How Academically Gifted Elementary, Urban Students Respond to Challenge in an Enriched, Differentiated Reading Program

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This mixed-methods study combined the use of qualitative, comparative case study methods with other data analysis procedures to investigate an afterschool enriched reading program for academically gifted students who had also been identified as talented readers. The Schoolwide Enrichment Model–Reading Framework (SEM-R) was used to provide challenging reading experiences for 2 days each week in a 6-week afterschool program. Although their reading fluency scores improved, each academically gifted student initially encountered frustration when asked to read content that was either at or slightly above his or her current independent reading level. With encouragement, these academically gifted students began to be able to read texts that were slightly above their current instructional level for short periods of time. Without encountering more challenging content, as these students become older, they may become frustrated with more advanced material in honors or advanced classes in subsequent years, despite their identification as gifted.

The Schoolwide Enrichment Model–Reading Framework (SEM-R; Reis, Eckert, et al., 2004; Reis, Fogarty, Eckert, & Muller, 2008) was developed to provide challenging reading experiences and to increase self-regulation and reading fluency. In this study, mixed methodology was used, combining qualitative, in-depth, comparative case studies with nonparametric data analysis procedures to explore how 5 academically talented students who were also talented readers in an urban elementary school would react to being asked to read appropriately challenging books in an afterschool SEM-R program. An absence of challenging reading opportunities for academically talented students has been documented in some previous research

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(Reis, Gubbins, et al., 2004), but little research has addressed what happens when these students encounter this challenge in school-based or afterschool programs.

Review of Related Research

Students must have opportunities to interact with texts that foster continuous progress in reading. To do this, educators must challenge all students, including those who are academically talented (Benbow & Stanley, 1996; Renzulli & Reis, 1997), to work at an appropriate individual challenge level in all content areas. Too many students in the United States are not proficient in reading for various reasons (National Reading Panel, 2000), and far too few talented readers encounter challenging reading instruction or even opportunities to read independently at levels that will challenge them (Reis, Gubbins, et al., 2004).

Declining Reading Proficiency for All Students

In a recent study, the ACT college-entrance test scores of 1.2 million high school students were reviewed, and results showed that only 51% of high school graduates who took the exam had the reading skills necessary to succeed in college or job-training programs (American College Test, 2006). These results represented the lowest proportion in more than a decade. Of particular significance in this study was the high percentage of culturally diverse and low-income students who were unprepared for college-level reading, including 79% of African American students, 67% of Latino students, and 33% of students from families with annual incomes below $30,000. Research by the Education Trust (2006b) found that reading achievement among Latino students increased during the 1970s and 1980s but declined precipitously in the 1990s. The most recent National Assessment of Educational Progress (NAEP) shows that only 14% of fourth-grade Latino students read at a proficient or advanced level, while 57% could not read at even a basic level (Education Trust, 2006b). Similar results were found for African American students (Education Trust, 2006a); only 12% of fourth-grade African American students read at

a proficient or advanced level, and 61% read below basic level. Sadly, research about children from schools of poverty demonstrates that even when students benefit from well-regarded early reading interventions, those same students are usually behind again in the middle grades (Foorman, Francis, Fletcher, Mehta, & Schatschneider, 1998; Hiebert, 1994). In a 2007 study funded by the Jack Kent Cooke Foundation, lower income high achievers were found at a deficit in first grade, as only 28% of students in the top quarter of their first-grade class were from lower income families, while 72% came from higher income families. The same report found that nearly half of these lower income students in the top 25% of their class in reading fell out of this rank by fifth grade.

Research suggests that students of poverty and those who are culturally diverse *can* learn to read at high levels but may be hindered by societal and individual barriers. Thompson (2004) found that African American students like to read, but school practices may be counterproductive to their success. These practices include low expectations, a culturally limited curriculum, lack of respect for diversity, and culturally biased tests. Boutte (2002) suggested that overt and covert societal values in literature affect multicultural children and highlighted both criteria to use when choosing books for multicultural collections and strategies for critical discussions about books with children from different cultures. No research could be found that focuses on gifted, culturally diverse students and their reading experiences in school.

Reading Fluency

Reading fluency is the ability to read with speed, accuracy, and expression that has long been considered one of the hallmarks of well-developed reading skills (Snow, Burns, & Griffin, 1999). In fact, according to Adams (1990), the salient characteristic of skillful readers is the speed and effortlessness they use as they breeze through text. Fluency is also closely related to reading comprehension (Fuchs, Fuchs, Hosp, & Jenkins, 2001), and research shows a pattern of increased fluency and comprehension when students receive early and individualized support (Elbaum, Vaughn, Hughes, & Moody, 2000; Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994). Prominent theorists who have examined the relationship between fluency and comprehension

believe that higher efficiency of lower level reading skills (e.g., word recognition) characterized by fluent reading results in additional cognitive resources being available for higher level reading skills (e.g., comprehension; Perfetti, 1985; Stanovich, 2000). For the nonfluent reader, "reading becomes a slow, labor-intensive process that only fitfully results in understanding" (National Reading Panel, 2000, p. 3). Because reading fluency reflects the complex orchestration of both lower level and higher level processes, it can be considered a reliable indicator of overall reading proficiency (Fuchs et al., 2001).

Absence of Challenge for Academically Gifted Students

A number of studies suggest that many academically talented students do not encounter appropriate levels of challenge in school. For example, studies conducted by researchers at the National Research Center on the Gifted and Talented suggest a disturbing pattern in the lack of differentiated instructional practices for these high-ability students across the country. The Classroom Practices Survey (Archambault et al., 1993) explored the extent to which high-ability students receive differentiated curriculum and instruction in regular classrooms. Approximately 51% of a national, random sample of 7,300 third- and fourth-grade teachers responded to the survey, and classroom teachers reported that they made only minor modifications to the curriculum on an occasional basis for gifted and talented students, a result that was consistent across all types of schools, classrooms, and communities. A follow-up study, the Classroom Practices Observational Study (Westberg, Archambault, Dobyns, & Salvin, 1993), examined the instructional and curricular practices used with gifted and talented students in 46 heterogeneous third- and fourth-grade elementary classrooms throughout the United States, finding little to no differentiation in the instructional and curricular practices for gifted students in the regular classroom. Another study, The Curriculum Compacting Study (Reis et al., 1993), examined the effects of using curriculum compacting to modify the curriculum and eliminate previously mastered work for high-ability students. Results showed that the more than 400 teachers who participated in this study could eliminate between 40%–50% of previously mastered regular curriculum

work for high-ability students in students' varying areas of academic strength without negative learning or testing outcomes.

A more recent study (Reis, Gubbins, et al., 2004) investigated the ways in which teachers nominated by their principals modified or enriched reading instructional practices for academically talented readers in 12 third- and seventh-grade classrooms. Also examined was whether these students were grouped for instruction and whether appropriately challenging reading books were available either in their classroom or school library. Teachers provided only minimal differentiation for talented readers, despite knowing that they should be providing more advanced reading instruction and opportunities. Most teachers cited their need to work with low-achieving readers as the reason for their limited attention to talented readers. Findings also showed that less differentiation and challenge was provided for academically talented students in urban areas than in suburban schools.

Optimal Match to Challenge Students in Reading

Two central challenges for educators are (1) identifying the correct levels of academic difficulty for each student and (2) finding methods for determining whether texts are appropriately challenging. Chall and Conard (1991) described an optimal text as slightly above a student's reading level, thus requiring the student to make an effort to read the text, and occasionally, to ask for assistance. To achieve optimal challenge, a reader must encounter new concepts and language, as suggested by Vygotsky's (1962) theory of the zone of proximal development of language, determined by preestablished meanings of the adult language that the child internalizes. Thus, knowledge can be seen as socially influenced and constructed. In a model for instruction based on this idea, a zone established as a "proximal" level of difficulty allows students to work with adult assistance in a "guided practice." Work in the SEM-R is undertaken with a clear goal of having children guided by adult evaluation of independent performance. Vygotsky believed that studying challenging material in this way enabled students to learn more complex material than they could learn without support. In other words, a "supported struggle" must exist, a core component of the SEM-R.

In reading, educators usually determine the appropriateness of a text based on factors such as sentence length, vocabulary, readability, skill development, and content (Chall & Conard, 1991). Graves, Juel, and Graves (2001) recommend fluency tests to assess the readability of text, but this method addresses neither content difficulty nor students' interest in the text. Student choice has been emphasized as important in the process of finding the optimal student-challenge match (Allington, 2002; Graves et al., 2001; Ivey & Broaddus, 2001; Renzulli & Reis, 1989), and recent research suggests that students who make their own choices based on interests enjoy reading more (Reis et al., 2005). Ideally, all teachers should be able to instruct students about how to choose appropriately challenging texts (Graves et al., 2001), but consensus does not exist among teachers and reading specialists about what makes a "good" choice. Allington (2002) suggested that mismatched textbooks and an absence of support for students hamper student choice, and few choices exist for reading in many classrooms. Chall and Conard noted that it may be difficult to find challenging books in areas of interest for individual students. Very few researchers, however, have formally studied the impact of using books that are too easy for talented students (Chall & Conard, 1991; Reis, Gubbins, et al., 2004; Renzulli & Reis, 1989), and no research was found about the academic and personal self-regulation experiences of urban, gifted students who are also talented readers.

Research on the SEM-R

The SEM-R is an enrichment-based reading program that includes student-selected, high-interest books that are slightly to moderately above students' current reading levels to stimulate interest in and enjoyment of reading and provide individualized, differentiated instruction and curriculum. The SEM-R has been implemented in three previous research studies (Reis, Eckert, McCoach, Jacobs, & Coyne, 2008; Reis & Fogarty, 2006; Reis et al., 2007). Reis and Fogarty (2006) used a randomized design to investigate the SEM-R for 12 weeks with third- through sixth-grade students from 2 low-socioeconomic, urban elementary schools. Teachers were randomly assigned to teach, and students were randomly assigned to participate in treatment or control groups. Both the treatment and the control

group students participated in a direct instruction reading program in the morning, but in the afternoon, the control group received 1 hour of remedial reading instruction and test preparation while the treatment group participated in 1 hour of SEM-R. Significant differences were found favoring the SEM-R treatment group in students' attitudes toward reading, reading comprehension, and reading fluency.

In subsequent research, a randomized design investigated the use of the SEM-R for 14 weeks with third- through sixth-grade students in one suburban school and one urban elementary school (Reis et al., 2007). Again, teachers and students were randomly assigned to teach and participate in either treatment or control groups. The treatment and control group students participated in the regular basal reading program for 1 hour each morning. The control group received a second hour of the basal reading program instruction while the treatment group participated in SEM-R during the second hour of the reading program. In this study, significant differences favoring the SEM-R treatment group were found in reading fluency, but most of the variance was explained by the results in the urban school. In each of these studies, the SEM-R intervention was implemented each day as part of the language arts/literacy block in school for an hour daily for 16 to 20 weeks. In the current study, an afterschool SEM-R program was conducted to investigate whether increases in fluency and self-regulation in reading could be accomplished in less time.

Research Methods

The purpose of this study was to explore the use of SEM-R to encourage academically talented, culturally diverse urban students to read appropriately challenging content, that is, to experience a supported struggle (Vygotsky, 1962), and to provide appropriate resources and scaffolding strategies to help students achieve this goal. One nonparametric data analysis procedure and mixed methodology procedures including qualitative in-depth comparative case studies (Miles & Huberman, 1994; Yin, 2002) were used to probe the experiences and perceptions of academically talented students who participated in an afterschool SEM-R program. Specifically, the questions addressed in this study were:

1. Do academically talented third- and fourth-grade readers who participate in an SEM-R afterschool program increase their reading fluency and improve their attitudes toward reading?
2. What is the optimal challenge level in reading for these talented readers?
3. In what ways do these academically talented readers react to being encouraged to read at advanced levels?
4. What is the appropriate challenge level for these academically talented readers in an urban elementary school, and how can reading performance be increased in these students?

The Urban School and the Study Participants

The researchers contacted both an urban school superintendent and principal about conducting this research in a professional-development center school that had a partnership with the university researchers, and permission was granted. In this urban elementary school of 500 students, approximately 72% were from predominantly low-socioeconomic backgrounds (free and reduced lunch). Most students in the school demonstrated low levels of academic achievement, with only 22% of the school's students meeting the state goal for reading on the most recent achievement test. The school had been targeted as in need of improvement, and the principal had expressed concerns about the lack of attention given to students who were doing grade-level and above-grade-level work as the nature of instruction had become increasingly more remedial to address the lack of adequate progress in reading and mathematics. Approximately 60% of the students in the school were from culturally diverse backgrounds (African American and Latino), and of those, 30% spoke English as their second language.

Approximately 3% of the students in Grades 3–5 in this urban school had been previously identified as academically talented. Identification of academically talented students occurred in this district and school when students met all of the following state criteria: (1) standardized achievement and/or aptitude scores in the top 3%–5%; (2) exemplary classroom performance as documented by high grades and performance across content areas; (3) teacher nomination guided

by the Scales for Rating the Behavioral Characteristics of Superior Students (SRBCSS; Renzulli et al., 2002); and (4) evidence of creativity and task commitment as documented by classroom observations. Students identified as gifted were reported by a statewide accounting practice to the State Department of Education and received pull-out enrichment services for 2 to 3 hours each week in this school. All 5 students in this study were identified as gifted under the state criteria in third grade.

Students who previously had been identified as academically gifted using these district and state criteria were screened for participation in this study and dually identified as talented in reading if they: (1) scored at advanced levels on recent reading tests administered as part of a standardized, district-wide assessment; (2) were nominated by their classroom or reading teacher as a talented reader using the Scales for Rating the Behavioral Characteristics of Superior Students–Reading (SRBCSS-R; Reis, 2005); and (3) were individually tested and found to be accelerated readers by the reading consultant in their school (reading two to three grade levels ahead of their chronological grade level peers in the school). These three criteria were used to identify talented readers in this study.

Five students dually identified as gifted in the state and as talented in reading were invited to participate in this afterschool program. An additional 17 randomly selected students participated in the afterschool program, but were not a part of this study.

Data Collection

In this mixed-methods research study, the words and experiences of the participating students were recorded in the afterschool intervention. Data collection included finding, gathering, or generating materials that were subsequently analyzed (Strauss, 1987). Institutional Review Board permission was sought and granted for the study and active parent consent was obtained for each participant. In addition to the observations that were the primary source of data for the study, information from parent interviews, teachers, and school records was also gathered. These data, the accompanying field notes from the interviews, and field notes from student, classroom, and parental observations were used to triangulate sources. This data collection

enabled researchers to compile thick description case studies that present detail, context, emotion, and study patterns of reading for each student.

Researchers observed students' reading practices before and during the intervention and measured students' oral reading fluency and attitudes toward reading both before and after the program. Students were carefully observed to probe their ability to use self-regulation to read challenging texts for extended blocks of time. Observation included a systematic description of events and behaviors of the students during all afterschool SEM-R sessions, accounting for slightly more than 25 hours of student observation (Yin, 2002). This amount of time was necessary to increase trustworthiness (Marshall & Rossman, 1989; Miles & Huberman, 1994), to compare outcomes across several cases, and to develop sophisticated descriptions and powerful explanations. During the afterschool implementation of the SEM-R, observations were guided by an established procedure that included the identification of responses to differentiated reading practices for talented readers. This procedure involved analyzing how talented, urban readers reacted to challenging reading instruction, patterns of reading, interest in reading, and, in particular, affective issues that interacted with these students' abilities to read appropriately challenging materials for more than a few minutes at a time.

The SEM-R Intervention

In this study, the SEM-R (Reis et al., 2005) was implemented in a 90-minute, afterschool SEM-R intervention for 6 weeks for 2 afternoons each week. The SEM-R includes three general categories of reading instruction that are dynamic in nature and designed to enable some flexibility of implementation and content in response to both teachers' and students' needs. This approach is based on Renzulli's Enrichment Triad Model (Renzulli, 1977) and the resulting Schoolwide Enrichment Model (Renzulli & Reis, 1985, 1997) with three levels of enrichment: (1) broad exposure to areas in which students might have interests, (2) training and methods instruction, and (3) opportunities to pursue self-selected topics of interest to students. The emphasis of the Schoolwide Enrichment Model (SEM)

is on enjoyment in the process of learning with a focus on planned, systematic enrichment experiences.

In Phase 1 of SEM-R, teachers select literature to read aloud to students and intersperse read-alouds with higher order questioning and thinking skills instruction. These sessions, entitled "book hooks," are 10 to 20 minutes in length, and high-interest, challenging books are used in this read-aloud component. Interests are determined after students complete an interest questionnaire, and students help select books for the read-aloud phase of the study. Bookmarks with higher order questions are provided to all students and teachers. A goal in this phase is to engage students' interests and expose them to a variety of literary genres, including mysteries, poetry, historical and science fiction, biographies, autobiographies, and other nonfiction.

In Phase 1 of the afterschool SEM-R, all participating students met as a group for 20 minutes to listen to sections of these books that were read aloud to them by the researchers and guest readers. Books were selected based on both their match with students' interests as expressed in their reading-interest assessments and their potential to offer cultural enhancement and enrichment. For example, one weekly theme was historical views of prejudice, and the books introduced were selected for our diverse student population as well as for point of view and genre. A few of these books were: *I Have A Dream*, by Martin Luther King (1997); *My Brother Martin*, by Christine King Farris (2003); *The Voice That Challenged a Nation: Marian Anderson and the Struggle for Equal Rights*, by Russell Freedman (2004); *Maniac Magee*, by Jerry Spinelli (1990); *Roll of Thunder, Hear My Cry* by Mildred Taylor (1976)*;* and *Witness,* by Karen Hesse (2001). Also included were books that the researchers believed might appeal to the Latino students in the afterschool SEM-R, such as *The Circuit: Stories From the Life of a Migrant Child* by Francisco Jiménez (1997), biographies such as *Dolores Huerta* by Frank Perez (1996), and *Harvesting Hope: The Story of César Chávez* by Kathleen Krull (2003). Phase 1 was followed by a 10-minute snack break provided by the research team, during which time informal discussions were held with small groups of students.

The second phase of the afterschool SEM-R implementation emphasized the development of each student's ability to engage in structured silent reading time using self-selected, high-interest books

for 45 to 60 minutes. During this phase, Supported Independent Reading (SIR), students were supported by individualized reading conferences. Students met in small groups of 4 to 5 students with similar levels of reading comprehension for 45 minutes each session with the same adults. Each child in the group had at least two opportunities for independent reading with a researcher or teacher during this time period. The 5 academically gifted students who were also talented readers worked with the same researchers for all sessions. Two of the researchers were professors and one was a graduate student who had completed coursework in gifted education. All had experience working in urban areas, and one was of Latino descent and bilingual, while two were white and spoke English as their primary language but did have conversational Spanish-speaking skills.

The students in this study were encouraged to select books that were slightly above their current reading level, and researchers continually assessed the appropriateness of the challenge through conferences with each student during every session. Teachers and research team members found that the majority of students selected books that were too easy for their skill level. Students were told that they could take these easier books home to read, but that during the afterschool SEM-R program, they were required to select books that were more challenging to read. Students also were given high-interest books as gifts. During this reading time, research team members provided individualized support and instruction to all students. With the talented readers in this study, teachers discussed higher order themes, asked critical questions about reading, focusing on synthesis, and held literary discussions that connected text to text and text to self. Books were selected to be sensitive to students' multicultural backgrounds; many books had multicultural content and themes and were made available to students in both English and Spanish.

In the third phase of the afterschool SEM-R implementation, students remained in the same small, homogeneous groups to which they were assigned in Phase 2 and were encouraged to move from teacher-directed opportunities to self-choice activities over the course of the intervention. The time for this phase was approximately 25 minutes. Activities included opportunities to explore new technology and engage in discussion groups, writing activities, creativity training in language arts, learning centers, interest-based independent or

small-group projects, continuation of self-selected reading, and book chats. The intent of these experiences was to provide time for developing and exploring student interest in reading. In addition, during this time, students engaged in creative and critical thinking training and in advanced training in the use of the Internet to find information about various literary genres, such as biographies and autobiographies. Training in the use of technology focused on enabling students to learn to read critically and to locate enjoyable and challenging reading materials online, especially high-quality challenging literature. Options for independent study also were made available to students during this phase.

Each component of the SEM-R was developed to help students increase their reading skills with practice and coaching of differentiated reading strategies, in conjunction with efforts to increase automaticity and self-regulation in reading. In this study, the most frequent activities completed in Phase 3 were small-group book discussions, continuation of independent reading, projects related to reading such as designing book jackets and bookmarks, and some creative thinking activities involving brainstorming and other open-ended language arts activities provided by the SEM-R staff.

Instrumentation

Students' attitudes toward reading were assessed at the beginning and end of the intervention using a 20-item Elementary Reading Attitude Survey (ERAS; McKenna & Kear, 1990) in which 10 items measure recreational reading and 10 items measure academic reading. The ERAS uses a 4-point Likert scale with pictorial anchors of a smiling and scowling Garfield cat, and research with the ERAS indicated satisfactory internal consistency coefficients and reliability with Cronbach's alpha (full scale) for Grade 3 of .88 and .89 for Grades 4–6.

Curriculum-based measures of oral reading fluency were individually administered as a pre- and posttest to assess students' speed and accuracy when reading aloud. Oral reading fluency reflects the complex combination of both lower level and higher level processes, and it can be considered a reliable indicator of overall reading proficiency (Fuchs et al., 2001). To measure oral reading fluency, each student reads an unpracticed, grade-level passage of connected text

from the AIMSweb standard passages (NCS Pearson, 2001) for 1 minute. The score is the number of words read correctly. Test-retest and alternate-form reliability of oral reading fluency measures are consistently above .90, and criterion-related validity with other standardized measures of reading, decoding, and comprehension average .80 or higher (Hasbrouck & Tindal, 2005). In this study, each student read the same three separate oral reading fluency passages for both pre- and posttest. These third- through fifth-grade students were each administered one third-grade, one fourth-grade, and one fifth-grade oral reading fluency passage. Oral reading fluency measures were administered and scored by research team members who were not working with the talented students who were the focus of this study.

The Scales for Rating the Behavioral Characteristics of Superior Students–Reading (SRBCSS-R; Reis, 2005) was used to guide teacher identification of talented readers from the population of academically gifted students already identified using state and local criteria including achievement tests, teacher nomination, grades, observation data, aptitude tests, and other criteria. The SRBCSS-R has six items related to reading enjoyment, reading fluency, and advanced processing in reading and was developed as an addendum to the revised scales as a part of a national validity study of 726 students. Cronbach's Alpha reliabilities were found to be high ($r = .96$).

The Reading Interest-a-Lyzer was adapted from Joseph Renzulli's Interest-a-Lyzer (1977) and modified to reflect questions about students' preferences and interests in reading. The Interest-a-Lyzer includes questions about favorite books, places the student likes to read, whether the student uses the school or public library, and reading practices at home and in school.

Data Analysis

Data analysis in this study was conducted using both quantitative and qualitative techniques designed by Strauss (1987) and Strauss and Corbin (1998). Quantitative techniques included nonparametric data analysis methods and the use of a Wilcoxon procedure in which a comparison can be made between two samples, in this case, a large national sample and a small subsample. For a comparison of small and large samples, this is a recommended procedure. Qualitative

data analysis coincided with data collection using a coding paradigm including three levels of coding techniques—open coding, axial coding, and selective coding. Researchers independently coded and then conferred with each other to confirm the decisions made about initial coding and emerging categories and theory.

Open coding is the earliest stage in the coding process, in which the researcher breaks down, examines, compares, conceptualizes, and categorizes the data (Strauss & Corbin, 1998). It involves unrestricted coding of all data involved, by the careful scrutiny of field notes, interviews, or any other documents to begin to identify patterns and regularities transformed into categories into which subsequent items are sorted. Open coding, in this study, related to the various behaviors exhibited by students when they were asked to read more challenging texts.

The next stage in coding is axial coding, in which codes are examined according to the coding paradigm, and knowledge emerges about the relationships between categories (Strauss & Corbin, 1998). Axial coding occurs during the early stages of open coding, but becomes more dominant after initial data are collected and analyzed. Axial coding began during the latter stages of open coding, enabling the researchers to specify relationships among the many categories that emerged in open coding and ultimately results in the conceptualization of one or more categories selected as the "core."

The core category was the central phenomenon around which all the other categories were integrated (Strauss & Corbin, 1998), and in this study, related to the difficulty students initially faced when interacting with challenging text. The core category appeared most frequently in the data, related to other categories, and enabled the researchers to explain most of their findings. In this study "initial inability to deal with challenging reading" was identified as the core category.

Findings

The findings include summary findings about the case studies of the 5 academically talented readers who participated in this study as well as the findings about each of the research questions that guided the

Table 1

Participant Demographics

Participant	Sex	Grade	Ethnicity	Grade Level of Reading	Reading Interests
Beth	F	3	White, non-Latino	5.5	Science, fantasy, comics
Brad	M	4	African American	6.0	Science fiction, science
Carrie	F	3	White, non-Latino	5.5	Poetry, fantasy, comics
Harry	M	3	White, Latino	5.5	Science, fantasy
Luz	F	4	White, Latino	6.0	Poetry, writing

study. Due to space limitations, only three case studies are included in this article. The categories that emerged from the coding paradigm are also summarized in this section. Participant demographics for all students are included in Table 1.

Student Case Studies[1]

Harry. An 8-year old third grader whose mother was White and father was Latino, Harry participated in the enrichment reading program after being nominated by his teacher because he was reading beyond a fifth-grade level and had been previously identified as a gifted and talented student using state criteria. He explained that his parents were not married and lived separately, and his mother had another child, who was still an infant at the time of the intervention. Harry lived with his mother and stepfather. He explained that he enjoyed the company of both of his parents and that he was encouraged to read at home.

Harry was an energetic student who had difficulty being still for any extended period of time. Although he could be quite focused when reading, Harry fidgeted and often had verbal outbursts during group activity. His classroom teachers also had noticed this heightened activity and reported that Harry often was distracted and lacked focus. They had provided him with a stress ball to squeeze when he felt distracted, in the hope that this would help him to focus better during

group work or during any time that he could not be independently engaged in his own work.

In contrast to his behavior during group work, Harry was able to focus while reading and could read quietly through periods of peer noise distraction. To ask Harry a question about his reading and gain his attention, we often had to call his name twice before he would take his eyes from the page. Unfortunately, although he was capable of reading on a fifth-grade level and despite being encouraged to read at a higher level, Harry's initial choices of books were always from the *Goosebumps* series, which was well below his challenge level. Harry liked some of the challenging books suggested to him, including biographies of baseball stars, but he would discontinue reading if he perceived that he could not finish the book in a certain period of time, such as 30 or 45 minutes. He could, for example, read one *Goosebumps* book in 45 minutes and initially seemed to need the extrinsic praise that he consistently had been given if he finished a book in that time period.

On his Reading Interest-a-Lyzer, Harry indicated that he liked science, fantasy, and comic books; writing activities; and reading books of his choice before going to bed. Harry also explained that he liked reading about spiders and frogs, and he often read children's science books he found in the library and the classroom. If Harry chose a book that was well below his challenge level, he would usually read silently and independently for 1 hour. The amount of time Harry could read silently and independently, even in less-challenging books, however, decreased in the last few weeks of the program, as spring and warmer weather approached, from 15 minutes to 10 minutes or less.

Toward the end of the intervention, Harry needed to be in a separate space from his classmates in order to focus and had to be encouraged to take more frequent breaks. When the weather was pleasant, Harry asked if the group could go outside for a break and when granted permission, he ran the entire time. He had to be coaxed to leave the playground to participate in the SEM-R. On some spring days, Harry simply seemed incapable of reading anything that challenged him in any way, and researchers were forced to let Harry read R. L. Stine's series *Goosebumps*, or whatever books might spark his interest. During the later sessions, when a book was suggested to Harry in one of his areas of interest and at or above his reading level, he would glance at the cover or read one page and dismiss it as boring. If it was

a science fiction or fantasy book, Harry would become frustrated with the unfamiliar names and make fun of the titles; he became discouraged about reading more challenging books when the title looked unfamiliar or the content was too difficult. Despite having several conversations about giving books a chance and reading enough so that he could enter "the world" of the book, he did not appear to want to change his behavior. It was difficult to monitor his progress as he tried to read more challenging books because he asked to bring them home and would fail to return them to the program, saying he had forgotten them. Harry eventually explained that he had become accustomed to speed-reading at his comfort level and felt discomfort when he had to read higher content more slowly. After several hours of observation, it became apparent that Harry routinely read books that did not challenge him, and he lost interest in or could not regulate his own reading of appropriately challenging material.

When asked comprehension questions about book contents, Harry remembered fine details and seemed to understand plots. With more difficult books, Harry needed the chance to reflect more about the reading; then, he was able answer more in-depth questions, suggesting that he initially may have lacked the experience to respond to challenging questions. Over time spent with the research team, Harry gained some skills in learning how to think his way through more challenging questions.

Harry's closest friends in the program were 3 boys from lower reading groups who were boisterous and also had difficulty focusing on reading. Harry and his friends were separated after the SEM-R Phase 1 read-alouds, but when they were together during this brief whole-group time, they talked, touched, and kicked each other constantly, provoking reactions from each other. When separated into the advanced reading group, Harry moved constantly but had fewer vocal outbursts. Throughout the entire SEM-R program, he repeatedly asked if the group could skip the whole group read-aloud sessions and move straight to Phase 2 supported independent reading. When asked, Harry admitted that he understood that the whole-group read-aloud phase was his most disruptive time. When Harry was asked questions about the section of the book or story read aloud, he usually answered accurately with details from the text, but would occasionally respond with a silly answer, causing the whole group to

lose focus. When asked to write during the program, Harry wrote only occasionally and his writing was usually illegible. His letters were very large and lopsided, like the writing of a second grader, and he rushed through his writing assignments, often leaving out conjunctions and articles.

Intensive observations during the SEM-R intervention suggested that Harry had the ability to read challenging texts at the fifth- or sixth-grade level or higher if he had an interest in the content and could regulate his behaviors but lacked the reading and self-regulation strategies to focus on new, more challenging material on a systematic basis. With enough support and with interest-area books, and if he was in a positive frame of mind, Harry could be encouraged to read at an appropriately challenging level for up to 50 minutes. This occurred on two or three occasions during the intervention, but after which a great deal of feedback and encouragement was given. If left on his own to select what to read, Harry would read books below his chronological grade level, even though he understood he was reading material that was well below his skill level. He explained that he had learned over time that he could receive positive feedback for little effort because his output exceeded that of the majority of his classmates. By the end of the program, Harry was able to focus on the more challenging text for longer periods of time and had achieved some success at self-regulating his behaviors.

Luz. A 10-year-old girl of Latino descent, Luz was a fourth grader who read three grade levels above her chronological grade and had been identified as academically gifted in third grade. Luz enjoyed poetry and was interested in creative writing. During the first week of the SEM-R program, she brought in poems she had written about colors and ice cream, using precise language and rhyme. Luz was outgoing, had a dynamic presence, and always dressed neatly in bright, matching colors. Several younger girls reported that Luz was very popular, and her classroom teacher confirmed this; the younger girls in the program even hovered around her before they were divided into groups. Luz reported that her parents had not married and lived separately, and that she lived with her grandmother. Luz saw her mother occasionally but she seldom saw her father. Luz's grandmother spoke both Spanish and English, and Luz understood oral Spanish but had

trouble reading text in Spanish as she only had participated in English instruction since entering school.

Luz showed consistent enthusiasm for reading and encouraged others in the group to pay attention. Luz participated in discussions about the books that had been read aloud and, even when distracted, was able to refocus on the topic quickly. Despite her enthusiasm, when given a choice of books to read, Luz chose picture books that were well below her reading ability for her supported independent reading time. Luz also had difficulty maintaining her focus and concentration for more than 10 minutes during supported independent reading, despite the focus on increasing minutes at each session. Several strategies were implemented to encourage Luz to read for more than 10 minutes. What Luz needed was to have space from the other readers in the group as she was easily distracted. The longest independent reading period Luz accomplished in the SEM-R program was 20 minutes, and she consistently claimed to be bored with longer, more appropriately challenging chapter books. When asked why, she replied that she did not know but claimed that they were "just too long." By trying several different strategies, researchers found that Luz could focus longer if she read aloud. When she was encouraged to take her book in the hallway and remove herself from other distractions, she was able to focus for slightly longer periods of time than her usual 10 minutes, about 12 to 15 minutes. She enjoyed reading with a partner but was easily distracted and could not read for very long. On the one day that she read for 20 minutes, she was reading a lengthy biography about Martin Luther King Jr. written in Spanish. She read the words aloud in order to familiarize herself with them and seek meaning. She sounded each word out slowly, excited to figure out what each meant. Martin Luther King was familiar to her, and her interest in him seemed to help motivate her to discern the meaning of the words. Luz was excited about reading Spanish, and she continued to read several sections of the biography with a member of the research team who was fluent in Spanish.

Because Luz enjoyed poetry so much, one strategy implemented with her was to pair her with another talented reader, Sarah, who also loved poetry. They read *Poetry for Two Voices* aloud together for approximately 20 minutes and reported they liked the sounds of the poems. Luz read this book avidly, explaining her joy in the imagery

and rhythm. When questioned about the language and metaphors, she was able to discuss imagery and symbolism in a very rudimentary and basic way and was consistently reluctant to respond to or discuss higher level questions.

At one point in the program, all participants were given books that had been selected especially for them. When Luz received *Esperanza Rising* by Pam Munoz Ryan (2001) in both English and Spanish, she was excited and wrote her name in permanent marker inside the cover. She read for about a page then became distracted and did not continue. When attempts made to refocus her failed, researchers asked her to complete a writing prompt based on the first two pages she had read. She seemed excited about the writing opportunity and carefully selected pencils and lined paper to list the nouns, verbs, and adjectives that represented the part of the story she had read. Luz wrote short, insightful responses about the opening scene of *Esperanza Rising*. In the scene, a small girl describes her connection to the heartbeat of the land, and Luz seemed to grasp this difficult concept thoroughly, choosing this as her writing topic. However, Luz lost interest in this activity and was not observed reading the book again during the program, despite several attempts to encourage her to do so. Luz stayed interested in the program and in reading, but researchers were neither able to increase her independent reading time nor encourage her to read appropriately challenging books for more than a few minutes. Researchers were able to extend this time to a few more minutes by the end of the intervention, but although Luz maintained her eagerness to try new books, she consistently preferred to read those that were well below her challenge level, like the *Babysitters Club* series by Ann M. Martin. Accordingly, attempts to engage her in longer periods of challenge reading were unsuccessful.

Brad. A fourth-grade African American student, Brad also read above the sixth-grade level and had been identified as a gifted student in fourth grade. Brad loved joke books, but would rarely read challenging texts and was encouraged by both his teacher and his mother to participate in the afterschool reading program. Brad lived with his mother and did not discuss his father, who was not living with his mother. Brad did not want to stay after school and researchers had to walk to his classroom each day of the program to prevent him from trying to leave before the SEM-R program began.

Brad's Reading Interest-a-Lyzer suggested that he might enjoy science fiction, and initially, he was encouraged to read novels geared toward students at his sixth-grade independent reading level. Researchers recommended several appropriately challenging books at this level for him in his interest areas, and Brad began to read with some interest. Typically, however, he would begin to fidget after just one page and, similar to Harry, said he did not like the challenging names used for the science-fiction characters. Because of their similar interests, Brad and Harry were paired together, and they began to read aloud together; however, within a few minutes, they would become distracted and begin to laugh about the unusual names.

When Brad selected books on his own, without the suggestions of the research team, he gravitated toward simple books that he found humorous. Brad was encouraged to read other appropriately challenging books in his interest areas, but he appeared interested only in reading books that were well below his challenge level. Brad seemed uncomfortable with the challenge of new material despite the fact that the books suggested to him were well within his reading level.

During Phase 1 read-alouds, Brad often challenged researchers, asking, "What if I don't want to listen or read?" During Phase 2, he would often smile as he refused to read the books offered to him and would initially gravitate toward books he had already read or were quite easy for him. It appeared that he was testing the researchers in the program, and his classroom teachers reported similar instances of the ways that Brad avoided working at appropriate challenge or above grade level.

Brad's efforts to read occurred intermittently and were varied. One day he sat at his desk and steadfastly refused to read, and when asked what was wrong, he shrugged and refused to talk. When he was told he might feel better if he picked up a book and relaxed with a story, he said he did not feel like it. When asked what he felt like doing, he replied, "nothing." When asked if he wanted to read aloud, or have one of the researchers read to him, he said "no" and would not explain what was wrong or participate in any activities. He rolled his eyes, looked very uncomfortable, and when offered a number of high-interest books, refused to read. Another researcher came and sat with him for a while and they began to read together. It was very difficult to motivate or help Brad on this and other days of the program as he

often demonstrated a pattern of mood variation, depending upon the experiences he had on any particular day.

By the end of the program, however, Brad displayed more interest in reading on a more consistent basis and even asked to read a graphic version of *Moby Dick* by Herman Melville that Harry had completed. He seemed to enjoy the text and gravitated toward other books with pictures. Because of his inconsistent behaviors, it was difficult to engage Brad in the use of specific reading strategies with any continuity. However, Brad expressed sadness when the program ended, asking if the program would continue the next year and if he could have a chance to work with the researchers to identify books that would interest him. The researchers working with Brad believed that they had made progress and that more would be made if the program continued during the next semester.

Findings Related to Research Questions

Reading fluency and attitudes. Research Question 1 investigated whether students' reading fluency scores and attitudes toward reading scores increased from pre- to postadministration. Each of the 5 academically talented readers who participated in this study increased his or her reading fluency as reported in Table 2, but scores varied. Initially, none of the students scored at the reading fluency level that might be expected of identified gifted students. This may be due to the educational experiences in their urban elementary school as both the principal and reading consultant indicated that the school's focus on remediation and on the direct instruction of basic skills created few opportunities for advanced challenge for academically gifted students. The absence of consistent challenge and opportunity to make continuous progress in reading (Reis, Gubbins, et al., 2004) may have affected these students' understandings about how to tackle more challenging reading material. Their lower reading fluency scores, despite being identified as gifted, may also have been due to curriculum that focused on deficits rather than strengths and on instruction that had been targeted for lower achieving students and/or misperceptions related to the talents and abilities of culturally diverse students (Ford, Howard, Harris, & Tyson, 2000; Renzulli & Reis, 1997).

Table 2

Reading Fluency Scores Before and After the SEM-R Intervention

Student	Pre SEM-R[a]	Post SEM-R	6-Week Gain	Expected Gain for 6 Weeks[b]	Expected Gain for 18 Weeks[c]
Beth, grade 3	132	153	19	5–6	16–17
Brad, grade 4	119	143	24	4–5	13–14
Carrie, grade 3	123	129	6	5–6	16–17
Harry, grade 3	131	160	29	5–6	16–17
Luz, grade 4	118	124	6	4–5	13–14

Note. [a]Score equals number of words read aloud correctly per minute. [b] Expected gain for 6 weeks of reading instruction based on the national norms for reading fluency, winter to spring as reported by Hasbrouck and Tindal (2005) for the 90th and 75th percentile rankings respectively. Each of the students reported fall within the 90th and 75th percentile. [c] Expected gains for 18 weeks of reading instruction based on the national norms for reading fluency, winter to spring as reported by Hasbrouck and Tindal (2005) for the 90th and 75th percentile rankings respectively. Each of the students reported fall within the 90th and 75th percentile.

After this 6-week study, students made significant gains in reading fluency that were higher than would be predicted for, for example, a 4-month study spanning winter and spring. A nonparametric related samples test (Wilcoxon) was conducted on the mean gain scores and significant results ($n = 5$, $z = -2.023^2$, $p < .04$) were found on these gains as compared to what would be expected in the same time period on a nationally normed sample. As noted in Table 2, the expected fluency increase for third graders who are scoring at the 90th percentile from winter to spring is 16 points for 18 weeks. During the 6-week period of this intervention, an expected increase based on national norms would be approximately 4 to 6 points. Three of the students increased their reading fluency by more than 20 points in 2 sessions weekly over a 6-week period. Beth increased by 21 points, Brad by 22 points, and Harry by 29 points. These data suggest that strategies from the SEM-R helped these talented readers to significantly increase their reading fluency. These students gained as much on reading fluency tests in 12 afterschool 90-minute sessions as they may have been expected to in 4 months of school. Attitudes toward reading also

Table 3

Attitude Toward Reading Before and After SEM-R

Student	ERAS Score Pre SEM-R	ERAS Score Post SEM-R	Gain
Beth	66	68	2
Brad	55	70	15
Carrie	69	70	1
Harry	65	71	6
Luz	63	63	0

Note. ERAS = Early Reading Attitude Scale, composite score range 20–80.

improved in most students, but the gains varied, as indicated in Table 3, with one student increasing by only 1 point and another increasing by as many as 15 points. These changes suggested that as students acquired increased reading fluency, some had slightly or somewhat better attitudes about reading.

Optimal reading challenge levels and reactions. Research Questions 2 and 3 concerned the optimal match in reading challenge levels and the ways that academically talented, elementary readers reacted to being encouraged to read at challenging levels. The core category that emerged in this study was the difficulty these talented students experienced when they were challenged to read slightly more challenging works than they typically read. Findings in this afterschool SEM-R program demonstrated that all 5 academically talented students had difficulty reacting to reading appropriately challenging material. Carrie and Luz were least likely to respond to challenge appropriately matched for their reading levels, while the other 3 students reacted somewhat better to the strategies and encouragement they received. In the beginning of the SEM-R program, books were recommended that were appropriately challenging for students' reading levels, but each of the students initially perceived these texts as being too difficult. Students usually lost interest after the first page if the fictional names in the text were "too hard," or if the reading took more time than they had previously experienced. It appeared that these students had so seldom encountered challenging

material that they gave up almost immediately if they had to exert effort to read.

When researchers offered suggestions for the use of strategies to enable them to read appropriately challenging material, such as skipping over the names they could not immediately pronounce, the students usually replied that this was "just too hard." When the reading was viewed as too challenging, even though it was below their current level of reading, the students would leave their books at home or refuse to open them. Researchers routinely encouraged students to read 10 pages before they gave up on a book. This rule enabled students to better understand whether they were interested in the book or if the reading challenge level was too difficult. Determining an appropriate and realistic challenge level was difficult because the students had become accustomed to reading books that were two to three grade levels below their level of reading ability. When researchers switched to material that was only slightly above their current chronological grade level, all of the students reported that the new material was too challenging, even if it was well below their actual potential to read. As the program progressed, students consistently tried to revert to reading easier books they had already read in their classrooms, while researchers worked to encourage them to try to read the more challenging materials.

Appropriate challenge for talented urban readers. Research Question 4 involved appropriate challenge levels for academically talented readers in urban schools. To make an initial choice of an appropriately challenging book, an oral reading fluency test was used to gauge the level at which the child read independently aloud. Then, to match the text with the student, researchers found that it was necessary to consider several other factors including maturity of content, complexity and length of sentences, and student interests. To assess the appropriate maturity of content, the researchers had to take the time to become familiar with the content of the book as well as the developmental level of each student.

The complexity and length of sentences seemed to be an important determinant in whether a student continued reading a book. If daunted by the first page of a book, students initially tried to change selections. All were initially discouraged by any in-depth descriptions, unfamiliar names, and longer sentences, but with time and

encouragement from the researchers, most of the students learned to persist in reading. Individual attention and discussions about ways to increase self-regulation in reading helped some students to increase their motivation to read more challenging material. Student interest also was affected by events that occurred during the school day; when a student had a difficult or sad day, he or she often chose comfort-level reading for individual reading time. On these days, researchers understood that it was important for these students to enjoy any type of reading to release the frustration of the day.

Researchers also found that when students appeared to be reading slightly more challenging material, they often could not answer relatively easy comprehension questions. Many students were only skimming text or speed-reading, and thus they could only answer questions about surface details. For example, Beth turned pages quickly and was initially unable to answer most questions about the text she was reading. She remembered only surface details that she could answer by having skimmed the page. When this happened, she would be asked to read the text aloud and then answer the questions. She consistently understood content more clearly when she read aloud, perhaps because this strategy increased her self-regulation to pay attention to the text. The problems she had with motivation to read more challenging text seemed to be eliminated when she was asked to read aloud. Carrie, in contrast, was so quiet and shy that she tried to hide from individual discussions and conferences and actively avoided in-depth questions. She never wanted to read aloud and would do so only very quietly.

Harry initially encountered comprehension problems when he read at a level slightly above his usual challenge. He was used to blocking out the rest of the world and speed-reading novels well below his level, and had difficulties with both rate and pace when he read more appropriately challenging work. He would speed through difficult reading as if he were reading much easier material. When he read difficult material quickly, he remembered few details, but could remember the names of characters, some important events, and could regularly recall illustrations. Researchers provided Harry with a number of strategies for effectively reading more challenging texts. He listened and was able to use these occasionally but would also become impatient and when not monitored, would revert to patterns of reading he had previously used with quick and easy read-alouds.

Luz also had some difficulties with longer texts and preferred to read aloud. When given permission to read aloud to herself, Luz could read for longer periods of time. Reading aloud seemed to help both Beth and Luz to focus.

Our findings, unfortunately, suggest that the reading preferred by these talented students was below challenge-level literature that they could read with minimal effort. The students in this study were most comfortable doing this type of reading independently and when able, consistently selected these easier materials, despite their emerging understanding of the lack of challenge presented to them in these texts.

Strategies that encouraged challenging reading. Research Question 4 additionally related to the appropriate level of challenge and the circumstances under which these academically talented, urban students could be encouraged to read more challenging material. Findings suggest that when students were able to select their own content based on their area of interest, they were more able to read appropriately challenging text for more than a few minutes, supporting previous research about the importance of student choice in finding the optimal match (Allington, 2002; Graves et al., 2001; Renzulli & Reis, 1989). This meant that researchers had to constantly provide a variety of challenging and interesting books in students' interest areas and continue to encourage students to persist in reading. However, when too many books were suggested, students became overwhelmed and wanted to browse through several books on their own before choosing one to read. This worked well as long as the researchers encouraged students to make a final choice and read at least 10 pages. Asking students to read a book they did not select caused students to pretend to read, ignore strategy use recommendations, and revert to reading material that was well below their grade and challenge level. Students' moods and motivations varied, and on some days, some students were ready for a challenge and displayed high energy. On other days, the same students appeared frustrated or listless, and researchers were forced to let them choose texts that were familiar and comforting to them. On most days, this group of urban, academically gifted students did not want to read, and needed encouragement and support to begin the process. Data collected in this study suggest that these students had not learned to enjoy reading challenging material, perhaps because they had been systematically denied the

opportunity to read appropriately challenging books in school. The students' inability to deal with appropriate levels of challenge, either at or slightly above their level of reading, was due to the consistent pattern of encouragement that they had received to read easier books. The students seemed to crave the praise they had previously gotten for reading easier books in one sitting or from finishing work that their peers had barely begun. The lack of attention to providing these students with higher levels of challenge may negatively affect their ability to react well to challenging content in the future.

Some strategies enabled talented readers in this urban environment to participate in advanced reading opportunities. Previous research has demonstrated that, in classrooms geared toward the ability level of the classroom's average or below-average student, talented readers often read well below their reading ability and received little individual or differentiated instruction (Reis, Gubbins, et al., 2004). This program addressed that problem for a period of time as researchers tried to respond to the needs of individual students and select high-interest books that were only slightly above each student's reading level. At first, students were reluctant to work harder, especially in an afterschool program. They initially balked at bigger words and quickly lost interest in longer texts. By using varying strategies to engage these students in reading more challenging reading material, all 5 academically talented students began to read at a higher level with a good deal of support for short periods of time. Different strategies worked for different students. Some affective strategies were used, providing students with support, attention, and encouragement. Other strategies were situational, providing students with an environment conducive to reading and suggesting individualized reading strategies to each child depending on his or her needs.

One strategy that seemed to motivate all of the students involved book ownership. After six afternoon sessions, or halfway through the program, a novel was given to each student to read and keep after the program. These books were offered as special gifts selected for students' interests and reading abilities. On the day these books were given to students, some read for 20 sustained minutes. The personal connection provided by the gift of the book seemed to motivate the students who understood that researchers had selected these books especially for them.

These students had become excited about reading the new books they had listened to during the Phase 1 read-aloud of the SEM-R. Read-alouds were effective in general, as students often wanted to read the books that had been read aloud to them and sometimes they argued about who would be able to read the book first. Although they did not always complete these books, the students' excitement about reading was initially high and they began to read more appropriately challenging texts. Unfortunately, many classrooms in this urban school had little variety in the reading material provided because of funding problems or other limitations (Reis, Gubbins, et al., 2004). Few classroom libraries have selections appropriate for more talented readers (Reis, Gubbins, et al., 2004), and even if choices were available, students reported that they rarely had opportunities to browse the shelves of their school or city library and select books that both appealed to them and challenged them.

Other strategies that helped students to read for extended periods of time were related to self-regulation in reading (Zimmerman, 1989), such as encouraging each student to find the right place to read. During the weeks of the SEM-R intervention, it became clear that the students in this study needed a quiet space to concentrate. Another method that emerged in this study as a way to help students self-regulate was to encourage students to discuss the strategies they could use to self-regulate their reading with researchers. One such strategy that researchers suggested to students was to consider the new reading opportunities as exciting explorations of new ideas that would enrich their education (Renzulli & Reis, 1985, 1997). An additional important factor researchers found in helping students to better understand how to self-regulate in reading was parental involvement. Brief parent meetings were held at the conclusion of each session and suggestions were given to parents to help extend self-regulation at home, such as providing quiet evening time devoted to reading books given to students in the SEM-R program. With this support over the course of the 12 sessions, students began to learn some self-regulation strategies and respond to these challenging reading opportunities by reading longer and trying to read more challenging books.

Limitations

This study had limitations that often occur in qualitative research (Lincoln & Guba, 1985). Although the researchers used prolonged engagement and persistent observation over a period of 30 hours for students participating in the program, it occurred over a period of 2 months, and this time period may not have enabled us to conduct observations under widely diverse conditions. A second limitation concerns our audit trail. Although an additional audit of research data collected was used for an inquiry audit by a second researcher, it is possible that having still another researcher audit all collected data may have resulted in slightly different coding outcomes. Another limitation refers to the fluency scores. National norms over the same time period were used for comparison purposes, but norms from other gifted students in the school could have been used if a sufficient number of identified students were in the school, but they were not. Researcher bias is always a limitation in qualitative research, and this was addressed in the current study by continual reflections on the daily occurrences and records of these thoughts using field notes and interview questions, but some bias may have existed as researchers worked with students across many hours and several weeks.

Implications

The SEM-R program was successful in providing individual attention to students, ownership of high-interest reading material, student choice, higher order thinking questions, and time and space for reading. The 5 talented readers in this group did respond to the individual attention, but their success in reading challenging content was varied. The session in which the students read the most was the session in which they each were given a novel selected in their areas of personal interests. The ability to write their names in books they owned created some excitement for the students.

Another important component of generating interest and comprehension in reading was giving students the time and opportunity to reflect on how and when they read best, supporting Zimmerman's (1989) theories about environmental issues in self-regulation of

learning. These students often distracted each other or appeared to be easily diverted from task by any noise from surrounding areas or rooms. In addition, when questions were asked directly after a student finished reading, the students began to understand that they needed time to process and reflect about what they had just read. They reported that their classroom teachers asked them questions about comprehension and details, and that they usually answered quickly, without thinking about their responses. In the afterschool SEM-R program, these talented readers were given time for reflection and the opportunity to consider higher order questions. They had the chance to listen to higher level thinking skills modeled for them in Phase 1 of the SEM-R, and although they initially tried to avoid responding to challenging questions, when they were given time to think about and practice discussing questions that involved synthesis, analysis, or evaluation, most were able to provide insightful and thoughtful responses. Giving students time to learn self-regulation strategies and consider which strategies are effective for them may be crucial to encouraging students to read challenging texts independently. Students in this study learned these skills over time and with encouragement, suggesting that talented urban readers benefit from individualized support and self-regulation strategies.

Earlier intervention might have enabled these academically talented, urban students to react more positively to challenge and to acquire self-regulation strategies at a younger age. The strategies that seemed to help these talented readers engage in reading material at or above their level are summarized in Table 4. High-potential and gifted students who are successful in schools must learn to react well to being challenged. In classrooms in which most teaching strategies and questions are directed toward students who are achieving at average to below-average levels, talented readers often read well below their ability level (Reis, Gubbins, et al., 2004). The SEM-R program was developed to address individual students' reading levels and interests. Initially, all of the students were reluctant to work harder, balked at reading more challenging words, and quickly lost interest in reading more challenging texts. A combination of some of the strategies in Table 4 enabled some of these talented readers to read on a higher level for increased periods of time. Different strategies worked for dif-

Table 4

Strategies That Challenged and Engaged Study Participants

1. High-interest teacher read-alouds and book hooks.
2. Time in the school and public library with guidance to select appropriately challenging books that relate to students interests and experiences.
3. Quiet space during regularly scheduled time to read without distraction.
4. Trial and reflection about specific reading strategies use.
5. Teacher/researcher persistence in asking higher order questions and providing wait time for thoughtful responses.
6. Freedom to select books in areas of personal interest.
7. Ownership of high-interest reading materials and receiving books as gifts.
8. Individual attention and praise for reading appropriately challenging content.
9. Reflection and practice and follow-up reflection on self-regulation strategies used for challenging reading.

ferent students, some students were more successful than others, but all achieved some success at reading more challenging materials.

The SEM-R provided exposure to different books and used choice and interest to improve fluency and change some attitudes toward reading. When teachers and researchers persisted in asking specific higher order thinking skill questions, these students were able to give thoughtful and intelligent responses. These 5 gifted students who spent all of their time in an urban school with a great deal of remedial content responded to individual attention and encouragement. This type of pedagogy and differentiation should be available to high potential students on a daily basis (Ford, Howard, Harris, & Tyson, 2000; Renzulli & Reis, 1997). Without this type of challenge, support, and engagement, these urban students and others like them may languish in classrooms and respond negatively to increasing levels of challenge as they enter later grades and encounter advanced content.

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End Note

[1] All student names are pseudonyms.