respond and attempt to solve context-based problems (e.g., Dewey, 1933; Schon, 1983; Schon, 1987; Zeichner & Liston, 1996).

Reading tutoring programs utilize responsive teaching in varied ways. For example, although there is an established teaching routine that Reading Recovery teachers follow, these teachers adapt their instruction based on student responses and needs. In explaining the responsive instruction of Reading Recovery teachers, Lyons, Pinnell, and DeFord (1993) explained that "learning how to observe, record, analyze, and then respond to the child's behavior is a difficult and complex task, yet accomplishing this goal is essential if teachers are to provide the assistance students need to develop self-extending literacy behaviors" (p. 150). In the Charlottesville Volunteer Tutorial Book Buddies Program (Invernizzi, Juel, & Rosemary, 1996/1997), instruction on students' word identification and reading instructional levels is viewed as essential in advancing the progress of struggling readers. Although there is a general sequence of word study in this program, responsive teaching occurs as tutors decide when students are ready for new instruction and how to scaffold students' reading and writing experiences.

General ways to promote responsive teaching in the context of small-group or classroom reading programs have been discussed in the literature (e.g., Englert & Palinscar, 1991), but research on responsive teaching is limited primarily to strategy instruction (e.g., Pressley, 1998; Rosenshine & Meister, 1997) rather than in reading instructional programs overall. In reading programs such as Concept-Oriented Reading Instruction (Guthrie, McGough, Bennett, & Rice, 1996; Guthrie, Van Meter, McCann, Anderson, & Alao, 1996), Direct-Instruction Reading (Carnine, Silbert, & Kameenui, 1997; Kameenui, Simmons, Chard, & Dickson, 1997; Tarver, 1992), Fluency-Oriented Reading Instruction (Stahl, Heubach, & Cramond, 1997), and Success for All (Slavin, Madden, Dolan, & Wasik, 1996), the role of the teacher is downplayed. This may leave the impression that the program itself, rather than the responsive teacher who implemented the program, is the factor responsible for students' reading growth.

The Kamehameha Early Education Program Whole Literacy Curriculum (KEEP) (e.g., Au & Carroll, 1997) and the Four Blocks Approach (Cunningham, Hall, & Defee, 1998) have been modified over time, but the role of the classroom teacher in making these modifications is not emphasized. The role of responsive teaching in the Book Club program (e.g., McMahon, Raphael, Goatley, & Pardo, 1997), however, is made explicit; for example, Grattan (1997), a first-grade teacher, discussed how she modified this program to meet the needs of her first-grade students. Although some researchers suggest that responsive reading instruction cannot and should not be done in group contexts (Zalud, 1998), others (Duffy, 1997) view responsive teaching as crucial if educators are to become "entrepreneurial" rather than mere consumers of reading programs.

Missing from the literature on responsive teaching are multiple examples of this teaching in action in research-based reading programs with groups of children rather than with individual students in tutoring sessions. The current research provides a necessary addition to reading research through providing such an example in a summer school reading program.

METHOD

In this section, I discuss (a) the perspectives on reading education that I brought to the research, (b) the design of the study, (c) a description of the school and participants, (d) the instructional program, (e) data sources and data collection procedures, and (f) data analysis procedures.

RESEARCHER PERSPECTIVE

This study was informed by my beliefs about reading instruction for struggling readers, the practical knowledge that I gained from teaching struggling readers, and research related to literacy education (Vacca, Vacca, & Gove, 1995, chap. 1). I have taught hundreds of elementary school struggling readers in various roles and contexts. Through these teaching experiences, I formed instructional beliefs that affected all aspects of this study. I value reading research with close ties to practice, and I consider myself among the "rare breed of reading researchers.... who are also educators actively involved with children and teachers" (Vellutino, 1992, pp. 355-356). I believed that it was essential to experience firsthand the strengths and weaknesses of this program as a teacher and researcher before possibly recommending that others investigate or implement it.

STUDY DESIGN

This study was conducted as a formative experiment, which I define as a research design implemented in an ecologically valid context in which quantitative and qualitative data are utilized to determine (a) the extent to which the designed intervention or program is meeting the established instructionally-based research goal and (b) how the intervention or program should be modified to reach this goal more efficiently or effectively. Reinking and Watkins (1998) described formative experiments as being aligned philosophically with a paradigm of pragmatism (e.g., Cherryholmes, 1993). Tashakkori and Teddlie (1998) describe pragmatic research as enabling the researcher to "study what interests and is of value to you, study it in the different ways that you deem appropriate, and use the results in ways that can bring about positive consequences within your value system" (p. 30). This view of research undergirds my interpretation of the formative experiment design.

Discussed by Newman (1990) and others, a formative experiment is an emerging, evolving research design that has the potential to capture the intricacies of conducting research in classroom settings (Reinking, 1996). A formative experiment enables the researcher to capture the complexities of classroom-based research in ways that other, more traditional research designs cannot (Reinking & Pickle, 1993). In a synthesis of literature on formative experiments (Jacob, 1992; Newman, 1990; Reinking, 1996; Reinking & Pickle, 1993; Reinking & Watkins, 1996), Reinking and Watkins (1998) described this design as one in which the researcher (a) identifies and provides a rationale for a pedagogical goal, (b) describes an instructional intervention and how it might accomplish the goal, (c) collects data to understand how the instructional environment affects the attainment of the goal, (d) uses data to modify the intervention as necessary to achieve the goal, (e) considers the effects the intervention produces beyond the pedagogical goal, and (f) ascertains how the overall environment was modified because of the implementation of the formative experiment.

My conception of a formative experiment is similar to and different from other formative

experiments. In a formative experiment, the researcher "sets a pedagogical goal and finds out what it takes in terms of materials, organization, or changes in the technology to reach the goal" (Newman, 1990, p. 10). The pedagogical goal of the program that I implemented was to accelerate the reading progress of struggling readers. I assumed the role of both teacher and researcher, and I modified the program based on students' needs and progress. I saw it as essential to serve as both researcher and teacher to find out for myself whether and how this program worked before conducting studies in which I researched the implementation of this program by classroom-based educators.

SCHOOL AND PARTICIPANTS

This research took place in a summer program designed to accommodate struggling readers attending Historia Elementary School (pseudonym), which is located in a rural region of the Southeastern United States. I had conducted staff development workshops for educators in this county during the preceding three years, so I was familiar with local educational issues. I was a regular summer school teacher at Historia, although I received no compensation for my services.

Forty-three percent of the Historia students received free or reduced-price lunch. The school population was 96% European American. Forty-five percent of the students who had completed Grades 1 and 2 at Historia the preceding school year were identified as being candidates for the summer program due to their below-grade level performances on a state-mandated reading assessment. My colleagues at Historia stated that summer school students were either scheduled for psychoeducational evaluation, were "slow learners" who did not qualify for special education services, or were students who needed an "extra push" in reading in order to achieve satisfactorily during the next school year.

In the summer program, there were four classrooms of children who had just completed the first grade and three classrooms of children who had just completed the second grade. I was assigned to one of the latter classes. Twelve second-grade students from this population were tentatively assigned to my classroom. The other second-grade teachers called the parents of these students and explained the reading program and my research. Eleven parents subsequently consented to have their children remain in my class. The remaining parent did not want his child enrolled in my class, and he subsequently failed to enroll his child in the summer program.

I sent home 11 permission letters, all of which were returned; however, one student did not attend the summer program because of a family crisis. Thus, 10 students participated in this study and were enrolled in my classroom. I contacted all parents by phone or in person to discuss the summer reading program and to answer any questions they had about it or the research. There were six girls and four boys in my classroom, all of whom were European American. Students entered the program with initial instructional reading levels ranging from primer to third grade as determined by informal reading inventory and running record data. Four students were referred for special education services for behavioral or reading difficulties. Eight students had participated in a special state-funded program for students with reading difficulties during the previous school year. All students were slated to receive state or federally-funded compensatory education services in reading during the next school year. All student names in this research are pseudonyms.

INSTRUCTIONAL PROGRAM

I used a variety of reading materials in the summer program. These materials consisted of sets of trade books that were shared by all of the teachers and used in small-group reading instruction; individual trade books, picture books, and chapter books used during student independent reading time and read alouds; traditional songs and poems I created that were written on chart paper; class books of stories written by class members; and big books that belonged to the school. I also obtained permission to convert small texts published by Modern Curriculum Press and The Wright Group into big books. I created gradients of text difficulty for all books used in whole-class reading, small-group reading, and student independent reading time using guidelines established by Peterson (1991) and discussed by Fountas and Pinnell (1996).

The summer program lasted 30 days. There were five phases in the program: (a) a pre-session with teachers, (b) a pre-assessment of students, (c) the instructional program, (d) a post-assessment of students, and (e) an awards ceremony and celebration for students. There were 21 instructional days in the program. Students attended summer school from 9:00 a.m. to 12:00 p.m. Monday through Friday, with approximately two and a half hours of instructional time per day, a time frame comparable to the 2 hours and 23 minutes that elementary school classroom teachers, on average, devote to reading and language arts instruction daily (Baumann, Hoffman, Moon, & Duffy-Hester, 1998). In the following sections, I describe the four instructional components of the program and how each incorporated the concepts of balance, acceleration, and responsive teaching; and the activities in which students participated at the end of the day.

Whole group reading and word sorting. In this component, students participated in six instructional activities that incorporated a "whole-part-whole" teaching structure (Strickland, 1998; Trachtenburg, 1990). Students began by reading entire texts (whole), proceeded to word sorts and word making (part), and ended by reading other texts independently that included the studied word elements (whole).

First, we reread chorally big books, poems, or songs. These rereadings were conducted to promote students' reading fluency and word identification abilities (Adams, 1990), as well as for enjoyment. Second, we read poems that I created and wrote on chart paper. These poems included words with spelling patterns that were going to be studied that day. Third, students engaged in several word identification activities using words from the poems and other words with the same word patterns. These activities included a whole-class word sort (Barnes, 1989), a modified version of Making Words (Cunningham & Cunningham, 1992) as described by Bear, Invernizzi, Templeton, and Johnston (1996), and word-wall activities (Cunningham, 1995). Fourth, students chorally sang a new song that I introduced to them. This song included words with patterns studied in the word-identification activities. Students were asked to identify words from the songs that included these elements. Fifth, I introduced a new big book to students. After the introduction, the students read the book chorally. Initially, we read big books near the average reading instructional level of the students. As students' reading levels progressed, we read more difficult books. Sixth, I encouraged students to find words with the studied word patterns in their individual reading and to use these patterns in their writing. Students added words to the class word sort during independent reading time and center time that fit the studied patterns.

Individual reading and writing. Before students began their reading and writing each day, I taught a mini-lesson. These lessons focused on topics such as what students could do if they encountered a word that they did not know when they were reading, how to choose a writing topic, and how to revise and edit their writing.

In the individual reading component, students chose books on their independent reading levels to read to themselves or with partners in order to apply the reading skills and strategies they were learning, build reading fluency, and increase their motivation for reading (Clay, 1991a). Students selected and read books from tubs that I organized based on gradients of text difficulty (Fountas & Pinnell, 1996; Peterson, 1991). During this time, I held individual reading conferences with selected students and took running records, which I used to guide subsequent instruction. I gradually increased the difficulty levels of texts as students improved their reading performances. During the individual writing time, students participated in a workshop structure (Calkins, 1994). Students wrote on topics of their own choosing, and I conferenced with individual students. I included this writing time primarily to improve students' word identification abilities (Adams, 1990) rather than to improve their overall writing abilities.

Book talks and read alouds. In this component, I promoted books from the reading tubs to encourage and support students' independent reading (Clay, 1991b). I also read aloud a variety of more complete trade books to provide a model for fluent reading, to improve students' comprehension and vocabulary, to motivate students' reading (Huck, Hepler, & Hickman, 1993), and to model before, during, and after reading comprehension strategies (Pressley & Afflerbach, 1995). Students then discussed aspects of the books that were meaningful to them. The book talks and read alouds influenced students' reading choices. Many of the books that I read or introduced during this component became books the students chose to read during their center time.

Small-group instructional level support reading. This instructional block was both the most difficult for me to implement and the component where my most powerful and meaningful instruction took place. Students were divided into flexible reading groups according to their instructional reading levels. These groups were flexible in two ways. First, students moved into a higher reading group when they were able to read fluently and accurately the book level being used in that group. Second, there were initially three reading groups in this block of time; however, a little more than halfway through the program, the students in the lowest instructional-level group improved enough to merge with a group reading higher instructional-level texts, leaving two reading groups for the remainder of the program.

At the beginning of the program, students read books that were at their assessed instructional or independent reading levels. As students grew in reading skill, I either moved them to a group reading texts on a higher instructional reading level or increased the text level of the books in that group. I supported students' reading of text (Fountas & Pinnell, 1996; McKeown, Beck, & Sandora, 1996) and orchestrated my instructional actions based on students' needs and experiences. Comprehension instruction included introducing the text to the students, guiding and scaffolding students' readings, and extending their thinking after reading. Students also

participated in word study (Bear, Invernizzi, Templeton, & Johnston, 1996) based on their current levels of orthographic knowledge.

End-of-day activities. At the end of the instructional day, students shared excerpts of books they enjoyed reading, pieces of writing they published, or other literacy artifacts they used or created in the classroom (e.g., songs, plays, or artwork). Students were provided the opportunity to learn from and interact with one another around these literacy events, thus providing motivation for students' future reading and writing. During the closing meeting, we informally evaluated the day and discussed any problems that arose.

In conclusion, the instructional components of this program were informed by instructional balance, literacy acceleration, and responsive teaching, as summarized in Table 1. Aspects of this program were modified based on the instructional context in which I worked, my assessment of students' needs, and student progress in the program.

DATA SOURCES AND COLLECTION

Data collection in formative experiments is "designed to determine whether the intervention is succeeding, why the intervention is or is not being successful, how its implementation can be improved, what unanticipated effects it might be having, and how the instructional environment is changed as a result of the intervention" (Reinking, 1996, p. 239). Thus, data collection and analysis served to both systematically evaluate program effects on student learning and richly detail the program itself (Reinking & Pickle, 1993), and required that data be collected before, during, and after program implementation.

Eleven types of data were gathered to accomplish these goals: (a) audiotapes and videotapes, (b) field notes and anecdotal records, (c) lesson plans, (d) Qualitative Reading Inventory-II (QRI-II) (Leslie & Caldwell, 1995), (e) Qualitative Spelling Inventory (QSI) Bear et al., 1996), (f) reading inventories (Rhodes, 1993; Shearer & Homan, 1994), (g) running records (Clay, 1993b; Fountas & Pinnell, 1996); (h) student writing sample analyses, (i) student work samples and communications, (j) teaching/research journal, and (k) written and verbal communications with parents. The assessment instruments that were included reflected instruments that are or could be utilized by elementary school classroom teachers, and that were aligned with measures of progress that I deemed important and useful to measure the reading progress of students who were completing first and second grade.

DATA ANALYSIS

Both quantitative and qualitative data sources and analyses are used in formative experiments to evaluate the nature and effects of the intervention (Reinking & Pickle, 1993). Quantitative data included students' pre- and postprogram scores on components of the QRI-II (with alternate forms of oral and silent reading passages used preprogram and postprogram as possible), QSI, reading interviews, running records, and student writing samples. Qualitative data included portions of audiotapes and videotapes, field notes and anecdotal records, lesson plans, QRI-II, QSI, reading interviews, running records, student writing samples, student work samples and communications, my teaching/research journal, and written and verbal communications with parents.

Informal data analysis occurred throughout the program based on tenets of reflective and responsive teaching (Schon, 1983). Formal data analyses occurred postprogram through content analysis, "the process of identifying, coding, and categorizing the primary patterns in the data" (Patton, 1990, p. 381) applied to documents. Precedent for employing analyses after the completion of data collection has been set by reading researchers conducting research in and outside of the classroom setting (Baumann & Ivey, 1997; Dunston, 1993).

Data were analyzed in six phases. Phase I, informal analysis, occurred during and after the instructional program. During the program, I observed, assessed, and monitored my students' reading progress. I used the initial and ongoing assessments that I administered to inform my instruction. On a daily basis, I watched videotapes of my classroom instruction, wrote field notes, and recorded my observations and thoughts in a journal to evaluate my instruction and modify the program as necessary. After the program, I watched the videotapes and listened to the audiotapes, creating video and audio summaries. I used these tapes to recheck and revise as necessary my initial pre- and postprogram assessments of students. In Phase II, qualitative coding, I read through my journal, audio and video summaries, lesson plans, and field notes and anecdotal records. I wrote topics and labels in the margins of these documents as an initial step of content analysis (Patton, 1990) and I began to categorize and classify these topics and labels in relation to the effects of the program on student reading growth. In Phase III, quantitative and qualitative data organization and reduction, I created case records for each student across data sources, which included file folders that contained their pre-and post assessment instruments, writing samples, daily self-assessments, parent communications, and work samples. I then constructed tables and charts to summarize quantitative and qualitative data from these data sources within and across participants, after which I coded these summaries. In Phase IV, projected categories and possible data source summary, I combined the topics and labels from my qualitative analyses (from Phase II) and the quantitative and qualitative summaries (from Phase III) to determine possible categories of student growth. I employed methods and data source triangulation (Patton, 1990) through using quantitative and qualitative data from the 11 data sources across all students in forming the tentative categories. I then created a matrix, juxtaposing the tentative categories across data sources and students. In Phase V, confirmed categories and data source summary, I reworded categories to accurately reflect the nature of student reading growth, deleted categories for which I had less than two data sources for the majority of students, and identified negative cases (Patton, 1990). From this phase of analysis emerged six categories of student growth in reading. In Phase VI, audit, I asked a colleague who was knowledgeable of formative experiments, the assessments I had employed, and qualitative and quantitative analyses I used to serve as an auditor. This auditor was a second analyst for triangulation (Patton, 1990). I provided the auditor access to all data and documents, all chapters of this research, the chapter "Preparing an Audit Report" (Schwandt & Halpern, 1988), and a list of questions to guide an audit (Halpern, 1983, cited in Lincoln & Guba, 1985). I asked her to assess the trustworthiness, credibility, and rigor of the methods employed in this research. The auditor requested clarification of the term positive in one of the categories that emerged from this analysis. In a post-audit conference with her, I reworded this category to clarify the meaning of this term to her satisfaction. The auditor concluded that "the trustworthiness, credibility, and rigor of the data analysis procedures of the research are well-supported and laudable. The procedures described in the methods section are clearly present in the data itself, as well as the

data analysis and findings. The audit trail provided by the researcher was clear, concise, and accurate."

RESULTS

In this section, I characterize the effects of the summer program on the reading growth of the students in my classroom through the six categories that emerged from the content analysis. The concepts of balanced literacy instruction, literacy acceleration, and responsive teaching formed the theoretical underpinnings of this study, and the categories that emerged reflected the multidimensional aspects of students' progress. Specifically, the assessments that I conducted with students before the instructional program began revealed that students had varied and diverse reading needs, which warranted an instructional program that took those needs into account. A multifaceted and multitasked program that centered on a balance of instructional activities and strategies was implemented responsively so as to accelerate the progress of the students, which resulted in student growth in six areas:

1. Students improved in word identification abilities.
2. Students became more fluent in oral reading and writing.
3. Students became more strategic in reading comprehension.
4. Students developed more positive perceptions of themselves as readers.
5. Students developed more positive attitudes toward reading.
6. Students increased their instructional reading levels.

STUDENTS IMPROVED IN WORD IDENTIFICATION ABILITIES

All students improved in their word identification abilities to varying degrees. Specifically, students (a) recognized and decoded more difficult words, (b) increased in ability to spell words with common orthographic patterns, and (c) improved in word identification strategies.

Recognition and decoding of more difficult words. According to a developmental sequence of word knowledge (Schlagal, 1992), students were able to recognize and decode more difficult words at the end of the program than at the beginning. Students' performance on the Qualitative Inventory II (QRI) (Leslie & Caldwell, 1995) word lists averaged one-half of a grade level higher postprogram (M = 1.7) than preprogram (M = 1.2), with five students passing (i.e., 70%+ words pronounced correctly) a higher grade level word list postprogram than preprogram. For example, at the beginning of the program, Dianna read the Grade 2 list with 90% accuracy, whereas at the end of the program she read the Grade 3 list with 78% accuracy. Three students who did not pass a higher grade level word list did show improvement. For example, Arnold read the Grade 2 list postprogram with 68% accuracy compared to his 58% performance at the beginning of the program. Nancy and Robin did not increase the percentage of words they were able to read on the word lists.

On the QRI oral reading passages, which require students to read words with 90%+ accuracy in order to pass a level, students scored 1.3 levels higher postprogram (M = 3.1) than preprogram (M = 1.8). Different passages were used during preprogram and postprogram assessments. Nine students made at least one year's growth in their reading accuracy. One student, Ned, only slightly improved his ability to read words in context (91% to 94% word identification accuracy on Grade 3 passages).

I also noted growth in students' recognition and decoding of more difficult words in my lesson plans, journal, and parent communications. For example, early in the program, I wrote on my lesson plan that the "level 18 group did not do so well...Need to go back in word study to mixed short vowels." Later in the program, I noted in my journal that "the word sort focus [on long-vowel patterns] seems just about right." In my journal, I noted that "Elizabeth really is ready to move on. Automatic in word sort," and that Robin "does still need a lot of help in word identification. But I can see improvements." In parent communications, Robert's grandmother wrote that he "can sound out words that he doesn't know much better now," Dianna's mother wrote that she "is getting a lot of the harder words correct," and Tommy's mother stated that he was "reading bigger words."

Increased spelling abilities. Students' performance on the Qualitative Spelling Inventory (QSI) (Bear, Invernizzi, Templeton, & Johnston, 1996) and their spelling in writing samples provided a window into their word identification abilities (Gill, 1992). I assessed students' orthographic knowledge using the "15-Point Scale/Spelling-by-Stage Assessment" (Bear et al., 1996, p. 48), which traces students' development from a Preliterate stage (1 word spelled correctly) through Letter Name stages (2-6 words spelled correctly), Within Word Pattern stages (7-9 words spelled correctly), and Syllable Juncture and Derivational Constancy stages (10-15 words spelled correctly).

Students spelled more words correctly on the QSI postprogram (M stage = 5.7, range 1-8) than preprogram (M stage = 3.8, range 2-10), moving, on average, from a beginning Letter Name stage to a late Letter Name stage. For example, at the beginning of the program, Robert spelled two words correctly (bed and when), and misspelled ship (shep), drive (bivve), bump (bup), train (trin), closet (closit), chase (cas), float (flot), and beaches (beahes), placing him in the early Letter- Name stage of orthographic development. Postprogram, Robert spelled nine words correctly (bed, ship, drive, bump, when, train, chase, float, and beaches) and misspelled closet (closeit) placing him in the late Within-Word Pattern stage of orthographic development.

Two students, Irene and Robin, did not increase in the number of words they spelled correctly, but they did demonstrate qualitative changes in their spelling. For example, at the end of the summer program, Irene included the correct short vowels when spelling the words bed, bump, and when; included a long vowel marker in the word float; and used ea in the first syllable of the word beaches. These were spelling skills she did not possess at the beginning of the program.

Growth in spelling was also evidenced in students' writing samples. On average, students spelled 76.5% of words correctly in their preprogram writing samples versus 83.5% of words at the end of the program.

Other data supported growth in spelling. For example, I wrote in my journal that "Ned published again. Spelling looked great. He did get the long a pattern words correct today." Parents also noted students' growth in spelling; for example, Laura's mother wrote that she "seems to be able to... spell a lot better," and Robert's grandmother wrote that "he is also spelling words which he could not spell and doesn't want help with them but thinks about them and then knows how to spell most of them."

Word identification strategies. All students increased in their ability to articulate word identification strategies. When asked in student interviews, "What do you do when you come to a word you don't know when you are reading?", students initially expressed one or two strategies for reading unknown words (M = 1.4), mostly "sound it out" or "ask someone." In contrast, at the end of the program, students could articulate three to four strategies to figure out unknown words (M = 3.8), supplementing the ubiquitous "sound it out" with more strategic approaches such as "ask someone," "skip it," "skip it and come back to it," "use word parts," "use words that look like it," or "break it apart." Interestingly, I never used the imperative, "sound it out" when prompting students to figure out words they did not know; however, this phrase seemed to be entrenched into students' repertoires of word identification strategies, perhaps from prior instruction.

Comments in my journal and field log reinforced students' interview statements. For example, midway through the program, I noted that when Robin came to yourself, a word she did not recognize automatically, she said, "time for breaking up," and proceeded to break yourself into syllables and pronounce it accurately. I also wrote that the "independent application of word sorts [was] working well, especially with Elizabeth" and that "students [were] doing well finding new words from patterns on their own."

STUDENTS BECAME MORE FLUENT IN ORAL READING AND WRITING

Analysis of several data sources revealed that students either improved or sustained skill in oral reading and writing fluency.

Oral reading fluency. I used Cunningham and Allington's five-point "Simple Fluency Rating Scale" to evaluate students' reading of QRI oral reading passages and running record texts. The fluency levels and descriptors on this scale are as follows:

1. Word by word reading primarily
2. Reads in 2-3 word phrases primarily, with some word- by-word
3. Reads primarily in phrases, little intonation, ignores some punctuation
4. Reads in phrases, generally smooth, but a little choppy at times
5. Reads fluently with expression (Cunningham & Allington, 1994, p. 53).

According to this scale, students increased their reading fluency on QRI oral reading passages, with average ratings increasing from 2.9 preprogram to 3.4 postprogram. Fluency ratings on running record data paralleled QRI fluency ratings (2.6 to 3.1) pre- to postprogram.

I also documented in my journal and field notes instances of students' improvements in oral reading fluency. Following the preassessment, I pondered whether "fluency was even more of an issue than decoding," noting fluency concerns for eight students. Later in the program, however, I noted that "Tommy and Robin were very fluent with Mouse Soup (Lobel, 1977)," and "fluency [was] very good with all" in the Frog and Toad (Lobel, 1972) reading group.

Parents also noted improvements in their children's reading fluency. Irene's mother wrote that her daughter's reading "seems to be a little smoother. I have noticed her fluency is a little better."

Similarly, Dianna's mother commented that Dianna was "reading faster and getting harder words correct" and "reading... at a faster pace."

Writing fluency. Although writing was included in the instructional program with the intent of improving students' reading, I also noticed development in their overall writing fluency. Students' compositions were longer postprogram (M = 61.8 words) than they were at the beginning of the program (M = 39.5 words), with eight students writing longer stories at postassessment. For example, Nancy's initial writing sample included 55 words and her end-of-program writing sample included 119 words.

STUDENTS BECAME MORE STRATEGIC IN READING COMPREHENSION

Students entered the program with relatively strong listening comprehension abilities, with all students passing (i.e., answering 70% or more of the comprehension questions correctly) the third- or fourth-grade QRI listening comprehension passages at preassessment. Additionally, the students generally reached frustration levels on the QRI oral and silent reading passages because of word identification limitations rather than comprehension difficulties. Thus, I determined that students' greatest needs were in word identification, with a relative strength in comprehension. However, students, in general, were not able to verbalize reading comprehension strategies or monitor their comprehension. As I noted following preassessment: "Some of the children should receive more comprehension instruction than I [initially] intended.... [Their] comprehension [is] not as good as I would have thought."

All students improved their comprehension abilities to varying degrees. Specifically, students improved in comprehension monitoring, maintained acceptable levels of comprehension while reading more difficult texts, and verbalized more appropriate comprehension strategies postprogram than preprogram.

Improvement in comprehension monitoring. Miscue analysis on the QRI oral reading passages revealed that seven students made more syntactically and semantically appropriate substitutions postprogram (M = 60.5%) than preprogram (M = 46.7%). These results were corroborated by miscue analysis on running record data (preprogram M = 44.7%, postprogram M = 70.6%). Further, this improved comprehension monitoring occurred while students read texts that were either as difficult or more difficult than the texts they read initially.

Maintenance of acceptable levels of comprehension while reading more difficult passages. Results indicated that students maintained acceptable levels of comprehension while reading more difficult material postprogram than preprogram; specifically, nine students increased the difficulty level of texts they read orally and eight students increased the difficulty level of texts they read silently preprogram to postprogram while maintaining acceptable comprehension.

I also noted students' growth in comprehension in my journal. For example, I commented early in the program that Arnold, Nancy, and Irene were reading Frog and Toad Together (Lobel, 1972), a level 19 (mid-to late-second grade) book, well: "For the group, comprehension good, fluency good." Two weeks later, these students were reading a late-second/early-third grade book, and I wrote that the "students read... very well in [the] George and Martha (Marshall, 1972) book."

Parents also noticed an improvement in their children's comprehension abilities. For example, Elizabeth's mother wrote that she "understands more about what she is reading so she is more interested in it," and Robert's grandmother wrote, "I can see a lot of improvement in Robert's reading. He read[s] better... [and] is reading silently and understands what he reads."

Verbalization of more acceptable comprehension strategies. Nine students articulated more appropriate pre-reading comprehension strategies and seven students articulated more appropriate during-reading comprehension strategies postprogram than preprogram. For example, Arnold initially responded to the question, "What do you do before you read?" by saying, "[I] make sure my hands are clean." Postprogram, Arnold responded, "[I] think of what it will be about." Preprogram, Arnold answered the question, "What do you do if you don't understand what you read?" with, "[I] look for books I like." Postprogram, Arnold answered, "I read back to it [reread]."

STUDENTS DEVELOPED MORE POSITIVE PERCEPTIONS OF THEMSELVES AS READERS

As part of the pre- and postassessment interviews, I asked students, "Are you a good reader? Why or why not?" At the beginning of the program, most of the students responded to the questions in a negative or mixed manner, whereas most (7/10) responded positively at the end of the program. For example, when I initially asked Robin if she thought she was a good reader and why, she answered, "No--I don't know a lot of words," but at the end of the program, she answered, "At the rate I'm going, I would say yes." One student, Robert, did not seem to improve his perception of himself as a reader, responding preprogram, "No, I don't know, some words are hard," and on his postprogram interview, "No, cause in first grade I couldn't read and I still ain't a good reader because I don't know some little words." Robert's grandmother, however, indicated that he expressed a negative attitude as an attention-getting device: "He writes 'bad' [in response to how he is doing in reading] as an attention-getter." This opinion was reinforced by comments Robert wrote on his daily self-assessments, 22 out of 24 of which were positive (e.g., responses of "good" to the question "How are you doing in reading?").

I also documented instances of students' improved perceptions of themselves as readers in my journal. I wrote that Irene "is really growing in her reading confidence." Parents also communicated with me that they saw improvements. Robin's mother wrote: "She is more self confident now and does it [reading] on her own."

STUDENTS DEVELOPED MORE POSITIVE ATTITUDES TOWARD READING

During the pre- and postassessment interviews, I asked students, "Do you like to read? Why or why not?" Interestingly, despite these students' classifications as struggling readers, the majority of the children both claimed and appeared to enjoy reading. The two students who entered the program with a negative attitude toward reading ended with a positive attitude, with the other students maintaining their positive attitudes. For example, Irene initially responded to the question, "Not that much. But I like exciting books." At the end of the program, she answered, "Yes. I like interesting books. I take after my daddy."

All students wrote positive comments in their daily self-assessments. For example, Robin

consistently commented that that she was doing "good" in her school and home reading. In my journal, I noted that Elizabeth "asked to read the words at the end of the story." Parents also communicated improvements in their children's attitudes toward reading. For example, Elizabeth's mother wrote that she "seems to enjoy reading when she didn't before," and Dianna's mother wrote that she "seems to be more interested in reading. I think she finally realizes how much you can learn from reading a good book."

STUDENTS INCREASED THEIR INSTRUCTIONAL READING LEVELS

Students increased their reading levels on QRI passages and running record texts over the course of the summer program. Students increased their reading levels on QRI oral and silent reading passages an average of 1.3 years (3.0 postprogram mean - 1.7 preprogram mean). Similarly, all (7/7) of the students who were administered running records increased their reading levels on these instruments, resulting in a 5.3 level (21.9 postprogram text level - 16.6 preprogram text level) average text gain, which is approximately one-half to one year's growth.

Using the QRI and running record data, I constructed an overall instructional reading level for each student. Students' average preprogram instructional reading level was 1.81 and postprogram level was 3.05, resulting in an average growth of 1.24 levels. Of the eight students who had instructional reading levels below grade level at the beginning of the program (i.e., less than Grade 3), six of these students were reading on grade level by the end of the program. The two students who were reading on grade level at the beginning of the program were reading above grade level by the end of the program based on these instruments.

Video and audio summaries, field notes, and lesson plan comments supported this progress. For example, I wrote during the middle of the summer program that Robin was having difficulty reading a level 15 (late first grade) book in her reading group, scoring an 86% accuracy rate. Toward the end of the program, I recorded that Robin could read a level 22 (late second grade) book in her reading group with 93% accuracy. I also noted in my journal that students were able to read more difficult books during our independent reading and writing time as the program progressed: "Before school, I changed the tub colors. All [students are] reading yellow, green [and] red [second-to third-grade level books] now except Elizabeth, Robin, and Tommy, who are reading blue, yellow [and] green [first-to-second grade level books] based on what I have found taking running records and listening to them read." Students themselves and parents also noted progress. For example, Tommy explained at the end of the program that he "tried to read Frog and Toad last year but couldn't read it very well" and that he "could read it well now." On homework sheets during the last weeks of the program, Nancy's father wrote: "I used to read this book [The Gingerbread Boy] to her and now she can read it to me," and Laura's mother wrote: "During school she couldn't hardly read but now she's doing so much better. And she can read so good."

DISCUSSION

The purpose of this research was to address the question: What are the effects of a balanced, accelerated, and responsive literacy program on the reading growth of elementary school struggling readers enrolled in a summer program? I attribute students' growth in this program to the implementation of the concepts of balance, acceleration, and responsive teaching.

BALANCED LITERACY INSTRUCTION

I attribute the progress my students made, in part, to the multiple instructional balances that I employed. This multiple balance orientation was necessary to meet the learning needs of all students. For example, although all of the students needed instructional support in word identification, the type of support they needed varied. Robert's word identification needs were masked by his ability to read connected text on grade level and by the behavioral difficulties that he exhibited. Robert needed word identification instruction that was both motivating to him, and that was explicit and focused on helping him learn common orthographic patterns. Conversely, Tommy needed to learn how the previous word identification instruction he had received connected to reading and writing. Because of the comprehensive nature of the balanced program I provided students, the needs of these students and the other students in the program could be met successfully.

Two competing perspectives on balanced literacy instruction seem to be emerging in the literature. From one perspective, balanced literacy instruction was rated as being the "hottest topic" in reading instruction (Cassidy & Wenrich, 1998/1999), and elementary school teachers who constructed their own versions of balanced literacy programs in their classrooms have been described in the literature as being "exemplary" (e.g., Wharton-McDonald et al., 1997). This perspective implies that there are multiple ways to construct and implement balanced literacy programs, and that no two balanced programs are alike (Spiegel, 1998).

From another perspective, balanced literacy programs may already be on the demise due to governmental and administrative mandates that pressure elementary school teachers in particular to teach reading in certain prescribed ways (Spiegel, 1998). Shockley-Bisplinghoff (1997, cited in Freppon & Dahl, 1998) explained that "the way balanced reading instruction is getting implemented in schools I have seen are not balanced. Programs (commercial) are the name of the game" (p. 245). As Freppon and Dahl concluded, some versions of balanced literacy programs, particularly those publicized in the popular press, are reactionary rather than research-based, and "gloss over what we know about good teacher thinking and action" (p. 248). In other words, this perspective suggests that there is one right, even prescribed, way to implement a balanced literacy program.

Elementary school teachers hold multiple goals for student success and teach in classrooms with a wide range of reading abilities (Baumann, Duffy-Hester, Moon, & Hoffman, 2000). Students classified as being "struggling readers" have complex, unique, and diverse learning needs. As such, it is essential that educators construct their own unique and informed instructional balances (Au & Assam, 1996; Baumann & Ivey, 1997). As Baumann and Ivey concluded and the present research supports, "we are confident in asserting that achieving a productive, effective learning environment indeed involves a number of delicate balances" (p. 272).

LITERACY ACCELERATION

It was the pedagogical goal of this study to accelerate the reading development of the students enrolled. This goal was achieved overall. For example, Elizabeth, the student who exhibited the greatest growth during the program, began the summer as a reluctant reader who had difficulty

reading first-grade texts, but ended the program reading third-grade texts and, as reported by her mother, "enjoy[ed] reading [now] when she didn't before."

I defined literacy acceleration as instruction that enables struggling readers to make rapid progress and read as well as or better than their peers not struggling in reading. As a result of my experiences teaching in the summer program, I have broadened my view of this term.

I modified my instruction as necessary throughout the program in order to meet optimally the needs of the students in my classroom and to support the growth of these students as much as possible. As I reflect on why I modified this instruction, I realize it was my belief that I was responsible for students' progress that made the difference. Rather than blaming students when they did not make progress, I reflected on my teaching and consequently redesigned instruction in an attempt to meet students' needs. Rather than blaming the parents of some students when I found that they were not consistently reading with their children at night, I incorporated a time during the instructional day for students to do the text rereadings that I intended them to do for homework. In other words, I accepted the instructional responsibility for teaching the students in my classroom rather than blaming the students themselves, their parents, or outside circumstances. Teachers' thinking, beliefs, perceptions, and expectations influence their actions in classrooms (Clark & Yinger, 1987; Winfield, 1986a). Some elementary school classroom teachers believe that it is persons other than themselves, such as resource teachers or the children's parents, who are responsible for the learning of struggling readers (Allington, 1994; Schumm, Vaughn, & Elbaum, 1996; Winfield, 1986b). Many elementary school administrators, principals and assistant principals hold a similar view. Although 33% of administrators surveyed stated that classroom teachers assume the primary responsibility for providing "remedial" instruction for struggling readers, 55% stated that it is the major responsibility of the reading teacher or specialist to provide this instruction (Hoffman, 1996). In short, the Pygmalion effects discussed in the teacher effect research of the 1960s and 1970s still exist, particularly in relation to the instruction of elementary school struggling readers (Taylor, 1998). As Rosenthal (1973) concluded, "expectations may be translated into explicit, overt alterations in teaching style and substance" (quoted in Taylor, 1998, p. 77).

Taylor (1996) argued that "teachers in our country need to operate from the perspective that all of their students... can be reading at an acceptable level by the end of the school year" (p. 63). Similarly, Hiebert (1996) concluded:

> As teachers in preservice and inservice university courses, as writers of articles in professional journals, as speakers at national conferences, and as leaders of workshops in local schools, university-based educators can focus the attention of school-based educators and community members of the effects of high expectations on literacy learning (p. 32).

I conclude that the pedagogical goal of this program, the acceleration of students' reading progress, was achieved through both instruction intended to support students' reading growth and the expectations for student success that I held for them. Perhaps literacy acceleration can best be viewed as an integration of optimal instruction, as in Clay's (1991a) definition of the term, and educators' high expectations for student literacy success. Hiebert (1996) concluded that "high expectations need to be accompanied by strong instructional practice" (p. 31). This research reaches the same conclusion. The challenge remains to convince all educators to accept the

responsibility for teaching struggling readers and to design and implement programs to achieve this objective.

RESPONSIVE TEACHING

I viewed students' reading growth as occurring both because of the designed program and my modifications to this program. Rather than implementing a fixed program, I modified it throughout the summer. I made minor organizational modifications throughout the program to maximize instructional time; for example, I changed the way I checked students' homework when I found the initial structure I used was not time-efficient. I made modifications to program components based on the assessed needs of my students in the areas of word identification, fluency, and strategic reading on the basis of student progress, and the instructional context in which I was working. I taught responsively on a daily basis within each of these components, basing instruction, in part, on the progress I observed students making.

My view of responsive teaching broadened as a result of this research. I learned that responsive teaching goes beyond simply meeting students' cognitive needs. Many students exhibited behavioral difficulties, ranging from behavioral outbursts, to shy and withdrawn behaviors, to attention-getting behaviors, to a suicide threat. Responsive teaching required that I meet students' emotional needs, which supported their academic progress in reading. As Triplett (1999) concluded: "Students are more apt to take risks in literacy learning when they feel safe and valued.... Being responsive to young literacy learners requires that we know and value students as unique individuals" (p. 12).

Reading researchers have long debated the influences of reading programs and teachers on students' reading progress. Some researchers have argued that reading programs should be "teacher proof," suggesting that teachers should implement published, sometimes scripted, reading programs to ensure that students receive all of the necessary reading skills. Teachers' adaptations of such programs are frowned upon. Other researchers have posited that exemplary teachers can teach most children to read well regardless of the reading program they implement. As Anderson (1998) described this phenomenon, "in one conception, teachers at their best are artists who create lessons in response to circumstances. In another view, teachers are conceived as technicians whose job is to efficiently implement a curriculum developed by others" (p. 7).

The results of this research suggest a middle-ground perspective: Teachers who both modify their literacy instructional program and respond to students' cognitive and emotional needs may have the greatest potential to affect students' reading growth positively. In other words, it may be that both the teacher and the evolving reading program are key in enabling all children to learn to read well. One fixed reading program, even if research-based, will never work for all children, and even exemplary teachers cannot be expected to enable all children to read well if they are not given the professional freedom to adapt reading programs in light of their instructional beliefs, teaching experiences, local demands, and the needs and progress of the students in their classrooms. This research transcends the reading program vs. teacher debate, and suggests that the teacher who learns how to address his/her students' needs through responsive instruction that includes an "ethos of caring" (Noddings, 1984) may have the best chance of ensuring that all of his/her students both learn to read and learn to want to read.

LIMITATIONS, CONCLUDING THOUGHTS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

This study has several limitations. First, a strength of this study, the use of my personal, practical, and professional knowledge (Vacca, Vacca, & Gove, 1995, chap. 1) to inform the design and implementation of this study, may also serve as a limitation. Specifically, my presence, biases, and beliefs affected all aspects of this study, serving to limit the type of data I collected, the way data was collected, and the interpretation of it. Second, this study is limited by the duration of the program itself. The results of this research should be restricted to programs of similar duration and focus. Third, this research focused on my own teaching in one classroom setting and hence has limited generalizability. The results I achieved with my students in this program may not be comparable to the results other teachers may achieve in similar reading programs. Fourth, follow-up data indicating students' sustained progress after the summer-school program were not obtained.

My research provides a detailed evaluation study of one summer school reading program. In this section, I discuss concluding of this inquiry related to (a) the duration of reading interventions, (b) the assessments used to determine struggling readers' progress, (c) the potential of summer programs to inform teacher education, and (d) the potential of formative experiments in making research more directly applicable to the world of teaching.

DURATION

I hypothesized that students would make progress in this summer program. Indeed, many of my students in my classroom made significant progress in the areas of word identification and fluency. Although it may well be the case that the students in my program could have made greater progress had I been able to work with them individually in a tutoring or clinical context, the instruction they received in this summer program nonetheless provided some of my students with a good jump-start to increased reading development.

The positive effects on the reading growth of struggling readers from short-term interventions such as Reading Recovery (Clay, 1993a), particularly when combined with exemplary classroom instruction (Shanahan, 1998), have been well documented in the literature. However, the results of this research call into question the premise that short-term interventions are sufficient for all struggling readers, particularly those with significant delays or deficiencies in word identification. Spear-Swerling and Sternberg (1996) concluded that, "some children's needs cannot be met solely by short-term interventions or by high-quality instruction in the regular classroom. For a significant minority of youngsters, such as those with very severe weaknesses in phonological processing, learning to read may require...intensive, long-term support" (p. 298).

Morris, Ervin, and Conrad (1996) explained the "necessity of a continuing word study program" (p. 375) to ensure the reading progress of Brett, a sixth-grade struggling reader with a marked word identification "lag" who made significant progress through tutoring, but still required ongoing support. Like Brett, some students in my program will need continued support both inside and outside the regular classroom to eradicate or fully close the gaps between their achievement and potential levels.

As Allington and Walmsley (1995) note, there is "no quick fix." This research suggests that

short-term interventions in the form of summer school programs should not be viewed as the simple or singular solutions for all struggling readers. It is likely that some combination of short-term, intensive instruction with long-term, ongoing support is needed for some students, particularly those with significant and complex needs in word identification, to fully "catch up" and sustain learning.

In their evaluation of the Early Steps intervention program, Santa and Hoihen (1999) concluded that "reserving Early Steps instruction for children most at risk makes sense, given that our traditional Title I program seems to work quite effectively for children less at risk for reading failure" (p. 72). Additional research is needed on other interventions and programs to determine when and with whom short-term literacy interventions such as summer programs are effective and what combinations of short- and long-term programs are appropriate for given students. Educators need to examine how school-wide literacy programs can be restructured to support optimally all literacy learners over time.

ASSESSMENT

Students' progress in reading in this school was determined primarily by their standardized test scores and by the number of cumulative points they earned on a state-mandated reading assessment that emphasized isolated word identification skills and oral reading of graded passages. I obtained the "points" of my students prior to the summer program on the state assessment and selected 10 other students with approximately the same number of points who did not attend the summer school program to match to my students. I then obtained the scores of my students and the matched students on this instrument at the beginning of their third-grade year. As compared to the matched students who did not attend summer school, three of my students had the same number of points, three of my students had more points, and four of my students had less points on this instrument.

This research suggests the need to examine the role assessment plays in determining struggling readers' progress. Although I attempted to take local conditions into account when implementing this research, I did not explicitly prepare my students to perform well on state-mandated and standardized tests; instead, the progress students made was better captured through the assessment instruments that I implemented in this summer program. In a sense, I was "teaching to the test," but the "tests" that I used to gauge students' progress were more closely aligned with the instruction that I valued and that I provided to my students.

Although the use of standardized tests has been widely criticized by reading researchers for a number of reasons (Lipson & Wixson, 1997), today's reality is that standardized and state-mandated tests are increasingly used to determine student progress and to judge teachers' and schools' effectiveness. Until or unless this situation changes, as Calkins, Montgomery, Santman, and Falk (1999) discuss, teachers need to ensure that the instruction they provide students in intervention and classroom settings includes preparing them to perform adequately on these instruments while at the same time enabling them to read well, read broadly, think critically, and want to read.

TEACHER EDUCATION

My teaching and research in this summer reading program affected the instruction of the other

summer-school teachers in different ways. During the staff development sessions that I conducted with the other summer-school teachers prior to the program, I emphasized the theoretical bases along with practical applications of this program. I discussed how I might have to change the program foci after assessing my students. During these sessions, the other summer-school teachers asked me to show and tell them "exactly" what I planned to do, stating that they wanted to "do what I did." I explained that I could not grant their request as I was unsure myself how the program would evolve, and I instead discussed multiple examples of how they might apply principles of balance, acceleration, and responsive teaching in their own classrooms.

As we began teaching our classes, we discussed informally students' progress and speculated on why we believed student growth in reading was or was not occurring to the extent that we desired. We each modified and adapted the original version of "my program" in ways that made sense in our own classrooms.

After the summer school program, we discussed our successes and failures. I recorded in my journal that "they [summer-school colleagues] talked about how this summer has changed the way they will teach reading next year" and that "they learned more from this summer than [in] any reading class." When I visited these teachers in their classrooms after the summer program, I observed that some of them used aspects of the summer program instruction and assessment in their reading instruction during the next school year.

Although university and inservice coursework is sometimes described as having little effect on teachers' practices because of "the disparity between the world of the university and the world of the school" (Beach, 1994, p. 145), this study suggests that this disparity does not have to exist. McNiff (1993) argued that "the way to improvement is not through trying to copy what other people do, but by the critical understanding of one's practice" (p. 13). In the summer program, teachers were given the opportunity to think about their instruction with students and were encouraged to modify their teaching to better meet the needs of their students free from the pressures and constraints of year-long classroom instruction. After the summer program ended, several teachers continued this way of thinking about reading instruction in their classrooms.

This research suggests the need for additional research to examine how the combination of grounded, purposeful, and focused staff development sessions and authentic, ongoing opportunities to reflect on instruction (Vacca, Vacca, & Bruneau, 1998) may be utilized in summer school and other intervention programs to enable more teachers of reading to become "reflective practitioners" (Schon, 1987) rather than mere consumers of the latest reading fad or commercial program. University educators need to consider how they can support school-based educators in integrating their personal, practical, and professional literacy knowledge (Vacca, Vacca, & Gove, 1995, ch. 1) when implementing their own unique literacy instructional programs. Rather than inadvertently or unintentionally perpetuating by omission the myths that there is one best program, that research and practice have yielded no answers for the instruction of children with reading difficulties, and that resource teachers rather than classroom teachers are primarily responsible for the instruction of struggling readers, university coursework needs to address research, teachers' beliefs, and effective practices related to the instruction of struggling readers. In addition, rather than purchasing fixed, commercial reading programs and training teachers to use these programs, perhaps a better investment of school districts' time and resources

would be to help teachers understand how principles of balance, acceleration, and responsive teaching can be utilized in multiple, purposeful ways in classrooms with struggling readers.

FORMATIVE EXPERIMENTS

Gerald Duffy, in his 1990 Presidential Address to the National Reading Conference in which he discussed the education and empowerment of teachers, concluded that "the complexities are themselves the heart of the matter... [and] teachers should be encouraged to capitalize on the complexities rather than being protected from them" (Duffy, 1991, p. 15). Clay (1989) stated that teachers "would like researchers to help them handle the complexities of their work, the changes in children over time, or the minute by minute interactions of teaching" (p. 32). As Allington (1997) concluded:

> Too often our research fails to recognize or acknowledge these complexities. Our research, instead, often seems to be searching for an instructional vaccine that will immunize all children against all sorts of environmental factors--a one-shot-cure-all in which the same dose is given at the same time to all children. It is not just the media that is touting simplistic solutions that will once and for all solve the problems of literacy education (p. 9).

Events occurred in the ecologically valid research context of an elementary school summer program that could not have occurred in the more sterile and controlled research contexts of university laboratories or clinics. Such challenges as having to move my classroom after the first week of instruction because of construction that was taking place in the school building, teaching without water and air conditioning due to a water main break and the failure of the heating and cooling system, an outbreak of head lice, the death of a student in the school, the suicidal threat of one of my students, the behavioral difficulties and suboptimal home lives of several of my students that interfered with their learning, and cold and influenza outbreaks that affected my students and me served to remind me of the difficulties that teachers of reading face on a regular basis. Through designing this study as a formative experiment, I addressed these events as I modified my program to meet the needs of my students and conducted my research rather than ignoring these events as do some researchers in other research designs.

This research suggests that formative experiments can inform the practice of teachers through incorporating rather than ignoring the complexities of teaching in actual classrooms. When school and classroom realities are categorized as limitations or ignored in research, classroom-based studies become little more than laboratory experiments implemented in ecologically valid research contexts. In formative experiments, these realities are ever-present.

University educators may consider incorporating formative experiments into research methods coursework for preservice and inservice teachers as a way to help classroom-based educators understand the potential and value of research, incorporate reflective teaching, and answer for themselves the questions that inevitably arise when teaching children to read. Further research on formative experiments implemented in different contexts and with different pedagogical goals is needed to explore methodological issues related to this design, as formative experiments are not yet entirely distinguishable from other designs and have not yet been formalized as a research approach (Reinking & Watkins, 1998). Formative experiments hold great potential in terms of making research more accessible and acceptable to school-based educators, administrators, and policy-makers, thus serving to bridge the much-discussed gap between research and practice. Through the additional implementation of formative experiments, perhaps reading researchers

can better inform the practices of classroom teachers by providing other examples of how to acknowledge and address the inevitable complexities that arise in the day-to-day world of teaching children to read.

On the first day of the summer program, I explained to my students all of the things that we would be doing in the weeks to come. One of my students, Tommy, responded: "This whole thing is confusing, but I can remember it." As I continue my journey as a teacher educator and researcher, it is Tommy's message that I hope to take from this research experience. I believe this research will help me remember the realities of teaching children to read in elementary schools. It is this real-world understanding that I hope will guide my future research and teaching endeavors.

Table 1 Balance, Acceleration, and Responsive Teaching Across Instructional Components

Instructional Component	Balance	Acceleration
Whole Group Reading and Word Sorting Component	* Word identification instruction (Duffy-Hester, 1997) * Controlled and non-controlled texts (Johnston, 1997)	* Big book acceleration * Word patterns of increasing difficulty * High frequency words instruction
Individual Reading and Writing Component	* Variety of texts (Johnston, 1997) * Reading and writing (Adams, 1990) * Planned and unplanned instruction (Durkin, 1990) * Task and talk structures (Hiebert & Fisher, 1991)	* Increasing students' independent reading tub levels * Individual conferences
Book Talks and Read Aloud Component	* Variety of texts (Pappas, 1993) * "Access books" and "discussion books"	* Discussion of difficult texts (Grattan, 1997)
Small-Group Instructional Level Support Reading Component	* Required and non-required reading tasks * Variety of texts (Johnston, 1997; Pappas, 1993) * Ways of reading texts (Opitz & Rasinski, 1998)	* Increasing text difficulty * Proceeding in word study

Instructional Component	Responsive Teaching
Whole Group Reading and Word Sorting Component	* Modifying Making Words (Cumingham & Cumingham, 1992) * Proceeding to new word patterns
Individual Reading and Writing Component	* Individual conferences * Range of books
Book Talks and Read Aloud Component	* Increased time for comprehension mini-levels * Proceeding to new strategies
Small-Group Instructional Level Support Reading Component	* Less time on comprehension instruction than initially planned * Individual word sorts added * Variety of activities utilized

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