

Case Studies of Schoolwide Enrichment Model-Reading (SEM-R) Classroom Implementations of Differentiated and Enriched Reading Instruction

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Abstract

This qualitative study examined the scaling up of the Schoolwide Enrichment Model in Reading (SEM-R) in 11 elementary and middle schools in geographically diverse sites across the country. Comparative case study analysis was used, with 11 in-depth case studies summarizing findings from both SEM-R and comparison classrooms. Teachers in the 11 schools were assigned to implement the SEM-R for 3 hours each week as part of their reading program or to serve as a comparison classroom, where they continued teaching their regular reading curriculum during their reading block. Three core student categories emerged across all schools, beginning with increased student enjoyment in reading for students using SEM-R, the ways that the SEM-R challenged talented readers, and increased student self-regulation. Teacher findings focused on the successful use of differentiated reading instructional practices, and the professional benefits and challenges experienced by teachers during their successful implementation of the SEM-R.

Keywords: Differentiated Instruction; Talented Readers; Enrichment Pedagogy; Engagement and Enjoyment of Reading; Increased Student Self-regulation

The Schoolwide Enrichment Model Reading Framework (SEM-R) is an enrichment-based reading program designed to stimulate interest in and enjoyment of reading and promote higher reading achievement by enabling students to select high-interest books that are slightly to moderately above their current reading levels. In this study, researchers examined the implementation of the SEM-R in 11 schools across the country as previous research was conducted under the supervision of a university research team. In this research, the SEM-R has been found to be effective at increasing reading fluency and comprehension (Reis & Boeve, 2009; Reis, Eckert, McCoach, Jacob, & Coyne, 2008; Reis & Housand, 2009; Reis et al., 2007; Reis, McCoach, Little, Muller, & Kaniskan, 2010). When teachers implement the SEM-R, they analyze students' strengths and interests and provide reading instruction through the use of enrichment pedagogy, including curricular differentiation (both acceleration and enrichment) and instructional differentiation. The goal of the SEM-R is increased student reading fluency, comprehension, and enjoyment of and self-regulation in reading for students who are at greatest risk for developing reading problems or becoming alliterate.

The purpose of this study was to examine the scaling up of the SEM-R in 11 elementary and middle schools across the country in which local teachers or reading coaches provided support for colleagues implementing this differentiated reading enrichment approach. Professional development about the SEM-R was organized and implemented the summer before the program began. In each school, a team of administrators and teachers attended a SEM-R workshop and received special guidance for coaching. These individuals subsequently conducted introductory professional development for other participating teachers in their own schools. Accordingly, this study examined the implementation of this enriched approach to reading supported by local school-level coaches as opposed to a SEM-R research team, as has occurred in previous research (Reis & Boeve, 2009; Reis et al., 2008; Reis & Housand, 2009; Reis et al., 2007; Reis et al., 2010). This current qualitative study

also scaled up previous research by (a) increasing the number and the geographic and demographic diversity of schools, (b) decreasing direct involvement from the research team in supporting classroom teachers' implementation of the intervention, and (c) using local coaches to provide professional development and coaching for implementation.

Qualitative case study analysis was used in this study, with data collection that included finding, gathering, or generating materials that were subsequently analyzed (Strauss, 1987; Yin, 2002). Data were compiled into in-depth case studies for each school and in each individual case study, findings were summarized from researcher observations of the SEM-R and comparison classrooms; interviews with SEM-R teachers, administrators, and school staff; and review of teacher and student logs, questionnaires, and other forms of communication.

Review of research

The research reviewed in this study focused on differentiation in reading, research conducted on the SEM-R, and research on student engagement and self-regulation in reading. A major theoretical influence is differentiated instruction using assessment data to support modification of curriculum and instruction to respond to differences in students' readiness, interests, and learning profiles (Renzulli, 1988; Tomlinson, 2001).

Differentiated instruction

Differentiated instruction is based on the premise that learning is most effective when teachers are able to assess students' current levels of academic progress and learning styles and preferences and subsequently use this information to help students progress to more advanced levels of learning. Differentiation attempts to address the variations among learners in the classroom through multiple approaches that enrich, modify, and adapt instruction and curriculum to respond to students' individual needs (Renzulli, 1977, 1988; Tomlinson, 2001). Tomlinson (1999) emphasized that in differentiating the curriculum, teachers are not dispensers of knowledge, but organizers of learning opportunities. Differentiation of instruction suggests that students can be provided with materials and work at varied levels of difficulty through scaffolding, enrichment, acceleration, diverse kinds of grouping, and different time schedules (Tomlinson, 2001).

The most common strategy suggested in the literature to meet the needs of advanced readers is to accelerate their reading by providing them with material that is above their current grade level (Reis et al., 2004). Differentiated instruction in the SEM-R includes the ability of teachers to make adjustments to reading tasks and enabling individual students to read at levels that are targeted to their specific interests and levels of readiness. Tomlinson and Allan (2000) summarized some of the challenges teachers face when they try to differentiate, including concerns about planning and management, as well as issues of finding the time to prepare for state assessments, limited preparation time overall, professional development needs, and materials to challenge all students (Hertberg-Davis & Brighton, 2006; Reis et al., 1993; VanTassel-Baska & Stambaugh, 2005).

Recent research suggests that many teachers do not differentiate instruction on a regular basis. For example, in one recent study, little purposeful or meaningful differentiated reading instruction was found in reading instruction for elementary or middle school talented readers who read several grade levels ahead of their chronological peers (Reis et al., 2004). Researchers also found that above-grade level books were seldom available for these students in their elementary or middle school classrooms, and students were not encouraged to select more challenging books. Accordingly, these talented students made little continuous progress over the course of the year. Other research with middle school educators found that little differentiation occurs and that teachers and administrators believe advanced students are under-challenged in many middle school classrooms in the United States (Moon, Tomlinson, & Callahan, 1995). The current study is a qualitative investigation about the nature and type of differentiated reading strategies included in the SEM-R and whether and how they were implemented by a wide variety of teachers with a broad range of readers.

Previous research on the SEM-R

The SEM-R is an enrichment-based reading program that is based on a widely used enrichment approach to learning called the Schoolwide Enrichment Model (Renzulli & Reis, 1997). In the context of the SEM-R, students read from self-selected, high-interest books that are slightly to moderately above their current reading levels, and teachers provide individualized, differentiated instruction. The SEM-R has been implemented in several previous research studies (Reis & Boeve, 2009; Reis et al., 2008; Reis & Housand, 2009; Reis et al., 2007; Reis et al., 2010). In one study, a randomized design was used to investigate the use of the SEM-R for 12 weeks with third- through sixth-grade students from two low-socioeconomic, urban elementary schools. Teachers and students were randomly assigned to treatment or comparison classes. During the study, treatment and comparison group students participated in a direct instruction reading program in the morning, but in the afternoon, the comparison group received one hour of remedial reading instruction and test preparation while the treatment group participated in one hour of the SEM-R. Significant differences were found, favoring the SEM-R treatment group, in students' attitudes toward reading, reading comprehension, and reading fluency (Reis et al., 2007).

Another randomized design study investigated the use of the SEM-R for 16 weeks with third through sixth-grade students in one suburban school and one urban elementary school (Reis et al., 2008). Again, teachers and students were randomly assigned to teach and participate in either treatment or comparison groups. The treatment and comparison group students participated in the regular basal reading program for one hour each morning. The comparison 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. 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 (Reis et al., 2008).

The SEM-R has also been implemented in urban schools with high populations of bilingual students (Reis & Housand, 2009) with significant differences found favoring the SEM-R group in oral reading fluency. These results suggest that an enriched reading program that challenges and engages students produced higher oral reading fluency in both English and bilingual students when used in conjunction with a standard basal program as compared to the use of the standard basal reading program alone. In other research, an after-school SEM-R program was implemented to investigate whether increases in fluency and self-regulation in reading could be accomplished in less time (Reis & Boeve, 2009). Resulting benefits included significantly higher reading fluency for SEM-R participants in a program implemented for 20-25 hours after school for 6 weeks.

In summary, previous research (Reis & Boeve, 2009; Reis et al, 2008; Reis & Housand, 2009; Reis et al., 2007; Reis et al., 2010) suggests that students of various achievement levels have benefitted from the SEM-R approach. Across a wide range of schools and classrooms, evidence has demonstrated that students who participate in the SEM-R consistently achieve at least at the same levels and in some cases higher levels when compared to those who participate in regular reading instruction (Reis & Boeve, 2009; Reis et al, 2008; Reis & Housand, 2009; Reis et al., 2007; Reis et al., in press).

Engagement and enjoyment of reading

Increased levels of student engagement results in higher achievement in reading (Guthrie & Wigfield, 2000; Teale & Gambrell, 2007), and research about reading engagement has focused on the importance of increasing student motivation for reading (Gambrell, Palmer, Codling, & Mazzoni, 1996) and the role of student interest in higher reading achievement (Guthrie, 2004; Guthrie, Hoa, Wigfield, Tonks, & Perencevich, 2006; Meece & Miller, 1999).

Teale and Gambrell (2007) have found that engaged readers and writers use literacy skills to read for pleasure, engage in social interaction, and satisfy their own intellectual curiosity. Goodman (1986) also underscored the importance of engagement, finding that students read because it is

enjoyable, interesting, or useful. Compton-Lilly (2007) discussed a connection between avid reading and engagement in reading, as did Guthrie and Wigfield, whose research has documented the relationship between engagement and motivation, as students who read more generally have higher motivation (Guthrie, 2004; Guthrie et al., 2006; Guthrie et al., 2007). Recommended instructional practices to increase reading motivation and comprehension from Guthrie and Wigfield's research are embedded in the SEM-R, including specific attention to supporting student autonomy, exposure to and having students read interesting texts, facilitating social interactions related to reading, and forging strong relations between teachers and students (Guthrie et al., 2006; Wigfield & Guthrie, 2007).

Self-Regulated Learning

Self-regulation, a multi-faceted construct that numerous theorists have conceptualized and operationally defined (Boekaerts, 1997; Schunk & Zimmerman, 2007; Zimmerman, 1989, 1990), is a key focus in the SEM-R. Most theorists have argued that students who successfully self-regulate their learning engage in knowledge acquisition and learn strategies to adapt their behavior, personal processes, and environment to support their learning and goal attainment. Researchers have found students' effectiveness in the process of self-regulated learning varies based on academic context, personal effort, and performance outcomes, and that academic achievement is increased by the use of self-regulation strategies such as organizing, goal-setting, planning, self-evaluating, information seeking, record keeping, self-reflecting, self-monitoring, and reviewing (Boekaerts & Corno, 2005; Winne & Perry, 2000; Zimmerman & Martinez-Pons, 1990).

Schunk and Rice (1987, 1991) analyzed the effects of explicit instruction and modeling of self-regulation strategies on reading comprehension, finding that orienting students toward a specific goal and using verbal feedback resulted in greater increases in reading comprehension and self-efficacy. They also found that combining specific strategy instruction with modeling of the strategy to answer questions increased comprehension more than simply modeling the strategy or providing instruction on the strategy alone (Schunk & Rice, 1987). The modeling of and explicit instruction on effective strategy use are incorporated into all phases of the SEM-R.

Multiple studies have addressed how classroom environments can support students' development and use of self-regulated learning strategies (Perry, 1998; Perry, Hutchinson, & Thauberger, 2007; Perry, Phillips, & Dowler, 2004; Turner, 1995). The use of differentiation also supports self-regulated learning by providing the opportunity for students to seek help from teachers (Perry, 1998; Perry et al., 2004) and participate in evaluating their own work (Perry, 1998; Perry et al., 2007; Perry et al., 2004).

Methods

Qualitative comparative case study analysis was used in this study with varied data collection methods including finding, gathering, or generating materials that were subsequently analyzed (Strauss & Corbin, 1999; Yin, 2002). Qualitative case study research design (Creswell, 2008; Miles & Huberman, 1994) involves in-depth, field-based studies of particular phenomena, such as the SEM-R (Gall, Borg, & Gall, 2002). Creswell described three types of case studies—intrinsic case, instrumental case, and collective case study, and collective or comparative case study research includes multiple cases to describe and provide insight into an intervention, such as the SEM-R. This study used collective, comparative school case studies (Creswell, 2008; Miles & Huberman, 1994) that involved in-depth, extensive data collection in field-based studies of the SEM-R.

Institutional Review Board permission was sought and granted and the SEM-R team communicated with school-based coaches during the school year to answer questions and encourage coaches' completion of classroom observations. Members of the research team spent 2-3 days at each school, conducting observations in SEM-R and comparison classrooms as well as in-depth interviews with principals, teachers, and literacy coaches to address the research questions that follow. In this study, researchers extended previous research on the SEM-R to focus on how implementation works with coaching and professional development for teachers handled locally by school personnel.

Research questions

The following research questions guided this study:

1. What elements characterize SEM-R implementation and treatment fidelity in classrooms for which support is provided through local professional development and coaching?
2. What are teachers' attitudes toward the implementation of SEM-R? What has worked best and what has been most challenging?
3. How have teachers and students changed their reading practices while using SEM-R?

SEM-R intervention

The SEM-R intervention includes three phases. Phase lengths were fluid and varied over time during the course of the total intervention. During Phase 1, the "exposure" phase, teachers presented short read-alouds from high-quality, engaging literature to introduce students to a wide variety of titles, genres, authors, and topics. Along with these read-alouds, teachers provided instruction through modeling and discussion, demonstrated reading strategies and self-regulation skills, and posed higher-order questions to guide discussion. Early in the study period, these Phase 1 activities lasted about 20 minutes per day; Phase 1 decreased in length relative to the increase in time spent in Phase 2 over the course of the intervention.

Phase 2 of the SEM-R model emphasizes the development of students' ability to engage in supported independent reading (SIR) of self-selected, appropriately challenging books, with differentiated instructional support provided through conferences with the teacher or another adult. During Phase 2, students selected books that were at a challenging instructional level of at least 1 to 1.5 grade levels above their current reading levels. Teachers monitored each book and assisted students in the selection of books that were of interest and at appropriately challenging instructional levels. At the beginning of the intervention, students read for 5-15 minutes a day during Phase 2; over time they extended their reading to 25 minutes and finally to 35-45 minutes each day. During this in-class reading time, students participated in individualized reading conferences with adults. On average, each student participated in five-minute conferences 1 or 2 times per week. In student conferences and student logs, teachers consistently monitored and documented the instructional challenge match of each book read in Phase 2. During conferences, classroom teachers and instructional aides assessed reading fluency and comprehension and provided individualized instruction in strategy use, including predicting, using inferences, and making connections. For more advanced readers, conferences focused less on specific reading strategies and more on higher-order questions and critical concepts.

During Phase 3, teachers provided options for varied extension and exploration activities for students, through which students could continue to pursue topics of interest through individual or group projects, work on creative thinking tasks, extend their reading through author studies or literature circles, explore technology resources, or engage in a variety of other learning opportunities. The intent of these experiences was to provide time for students to pursue areas of personal interest through the use of interest development centers and the Internet, and to give them opportunities to learn to read critically and to locate other reading materials, especially high-quality, challenging literature related to their current reading and related interests. Over the course of implementation, students transitioned from teacher-organized learning activities related to reading to more student-directed activities, including pursuit of independent study options. The length of Phase 3 varied throughout the intervention, with more or less time devoted to Phase 3 on particular days based on progress in independent reading and need for time to be devoted to independent projects and activities.

Recruitment

Schools recruited for the study in one of two ways. First, educators who had contacted the SEM-R web site asking for information were sent a notice about the study, as were administrators of schools from the network of schools connected with The National Research Center on the Gifted and Talented collaborative districts. Email requests were distributed to both of these lists. A summary of

expectations was noted in the recruitment letter, and interested respondents were asked to contact project staff. Requirements for the study included the willingness to have some teachers serve as treatment group teachers and others as comparison group teachers, as well as a series of responsibilities for administrators, a school coordinator for the SEM-R, SEM-R teachers, and comparison teachers. Administrators' responsibilities included selecting and supporting one individual for the position of SEM-R Coordinator and then enabling that coordinator to spend at least 2 hours of time each month to meet with SEM-R treatment teachers. Administrators also had to agree (a) to provide the SEM-R Coordinator with time (up to 4 hours each week) to devote toward the administration and implementation of the SEM-R project; (b) to allow treatment teachers to attend up to 2 full days of professional development sessions over the course of the academic year; and (c) to support teachers in the implementation of the study overall, including overseeing teacher roles as treatment or comparison and facilitating the implementation of the SEM-R daily during reading classes in the treatment group.

The SEM-R school coordinators were responsible for organizing and facilitating meetings for the treatment teachers, implementing the SEM-R project, providing coaching support to treatment teachers, and functioning as liaison between the school and our SEM-R research team. This liaison role included responding to research team communications in a timely manner and assisting teachers and the SEM-R research team in the administration of pre- and post-assessments as needed. The SEM-R treatment teachers were expected to implement all three phases of the SEM-R in half of their language arts/reading block each day, for a minimum of 3 hours per week, and they were also expected to attend regularly scheduled meetings regarding the implementation of the SEM-R project with the SEM-R coordinator. They were provided with a log to track their SEM-R implementation activities, and they understood that they would be observed periodically by the coordinator and members of the SEM-R research team. Comparison group teachers agreed to support and assist with administration of pre- and post-assessments and to be observed periodically.

Sample

The 11 participating schools were located in varied regions across the country and included 6 elementary and 5 middle schools (see Table 1). The SEM-R was implemented in the treatment group during daily reading classes in 10 of the schools; in 1 school, the SEM-R was implemented for 3 hours each week as an after school literacy enrichment block, supervised by a reading teacher. Each participating school sent a team to a summer professional development workshop on the SEM-R; this workshop included both a detailed overview of the SEM-R framework, including modeling and practice opportunities, and also smaller group meetings about coaching and facilitating during SEM-R implementation. After the summer workshop, each team returned to the school to provide introductory workshops on the SEM-R to the other teachers who would participate in the treatment group. The teams were provided with the same professional development materials that had been used during the summer workshop to use in their school-based sessions.

Ten of the 11 schools implementing this study during the school had a two-hour daily block devoted to reading and language arts instruction. Those teachers in the SEM-R treatment group taught one hour of regular language arts instruction focusing on writing, vocabulary, and other spelling and language activities, and taught SEM-R in the other hour of the block. Treatment teachers received SEM-R classroom libraries consisting of high interest fiction and non-fiction books across several reading levels to support SEM-R implementation. Teachers also received sets of bookmarks that listed higher-order questions; each bookmark listed 3-5 questions addressing a particular literary element, theme, genre, or other area of study.

Teachers used the bookmarks in both Phase 1 discussions and Phase 2 conferences to promote higher-order thinking. SEM-R activities were documented in teacher and student logs, as teachers noted the activities conducted within each phase and students recorded the books they were reading and how long they spent reading each day. Teachers assigned to the comparison group continued providing locally determined language arts and reading instruction, which varied somewhat within and across schools.

Table 1: Demographic data.

School Name	Location	Total Students	Amer. Ind./ Alaskan	Asian	Black	Hispanic	White	Free Lunch Eligible	Reduced-Price Lunch Eligible	SEM-R Treatment Teachers	Comparison Teachers
Highland Peaks Middle	Suburban	664	4	6	3	21	630	36	23	5	5
Jane Addams Middle	Urban	1069	8	23	157	828	53	891	84	5	5
Kendrick	Rural	455	7	11	17	13	407	121	44	6	5
Main Street	Urban	635	6	52	44	326	207	164	66	7	7
Martin Luther King Magnet	Urban	535	2	28	232	35	200	160	44	5	4
McMann Middle	Suburban	750	36	24	7	148	535	74	37	6	5
Monument Magnet Middle	Urban	187	1	75	7	46	58	68	33	1	1
North Pacific	Suburban	583	7	47	20	264	245	185	63	8	7
Poe Classical	Urban	177	1	0	167	2	3	51	28	5	5
Rainy Valley	Suburban	708	4	64	33	224	383	118	45	6	6
Rosa Middle	Suburban	1413	9	10 7	56	778	463	501	193	6	6

During the study, school or district-based literacy coaches worked cooperatively with research team members to collect data such as weekly lesson plans and to coach teachers about implementation of the SEM-R. Research team members were available by email and phone during the intervention to provide support and to monitor both intervention and comparison classrooms. Research team members traveled to the schools to conduct interviews and observations of treatment and comparison classes for treatment fidelity practices and to investigate comparison group practices.

Data collection

Research team site visits included classroom observations with review of teacher and student logs, as well as interviews with administrators, site coordinators, and teachers. Field notes from the interviews, observation notes, and treatment fidelity checklists from classroom observations were used to triangulate sources. Across the 11 schools, researchers interviewed all principals and all SEM-R site coordinators/coaches, as well as 54 of the 60 SEM-R teachers. Additionally, observations were conducted in all 60 SEM-R classrooms and in 24 comparison classrooms across all schools. During treatment classroom observations, researchers took detailed field notes on the specific features of each phase of the SEM-R observed, including notes of specific books, quotes from teachers and students, and descriptions of the classroom setup. Observations were also guided by the SEM-R Observation Scale (Little, Fogarty, & Reis, 2005), which includes a 9-item fidelity form on which observers indicate whether or not particular SEM-R elements were present during the observation. Comparison classroom observations involved careful field notes of the instructional activities observed, again with notes of specific texts used, teacher and student comments and behaviors, and classroom features. Furthermore, site coordinators' observation notes and fidelity checklists, collected throughout the year, were used as data sources in developing the case studies for each site.

The data collection procedures enabled researchers to compile thick descriptive case studies for each school that presented detail, context, and patterns of reading instruction across the SEM-R treatment and comparison classrooms for each site. Observations included a systematic description of events and student behaviors during SEM-R sessions accounting for at least 10-15 hours of observation at each school by the treatment team and extensive additional hours throughout the year by the SEM-R coaches. Site visits also included in-depth interviews with key school personnel. This thoroughness in data collection was necessary to compare outcomes across cases, and develop rich descriptions and powerful explanations (Creswell, 2008; Miles & Huberman, 1994).

Comparison classrooms observations

Reading instruction across comparison classrooms followed a general pattern, consisting of whole group and smaller group instruction most often using basal reading programs in the elementary school and class sets of novels in the middle school classrooms. From the observations, a representative summary of reading instruction was compiled across the control classrooms, documenting a similar pattern of instruction across most classrooms. At the beginning of the reading period in most classrooms, time was usually spent (varying from 15-25 minutes) on whole group instruction, followed by practice or test-preparation activities. Frequently observed activities included repeated reading passages, short read-alouds followed by lengthy whole-group lessons on comprehension strategies, specific test preparation skill lessons, and discussions featuring primarily comprehension questions related to texts read by the group. In some classes, a short period of silent reading was also given, with some student choice of text without observed monitoring of challenge level. Teachers in comparison classrooms also tended to spend more minutes managing transitions between activities, as compared to time spent in SEM-R classrooms.

The majority (80%) of comparison classroom teachers were not observed providing opportunities for reading of student-selected books during reading instructional time and rarely or never encouraged students to read challenging, high-interest literature. In one comparison classroom, for example, the opposite occurred, as students were observed being admonished for selecting a book above their Accelerated Reader (AR) levels. Many classroom libraries in comparison classrooms were small, lacked organization, and did not display books in an inviting way. Self-regulation tools and strategies, including those used in SEM-R such as documenting time read, identifying reading strategies used, and monitoring requests to teachers for help with reading, were not observed being introduced to or used by the students.

Field notes and observations documented that teachers in comparison classrooms spent twice as much time on classroom behavior and management issues when compared to teachers in SEM-R classrooms. The use of extrinsic motivation was more frequently noted in field notes of comparison classrooms, with teachers offering rewards such as parties, candy, and free time without assigned work to promote on-task student behavior. Student engagement in reading or work assignments was reported more inconsistently in the comparison classrooms, where teachers were able to engage some students during small group instruction, but other students were largely off-task during that time. The use of differentiation of instruction or content was not noted in field notes in the comparison classrooms. Individual differences in reading were not observed being addressed in comparison classrooms for either talented or low achieving readers, with the exception of occasional groups of students being grouped together to use similar materials or basal readers.

Data analysis

Data were coded manually using Strauss and Corbin's (1999) data coding paradigm and verified using meta-matrices and master charts that organized data from each of the schools into a standard format to enable patterns and themes to emerge (Miles & Huberman, 1994). As suggested by Strauss and Corbin (1999), data were organized into open, axial, 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 first stage in the coding process, and in this study, researchers examined, compared, conceptualized, and categorized all data from multiple

sources including observations and field notes, interviews, and other document reviews. In open coding, codes in the data were identified and patterns and regularities were transformed into categories. Open coding occurred after initial data were collected and continued during data collection, resulting in the identification of multiple codes. Examples of open coding included teachers' observations of their students' enjoyment of and engagement in reading, with comments such as "my students love reading now" and "my students do not want to stop reading."

During the next phase of axial coding, open codes were combined into broader categories. As relationships were identified among codes, a determination was made about the relationship of an open code to an axial code. For example, over 70 comments about students' enjoyment of reading from interview transcripts and field notes resulted in an axial code of the same name. The coding paradigm examined the elements of each category in terms of conditions, context, action/interaction strategies, and consequences (Strauss & Corbin, 1999). Axial coding enabled the researchers to specify relationships among the many categories that emerge in open coding. In the last stage, selective coding was used to identify a core category across the case studies (Gall et al., 2002).

Results

The research questions in this study addressed (a) whether classroom teachers across sites implemented SEM-R with strong treatment fidelity, (b) classroom teachers' attitudes about and experiences with the implementation of the SEM-R, and (c) the ways that teachers and students changed their reading practices while using the SEM-R. Overall, based on a review of all the data sources from across all the sites, 90% of the teachers implemented the SEM-R with strong fidelity. Findings also indicated that teachers had positive attitudes about the implementation of SEM-R while acknowledging challenges and concerns related to this new way of teaching reading. Findings also demonstrated that teachers changed the way they taught reading, and that students changed the way they read while using SEM-R.

Major findings

Across all 11 schools implementing the SEM-R in this study, including elementary and middle schools, three key student-related findings and three key teacher-related findings emerged. The first theme across all sites focused on the perceived benefits of SEM-R for both students and teachers, including perceptions of how the SEM-R affected students' reading habits and practices, the ways in which teachers' reading instructional practices changed after the SEM-R was implemented, and the professional benefits and challenges experienced by teachers during their successful implementation of the SEM-R. These themes and the additional themes for students and for teachers are discussed below.

Student themes

The core student theme that emerged in all schools was increased student enjoyment of reading. This theme was consistently observed and discussed in interviews and site visit observations. The second most dominant theme that emerged related to the ways in which the SEM-R challenged talented readers. Across each site, teachers consistently discussed their belief that, in some cases for the first time in years, they were successfully challenging their talented, advanced readers, even though many of them struggled to maintain these students' focus on reading appropriately challenging books. The third most frequently mentioned theme related to increased self-regulation in students as observed by teachers, coaches, and principals.

Increased enjoyment and engagement in reading

During observations and interviews of the SEM-R in all elementary and middle schools, the primary theme that emerged focused on increased student engagement and enjoyment in reading. Over 95% of the teachers reported positive changes in student attitudes toward reading and attributed these differences to their implementation of the SEM-R. One of the first changes that teachers reported was the creation of a classroom reading climate of increased enjoyment and engagement in

reading. Each teacher and principal interviewed commented on students' enjoyment of reading, and observations across schools demonstrated high levels of student engagement in reading. Teachers consistently discussed their perceptions that the use of the SEM-R contributed to a more enjoyable reading climate and cited, during interviews, multiple success stories about student enjoyment in reading. A representative student statement from Highland Peaks Middle School summarized what the majority of teachers reported about student perceptions across schools: "For the first time, I actually read for fun instead of for an assignment because I get to choose my own book."

During observations across schools, many teachers asked students to explain their perceptions of this new reading program, and most comments focused on their enjoyment of reading. For example, one of Mrs. Mallory's students at North Pacific explained, "My favorite part of school is SEM-R. My least favorite part is when we have to stop. It is not fun to stop." Another representative comment from multiple students was "I love reading in SEM-R because I can choose my book." Teachers also had positive feelings about their use of SEM-R; for example, the same teacher, Mrs. Mallory commented, "I enjoy meeting with my students and discussing their books. It's a great opportunity to dig deeper."

During interviews and in teacher logs, teachers continuously reported increasing levels of student enjoyment of reading during SEM-R time. At each school, teachers could and did provide multiple examples of how SEM-R had improved reading comprehension and fluency of individual students, indicating that the greatest improvement had been that their students found reading enjoyable. At Mandela School, the same sentiment was echoed by the principal, who explained, "...to see kids excited about reading is what makes this special to me." During observations, reviews of student logs, and informal conversations, students demonstrated pride in the number of books they were reading.

At Jane Addams School, a representative student comment was made about the selection offered by the expanded classroom SEM-R library: "I can't remember when I've been so excited about getting new books!" A teacher described a struggling reader who had become much more engaged in reading, explaining, "He'll buy a book and bring it in to show me. He gets really proud when he has read a book. He's really reading a lot more." Teachers consistently discussed their perceptions of how enjoyment influenced students' reading habits and interests in reading in their SEM-R classes: "My third graders have just blossomed. They read without

watching the clock" (Teacher log, North Pacific). Mrs. Conlon from Main Street discussed how her students demonstrated a greater interest in books in general, as she explained, "They love it—that's all they want to do is read. In between words on a spelling test all they want to do is read."

Mrs. Everett at Main Street shared how "The kids groan when I tell them to put their books away," and further explained that her students' fluency levels had increased, and that she appreciated the opportunity to conduct one-on-one in conferences with her students as it had enabled her to learn so much about her students' progress.

Increased levels of enjoyment were also attributed to the Phase 1 Book Hooks that teachers conducted. Observations from all schools summarized the ways in which enjoyment of reading was enhanced through the regular use of Book Hooks. For example, Mrs. Jacobs conducted a Book Hook on *How to Eat Fried Worms* during an observation of SEM-R in her classroom. She told the students that she really enjoyed the humor of the book, including the title. She asked if any of the students had seen the movie based on the book, and then began a short conversation about the differences between the movie and book versions of a story, based on a previous discussion about *The Tale of Despereaux*. She engaged students in a short discussion about genre, asking them whether the book was a fantasy, then asking them to compare realistic fiction and biography (Main Street School).

Teachers reported the usefulness of Book Hooks as an instructional strategy to engage students in reading, but explained that they also served other purposes. For example, teachers reported using Book Hooks to increase students' interests in reading, as well as to increase students' overall motivation to read, and to introduce reading strategies embedded in the content of their hooks. Mr. Isobe, a third grade

teacher at Rainy Valley, explained that he “thinks the Book Hooks have motivated kids to choose books to read for enjoyment.”

This finding about excitement due to Book Hooks emerged across all elementary schools and was mentioned as a positive part of the program by 80% of the SEM-R teachers. Most middle school teachers had similar perceptions of the Book Hooks, but three middle school teachers reported some challenges and concerns about using Book Hooks. For example, Dr. Lowery, a teacher at McMann Middle School, conveyed her decision not to use Book Hooks by explaining, “I tried that a couple of times. These kids are beyond that.” Despite the absence of Book Hooks in Dr. Lowery’s class, Book Hooks were still conducted by the librarian and by some students themselves in this classroom. The librarian at McMann Middle School enjoyed doing Book Hooks with students, and reported positive results: “I do a book talk and there is a stampede to get those books.”

Overall, 95% of the teachers perceived the use of SEM-R as having a positive impact on reading in their classroom and student logs verified this finding, with comments such as “I LOVE to read now!” (student in Mrs. Laverty’s sixth grade SEM-R class, McMann MS). A student at Rosa School explained to researchers, “I used to like to read. Now I love to read.” “And all of them will be readers, and will enjoy reading; last year I couldn’t say that about my

students” (Mrs. Randall, Resource teacher, Main Street).

At the Highland Peaks Middle School, the principal explained his belief that students in SEM-R classes enjoyed reading because they believed that they were in control of their learning. He explained that it was the first time that students had a sense of autonomy. He had read the SEM-R logs of many students and pointed to the words of a student writing in a log in this school: “For the first time I actually read for fun, instead of for an assignment, because I choose my own books.”

Another teacher explained, “The firm establishment of a culture of reading is the biggest impact of SEM-R. Not only are the kids reading during Phase 2 time, they are sharing and talking about books and forming their own informal book groups” (Mr. Stephens, Rosa School).

In summary, the most prevalent finding in this study related to students’ engagement and enjoyment of reading. Most treatment teachers perceived a notable difference in their students’ reading involvement using the SEM-R, as compared to previous reading programs. When asked to what they attributed this increased enjoyment, most teachers responded that this engagement and enjoyment emerged from students’ opportunity to choose what they read, as well as the opportunities to discuss books that they were reading with their teachers and one another.

Benefits for talented readers

When asked an open-ended question about the benefits regarding the use of SEM-R, a second pervasive category that emerged across the 11 schools related to the perceived benefits of the SEM-R for talented readers. Over 90% of the teachers and administrators discussed the positive outcomes of the SEM-R for talented readers. At Discovery Magnet, for example, all of the teachers interviewed commented that the SEM-R had positive effects on their talented readers in particular. One teacher indicated that her highest readers seemed more engaged than they had in previous years. Another reported, “many students, especially my highest readers, are benefitting from reading books at their level instead of the basal reader.” In fact, some of the teachers even commented on the challenge of finding enough books to meet these advanced needs. As Ms. Leachman at Rosa School explained, “the challenge has been to find enough books to support struggling readers and allow talented readers to continue to grow.”

At North Pacific, teachers discussed how talented readers made measurable progress on reading assessments given during the year. Teachers at MacQueen also explained that talented readers were benefitting from SEM-R, and that their greatest difficulty was transitioning students from books that were too easy for them. At Rosa School, talented readers became a priority for teachers, as many read books at a faster rate than the teachers could initially manage.

The principal at Mandela Magnet explained that he was grateful for the SEM-R because he had not had to answer phone calls or emails from parents of gifted students, as he had in previous years, about the lack of challenge for talented students. He explained that the majority of negative parental feedback he had previously received related to the lack of challenge in both math and reading, but that he had not had a complaint from any parent of a talented reader in a SEM-R classroom this year, explaining that he considered this a good endorsement of SEM-R for talented readers. At Rainy Valley, the teachers reported the delight they felt at the continuous growth and improvement for their most talented readers. The principal also reiterated that talented students' growth in reading had exceeded teachers' expectations. A teacher at Main Street, Ms. Bartlett, summarized what many teachers indicated about reading instruction for this population: "Our gifted kids are not getting what they need with the basal, and I think we're losing a lot of bright kids that way."

Several teachers explained that the SEM-R provided opportunities for talented readers that previous programs had not, such as opportunities to read at a higher and more appropriate level of challenge. All of the teachers who mentioned the benefits of the SEM-R for advanced readers were able to respond to questions about the ways in which they engaged and challenged higher-level readers, such as using more advanced Book Hooks and incorporating advanced, differentiated reading strategies as well as a focus on higher level questioning skills during Phase 2 conferences.

Approximately 90% of teachers also explained that while simultaneously challenging talented readers, their use of the SEM-R also helped students at the lower levels of ability in reading, commenting on how the SEM-R enabled these students to have access to and success in reading that they had not previously experienced. Several teachers also discussed how some students "slipped under the radar" in a whole class instructional setting, while their needs and successes were more noticeable in the individualized SEM-R structure.

Increased Self-Regulation and decreased behavioral problems

When asked an open-ended question about the benefits of SEM-R, over 90% of teachers discussed their perceptions that students increased their use of self-regulation strategies and displayed fewer behavioral issues during their use of the SEM-R, as compared to previous reading programs. Thus, this represented another pervasive category across sites. Teachers attributed the decrease in behavioral problems to students' increased interest, engagement, and self-regulation in reading. Patterns of student behavior that emerged across schools contributed to more focused reading during the SEM-R instructional block. These teacher-reported and observed behaviors included routines that helped students gain and use self-regulation strategies and decrease off-task behaviors. For example, at the beginning of each SEM-R time block, many teachers provided students with a specific number of minutes to retrieve their books and reading logs from a specified location if students did not keep them in their desks, and the materials were returned to the box or the file cabinet at the end of every class. The structure and expectations for the SEM-R were clearly established in most of the classrooms observed for this study. After students gathered their SEM-R materials, they usually listened to a Book Hook and then began reading with little initial direction for Phase Two. In classes in which some behavioral issues emerged, audio books were made available to support readers who struggled or had poor self-regulatory behaviors. These students were regularly observed reading individually and occasionally, as suggested in the SEM-R, using the aid of audio books and headphones. Observations also suggested that students interacted with each other to increase self-regulation, asking students near them to be quiet, or to focus more on reading. These comments enabled the class to continue reading, and most teachers concluded Phase 2 at the time when several students in the class lost their focus in reading.

Teachers regularly discussed students' increased development and use of self-regulation strategies both in interviews and in their logs. Teachers across sites also explained how the SEM-R emphasis on self-regulation helped students: "I have one kid this year who's more of a challenge than some, but I am able to get him to buckle down—he might just slide right through under the radar with

the anthology” (Mrs. Jacobs, third grade SEM-R teacher, Main Street). The majority, over 90%, of teachers also described a positive change in the behaviors of their students before, during, and after SEM-R: “Some of them didn’t know how to sit and read. At first they couldn’t sit and read for 15 minutes but now they all read for prolonged periods of time” (Ms. Bartlett, Main Street).

Special education teachers who were using the SEM-R or working with special needs students in SEM-R classrooms also commented about the behavioral benefits for their students. Mrs. Randall at Main Street discussed her experience with students who struggled with self-regulation, noting the skills that her students had acquired during the SEM-R, explaining, “A lot of them have attention problems—but you’ll see them monitor themselves, maybe moving to a different place or turning a different way to avoid distractions—they are really into their books.”

Teacher themes

The most dominant teacher theme, emerging with 98% of teachers when asked about instructional changes they made using SEM-R, was about their use of differentiated instruction. Teachers highlighted the specific ways they used differentiation in SEM-R to challenge talented and struggling readers, the ways in which they had increased their awareness of the unique needs of their students as readers, and how differentiated instruction helped them to help their students acquire different levels of reading skills and strategies. One principal’s comment about the SEM-R summarizes what many of the teachers said about the use of differentiation: “I think the program is terrific because not only does it encourage students to read by providing Book Hooks and time, it also sets up a one-on-one coaching situation between student and teacher. This, in my opinion, is where the real learning takes place” (Mr. Taylor-principal, Highland Peaks).

The second most frequently noted theme related to professional autonomy, as 80% of teachers who responded to an open-ended question related to their perceptions about professional benefits or challenges of their use of SEM-R discussed their perception of choice and professionalism. Teachers discussed their enjoyment of the differentiated choices within Book Hooks and conferences and the ability to decide on the types of questions they could ask and instruction on which they could focus with their students. For example, Ms. Binney explained she had choices about timing and types of instruction when using the SEM-R: “Since the kids are more focused in the morning, I do our SIR during the morning block and I do the Book Hooks at the end of the day” (North Pacific). Teachers also mentioned that in the years since No Child Left Behind, they perceived that they had limited choices about how and what to teach, and they found SEM-R refreshing in that it gave them opportunities to use their professional judgment.

The last teacher theme related to concerns and questions generated about using the SEM-R, and the ways in which teachers’ concerns related to their professional growth and development. The majority of teachers, 55%, explained that they wanted to improve their implementation of the SEM-R. For example, 25% of teachers said that they wanted to read more of the student SEM-R books before their next implementation, and 15% planned additional ways to integrate more of their state reading standards into the Phase 2 conferences and the Book Hooks they conduct. Each of these teacher-related themes is discussed in depth below.

Use of Differentiated Instruction

Across all schools, the most pervasive teacher theme related to how teachers used the SEM-R to differentiate reading instruction to challenge all readers. Teachers are asked to differentiate instruction during all three phases of SEM-R; however, observations found the most consistent evidence of differentiation occurred during Phase Two conferences. The majority, over 90%, of teachers across schools discussed their increased use of differentiated reading instruction and strategy use as a part of their Phase 2 implementation of the SEM-R.

Researchers’ observations of and interviews about differentiation in Phase 2 conferences were documented across all schools as teachers were able to integrate differentiated instruction across all

phases of the SEM-R. They used differentiation in their conferences by initiating different types of conversations and asking questions that varied in focus, but generally included vocabulary development, fluency strategies, comprehension, reading strategy use, and/or literary devices such as plot, theme, and setting. Researchers noted teachers' efficacy and ability to conduct these conferences, often without bookmarks or other prompts, suggesting that they had increased their levels of skill and comfort with differentiated instruction as the year progressed.

One component of differentiated instruction discussed by most teachers involved their perceptions about how well they knew their students' skills and reading patterns after using the SEM-R, due to the frequency of their Phase 2 conferences. Over 80% of teachers interviewed explained how this knowledge increased their ability to differentiate instruction. Principals noted this as well; for example, Principal Burke at Kendrick explained, "As the teachers became comfortable with what they were doing, the comments came in that they were getting to know their students as readers much more completely." The following representative teacher interviews and log entry excerpts characterize this increased knowledge of student's skills and potential:

"I know my students better than ever before and what they are reading far better than I did prior to my use of SEM-R." (Teacher log, Rainy Valley)

"The conferences allow me to gain a wealth of knowledge about the students and their reading abilities." (Interview, Mrs. Mallory, North Pacific)

"I have also really enjoyed getting to know the level they are capable of—you can tell some things from how they do with the anthology, but not everything." (Interview, Mrs. Jacobs, Main Street)

Over 80% of the teachers also explained that their assessments of students' individual reading skills and needs were more accurate because of the regular conferences they conducted with students in Phase 2. Most teachers discussed the increased awareness they were able to maintain with each student's progress. Teachers reported that these individual meetings with students and the book discussions were enjoyable parts of their daily routine and that they "...really enjoyed conferencing with students about what they are reading. It really helps me understand their level and interests" (Ms. Binney, North Pacific).

As teachers discussed their new process of understanding their students' reading skills, over 60% reported that using SEM-R had contributed to their awareness that some of their students really did not understand various types of reading strategies, as their teachers had previously assumed. A representative comment echoed by most teachers concerned the fact that teachers usually assume that students already know how to use reading strategies to discuss connections, predictions, or other reading strategies, but through their conferences, they learned that many students do not. The SEM-R highlighted this phenomenon for many of the teachers.

Having an appropriately challenging book to differentiate content was also frequently mentioned, as 80% of the teachers explained that they had not really considered the level of reading challenge necessary for students at such diverse ends of reading ability. Ms. Smith explained she had not previously considered her students' level of challenge in reading, explaining that reading consultants had always told her that students should read "just right" books whenever they read. Most teachers explained that they usually asked students to pick books that were in their fluency range and never really thought about challenge.

Representative observations of Phase 2 reading conferences also demonstrated how teachers asked differentiated questions of multiple students. In one observation at Mandela Magnet, a teacher conducted nine Phase 2 SIR conferences of approximately 3-5 minutes each during a 50-minute reading block. Each was quiet, focused, and employed differentiated questioning about various reading strategies (making inferences, using connections, synthesizing, determining importance, questioning, and using metacognition) using bookmarks based on students' reading levels, instructional needs, prior use of reading strategies, and interests. Mr. Faulkner at North

Pacific enabled students to volunteer for conferences, using his SEM-R Teacher's Log to track the number of conferences that had been conducted with each student. He asked each student to read a short passage and then followed up with varied, differentiated, open-ended questions.

At another school, during the 45 minutes of Phase 2 reading time, Mrs. Slatov conducted conferences with 8 of her 33 students, while her teaching assistant met with seven students. Using this schedule, students had a conference with an adult every other day. During each conference, Mrs. Slatov established a purpose for the conference by reviewing the student's reading log, and in most instances, asking the student to read from the book to check for correct match for challenge as well as for fluency. A variety of discussions were held during these individual conferences, including topics such as the use of context clues, advanced vocabulary, book selection, characterization, and exposition (McMann School).

Over 90% of the teachers discussed the benefits of Phase 2 conferences for meeting the needs of all students and commented on how students at both the high and low end were challenged using the SEM-R, again, focusing on the benefits of differentiated instruction. "During this process I've become more aware of what they need as readers. Just because they're a Z doesn't mean that they're done with learning how to read S-level books" (Teacher log, Jane Addams Middle).

More than half of teachers interviewed expressed their concerns about the use of the status quo reading instruction in their schools prior to their use of the SEM-R. The most common concern was that academically talented students were not getting what they needed with the basal programs, and most teachers believed they had previously been 'losing a lot of bright kids'. Teachers also described the ways in which their use of differentiated instruction enabled them to work individually on skills that some students had not yet mastered but eliminate skills that other students had already mastered. "Even

though that seems strange because it's one on one, you can be more efficient with your time with each student while the others are reading. You can work with decoding if that's an issue for a student, or whatever is the particular need" (Mrs. Nicholson, Main Street). Across schools, researchers observed the many ways in which teachers' Phase 2 conferences included differentiated questions to address students' use of strategies in their reading. Students were often asked to reflect on how they had used a strategy, such as synthesizing or determining importance, in their reading, or to evaluate their choice of reading materials, including whether the book was too easy, too challenging, or at an appropriately challenging level for the student. Teachers frequently compared the SEM-R to approaches that involve an anthology or basal series, explaining that the anthologies do not meet the needs of students at the higher and lower ends and that the SEM-R really helped to differentiate more effectively and challenge this population.

At each school, teachers who implemented the SEM-R reported ways in which they adapted or used innovative practices to support their students in the differentiated context. In one middle school, teachers developed a weekly "consider-it" question based on a question from one of the bookmarks that they used to integrate reading strategies into conferences. They asked students to reflect on and write about the question throughout the week in their logs so that by the end of the week the teachers were confident that each student understood the reading strategy and could demonstrate its application to his or her own reading.

The "consider-it questions" are just one example of how the teachers used their own knowledge base and creativity to adapt and differentiate aspects of the SEM-R for their own purposes while retaining the essential aspects of each phase. In all elementary and middle schools, the teachers reported changing instructional practices by incorporating instructional and content differentiation, and they attributed these different practices to their implementation of the SEM-R.

Professional benefits of SEM-R

One of the purposes of the SEM-R is to enable teachers to make professional decisions about how to introduce strategies, differentiate instruction, select books to challenge and engage, and

choose a focus that meets each student's needs during conferences. This opportunity for teacher choice and decision-making emerged as another theme in this study in response to an open-ended question about benefits of the use of the SEM-R. Some teachers admitted they had experienced some struggle with this level of freedom, but approximately 80% explained their pleasure in having the freedom to decide how to pursue opportunities and choices for instruction. Teachers believed that their students had positive growth in reading as well as more positive attitudes about their reading. Teachers explained, both in interviews and in their logs, the ways in which their perceptions of their own growth were intertwined with the progress of their students. "SEM-R is exciting because we, myself and the teachers, have fun teaching and we are allowed to use our professional knowledge" (Reading Specialist, North Pacific).

Mrs. Conlon, from Main Street School, commented that she hopes that her students will be able to be in SEM-R classes next year, because "...it would be harder to go back and not have that kind of freedom." The majority, over 85% of teachers interviewed for this study, displayed professionalism in their use of the SEM-R books that were provided to them, explaining that they had spent time outside of the school reading the books and would continue to do so. A frequent comment was that the teachers would have liked more time to read the books before the SEM-R started in the fall.

Over 90% of the teachers across schools commented on how the implementation of the SEM-R had required both time and effort over a period of months, demonstrating their professional efforts and the time they had devoted to differentiate instruction. The majority of teachers reflected carefully about their implementation of the SEM-R, citing both challenges and successes in their professional growth. Teachers mentioned benefits to students that made their work with the SEM-R much more personally and professionally meaningful to them. In particular, they discussed increases in self-regulation, knowledge and application of reading strategies, self-efficacy in reading, and higher scores in both reading fluency and comprehension.

Using the SEM-R to meet needs of diverse learners

Over 80% of teachers interviewed also described their professional growth and successes in using the SEM-R to benefit all students, including those at the high and low ends of the reading achievement spectrum. A representative teacher comment was that "Especially for the higher-level kids, it's boring to read at a pace below their level, and for the kids reading below grade level, they struggle with some of the stories in the anthology. So the fact that they can choose their own books is the best part" (Mrs. Jacobs, Main Street). Previous research has suggested that the needs of academically advanced students are not met in many classes (Reis et al., 2004), but with the professional development and books given as part of the SEM-R study, these teachers could discuss how important it is to meet the needs of all students and give examples of how they accomplished this goal. Several teachers shed insight into how their prior use of other reading programs resulted in boredom for their higher-level students, who had been forced to read at a pace below their level, as well as the ways that students who read below grade level had struggled with anthologies and novels that were too challenging.

Teachers at all schools were able to give specific examples of how they used the SEM-R to meet the needs of students at both ends of the instructional spectrum, such as doing Book Hooks at levels that were both above and below the chronological grade level that they teach, and making sure that they used a variety of these Hooks to challenge both high and low level readers. Mrs. Jacobs explained that because she had felt that she was not reaching all levels of her students, she now balances her Book Hooks with "about three higher, two lower books per week. That way the lower readers are also excited and are sharing among themselves, laughing out loud" (Main Street).

Teachers also reported how students with unique combinations of strengths and weaknesses benefitted greatly from the SEM-R, and several explained that high readers made progress in SEM-R. One teacher commented about one talented reader's experiences: "One student is very busy with

sports, activities and his church and he recently read *Les Miserables* by Hugo. When we met, he was thrilled about the book and was going on about the relationship between the main characters. He said, ‘you know, I’ve *never* really read a book like this (huge, complex) because I don’t have time at home. Here it’s quiet and I can really get into the story. It’s great!’” (Mrs. Slatov, McMann Middle School).

Most of the teachers interviewed indicated that they had enjoyed numerous professional benefits in challenging both high and low readers using the SEM-R. Their use of differentiation for high and low readers required focused teacher effort to address the differing needs of these students. With regard to students at the lower levels of ability in reading, Mrs. Randall in particular commented on how the SEM-R allowed her students access to and success in reading that they may not have experienced before. Teachers interviewed also commented on how some students might “slip under the radar” in a whole class instructional setting, while their needs and successes are more noticeable in the individualized SEM-R structure. At the same time, four teachers interviewed expressed concern that some students might need more structure than SEM-R provides; Ms. Bartlett, for example, perceived that some of her struggling students might require a different level of structure. Most of the teachers, however, believed that the individualized structure of the SEM-R was beneficial for their struggling students as well as their advanced readers.

The last pattern that emerged with regard to students at either end of the reading achievement continuum related to challenge level of self-selected Phase 2 books. Most teachers observed that their struggling readers tended to gravitate toward books that were too difficult for them. Some of the teachers across all schools believed that their struggling students were aware that their reading level was below that of their classmates, and they wanted to select harder books to mirror what their peers were doing. Consequently, the teachers were faced with the challenge of finding books that were of an appropriate reading level without being too immature in content or appearance. Meanwhile, over 85% of teachers also commented on the tendency of academically gifted students and talented readers to select books that were too easy for them. “My challenges occur when allowing the kids to choose their own books. Many times in third grade, their interests are in picture books, not challenging material” (Ms. Binney, North Pacific). In a few cases, parents even applied negative pressure on teachers saying the reading was too challenging when teachers encouraged students to select appropriately challenging books. “The biggest challenge has been to get my students out of easy books. I have gotten phone calls from parents asking for them to be able to read easier books in class. I tell them to let them read the easy books at home” (Mrs. Slatov, McMann Middle School).

The combination of these two trends, more advanced readers choosing books that were too easy while struggling readers select books that are too hard, should be a focus in future research and may also suggest an important topic for discussion in professional development on the SEM-R. A related point is the issue of how teachers find and provide books that are not too challenging but not too juvenile for struggling readers, while also providing books that are challenging enough but not too mature for advanced readers. Over 70% of the teachers also expressed concerns about their lower-level readers’ feelings of embarrassment about reading books they perceived to be too easy. In part in response to this issue, many teachers used the recommended SEM-R strategy of enabling students with reading problems or disabilities to listen to books on CD or tape while they simultaneously followed along with the text. This practice was also found to be effective for students who were not motivated to read for extended periods of time.

Implementation Concerns

When asked specifically about concerns related to implementing the SEM-R, teachers in the study cited four areas. The most frequent teacher concern, expressed by 20% of the teachers across schools, related to conducting conferences with students who were reading books that teachers had not themselves

previously read. A representative comment across schools was related to the uneasiness some teachers experienced about how well they knew or did not know all of the books students were reading. A common comment that teachers made was that they felt nervous when they hadn’t read all the books in the SEM-R library.

This comment was echoed across schools at the beginning of the intervention, but over time appeared to have less effect on teachers. Mrs. Knight at Kendrick School explained what other teachers also discussed: “My colleague and I kind of mastered having [the students] talk or read while we would scan the book or at least the back of the book—It became kind of an art...It was still stressful, though, when a child came up with a brand new book.”

Another finding from 15% of the teachers’ observations and interviews related to planning and integrating specific objectives and skills into SEM-R instruction. The teachers in this study demonstrated a continuum of concerns about the degree to which they could use the SEM-R to introduce and integrate required skills and strategies for their language arts standards and state assessments into their language arts program that included a block of time for SEM-R. Approximately 10% of the teachers specifically mentioned having alternated SEM-R instruction with more direct instruction, and a few others made reference to administering alternate assessments or integrating objectives from their state standards into their SEM-R instruction when some students appeared to need more structure. Some students may “need more structure to keep them involved. They might sometimes just be turning pages” (Mrs. Bartlett, Main Street). Teachers seemed to have different levels of comfort with the use of the SEM-R to provide and document instruction and mastery of specific skills. Some teachers seemed to have a strong sense of the specific skills they should integrate into SEM-R differentiated instruction, while other teachers seemed to use the other part of their language arts instructional block to teach these skills. For example, this representative comment from one teacher explained what this smaller group of teachers experienced: “I am having challenges doing SEM-R ‘in addition to’ rather than ‘in place of’ some of our district-mandated pacing guide and assessment driven instruction” (Mr. Isobe, Rainy Valley).

At some school-based professional development sessions, among approximately 15% of the teachers, some concerns emerged about how to integrate specific local reading objectives within the SEM-R. However, the majority of teachers felt confident in their ability to use the resources and materials provided as part of the SEM-R training to integrate local requirements into the SEM-R framework. The

use of the SEM-R appeared to affect some teachers’ perceptions of how well students were able to see connections through reading. Mrs. Bandura, a teacher at McMann Middle School, reported that “Students are excited about reading and telling you about their books. They are making connections and sharing insights I have not seen in years past with other reading programs.”

Concerns about time management also emerged from the treatment teachers, but the reasons for the need for more time or better time management varied across teachers. For example, about half of the teachers interviewed discussed the difficulty of conducting enough interviews during Phase 2, finding time for Phase 3, and finding time for completing their reflections in their logs. This concern diminished as the year continued. The most frequent time concern involved enough time for differentiated student conferences during the beginning of the school year.

Some teachers initially had difficulty conducting Phase 2 conferences that were 3 to 5 minutes long, enabling them to meet with all of their students at least once a week. Teachers explained that they had to be very organized to conduct conferences with all of students in their classes during the week. “It’s difficult to see [conference with] all students within the week. I can usually see 4 to 5 students per day” (Ms. Finey, North Pacific). The majority of the teachers also discussed their challenges and difficulties in maintaining their reflections in their teacher log. Approximately 60% of the teachers seemed to rely primarily on student logs for tracking purposes, and used their teacher logs less frequently.

The teachers implementing the SEM-R in this study represented a wide range of teaching styles and levels of experience, and the variability in this group emerged in their interviews about how they used the SEM-R. Many teachers demonstrated ease in planning for instruction and monitoring the skills they were integrating, and in integrating key objectives from the district or state standards into the SEM-R. Several of the teachers with less experience or less confidence seemed to need to preserve some of the security they had experienced with whole class instruction related to state standards and state test assessments in previous years.

Another area of variability was in teachers' questioning during conferences, including both what was observed and what they discussed in interviews. Some seemed to place a stronger emphasis on encouraging enjoyment and sharing than on fostering specific strategies or higher-level thinking. Other teachers selected specific areas to emphasize across conferences, usually demonstrating instructional differentiation as they worked with different students. Finally, some of the teachers seemed better able and prepared to target differentiated questions directly to individual students as opposed to using a similar pattern across students.

Limitations

Several limitations exist in this study. The geographic spread and time frame of this study meant that extensive on-site observation over several months was not possible, but multiple classroom observations did occur in each school. The time constraints may limit the depth and breadth of the observations and subsequent analysis of themes and processes found in the SEM-R classrooms. The nature and frequency of observations was within acceptable case-study guidelines (Yin, 2002). Observations were conducted of the majority of SEM-R and comparison teachers in every school. All members of the research team who conducted case study research have doctorates in gifted education, with extensive training in research methodology overall and case study methods. Another limitation involved the selection of classroom teachers for interviews and observations, as it varied among the larger and smaller schools. In the majority of the schools, all SEM-R classroom teachers were both observed and interviewed, and in others, a random selection of teachers implementing the SEM-R occurred.

Researcher bias is possible when researchers conduct observations (Yin, 2002). Every attempt was made to avoid such bias by these researchers throughout the observation and analysis process. When using interviews in a qualitative study, validity and reliability standards are applicable (Gall et al., 2002). To achieve cross-validation of the qualitative data, "between-methods" triangulation was used, including document review of the observation and interview notes as well as other records. Construct validity was achieved through the use of the SEM-R treatment fidelity instrument, and an audit trail was used to validate coding and key decisions made during the research process. As with any new program, results may have been influenced by novelty effects. The extended period of the SEM-R implementation and the frequent observations by the onsite observers, along with the observations by members of the SEM-R research team, mitigated against the possibility of this effect.

Discussion

Students using the SEM-R had increased enjoyment of, interest in, and engagement in reading, supporting the research mentioned earlier by Guthrie & Wigfield (2000), Teale and Gambrell (2007), Gambrell, Palmer, Codling, and Mazzoni (1996), and Meece and Miller (1999). Across interviews and across schools, the principals, teachers, literacy coaches, and reading specialists routinely discussed the increased enjoyment of and engagement in reading of students who participated in the SEM-R. At Kendrick School, for example, Mrs. Alton and Ms. Knight highlighted student enjoyment of reading as the most important benefit of the SEM-R program. Ms. Knight, one of the SEM-R classroom teachers, explained that students' reading time had become "a sacred 45 minutes a day" and that they were upset if they did not get that time. She said that some books became so popular among the students that they would be anxiously waiting their turn for specific titles and asking the librarian for copies. In addition, students formed "book clubs" around certain books to have more opportunities to talk about the books with one another. She also noted that parents had reported an increase in reading in their children, and that children had been asking their parents to get more books for them, a finding that emerged in several other schools as well.

The SEM-R teachers' reflections about student enjoyment and engagement in reading supports Guskey's (1986) framework about the influence of teachers' trying out an innovation with their own students before they are likely to change their beliefs and attitudes and fully adopt the innovation. These teachers gained confidence from the positive response and growth of their students within the SEM-R. All of the teachers interviewed were enthusiastic about the benefits of SEM-R for

their students, and expressed eagerness about continuing to use the SEM-R and their plans to improve their implementation further through additional reading, planning, alignment, and practice. Other research suggests the necessary level of attention is rarely given to support teacher growth and change when new reading policies are adopted and implemented (Allington, 2002; McGill-Franzen, 2000). The attention of the local coaches in the implementation of the SEM-R may have been helpful, as they regularly monitored progress and assisted the SEM-R teachers, as well as completing SEM-R treatment fidelity checks. As these coaches may have been perceived as supportive of teachers' efforts to make change occur, an implication that may emerge from this finding is the importance of local support and help in the ways that teachers are asked to differentiate as well as the ways in which they are supported in this challenge. In this study, principals supported the teachers' use of the SEM-R, and teachers received classroom libraries with books for a wide range of student reading levels. In addition, they received portable CD players and a collection of books on CD as well as print copies of the books.

Differentiation of instruction and content

The most dominant teacher theme in this study was the consistent use of differentiated instruction and content, with specific comments and observations about how teachers used differentiation to challenge all readers, including those who were talented and those who struggled in reading. Differentiation is both a challenging and time-consuming process that requires effort to address wide variations among learners in the classroom through multiple approaches including different teaching strategies, materials, content, and other aspects of the learning environment (Renzulli, 1977, 1988; Tomlinson, 2001). The use of differentiated instruction occurred across all phases of the SEM-R, but appeared to be most successful when used in Phase 2 conferences with differentiated questions about strategy use, challenge level, vocabulary development, fluency strategies, comprehension, and/or literary elements such as plot, theme, and setting. Researchers noted teachers' increased efficacy and ability to conduct these conferences, often without bookmarks or other prompts, as the year progressed. This suggests that teachers increased their levels of skill and comfort with differentiated instruction over the course of the year. Instructional differentiation was guided by the teachers' knowledge of their students' skills and reading patterns, due to the frequency of their Phase 2 conferences. The use of the SEM-R appears to help teachers differentiate by giving them specific suggestions for different levels and types of questioning during conferences and enabling each student to read appropriately challenging books within areas of interest.

As opposed to previous research that shows that teachers often have not had the professional development or training to implement differentiation effectively (Archambault et al., 1993; Hertberg-Davis & Brighton, 2006; Reis et al., 1993; VanTassel-Baska & Stambaugh, 2005; Westberg, Archambault, Dobyns, & Salvin, 1993), this study corroborates previous research that shows that with training and support, teachers can implement differentiated instruction and use differentiated materials (Reis et al., 1993). Principals attending the introductory workshop for the SEM-R agreed to support teachers' efforts and make time available for local coaching and support. These elements may also be an important implication for the use of differentiated instruction in reading. With time for professional development and preparation, materials such as a diverse set of books at appropriately challenging levels of content, and local coaching and support, differentiation was much more able to be implemented in this content area. This may indicate that starting in one content area with sufficient levels of materials and support may be an effective way to promote successful differentiation.

Self-Regulation

Teachers' and administrators' perceptions about the increase in self-regulated reading in the SEM-R intervention suggest that in this study, personal processes, the environment, and individual behaviors of both teachers and students increased students' use of self-regulation strategies in reading in the SEM-R classrooms. Researchers (Boekaerts & Corno, 2005; Winne & Perry, 2000; Zimmerman & Martinez-Pons, 1990) have found that academic achievement can be increased with the use of self-regulation strategies such as organizing, goal-setting, planning, self-evaluating, information seeking, record keeping, self-reflecting, self-monitoring, and reviewing. The study

suggests that the environment in SEM-R classrooms promotes organization of materials, order, clear expectations, and rules, and also supports the use of student self-regulation strategies in reading.

Implications of this study include the need for more opportunities for self-regulation to develop in school. In the SEM-R classrooms student choices in reading material made reading more personally meaningful and challenging, gave teachers more flexibility in classroom procedures, and enabled students to engage in complex tasks, including longer periods of challenging reading and independent studies that support self-regulated learning. The teachers in SEM-R classrooms in this study modeled and integrated higher order thinking skills, encouraged students to use literacy strategies, differentiated individual conferences, and provided explicit instruction in metacognitive strategies, all of which may have contributed to student engagement and application of self-regulation to reading. Another implication of this study may be the need for other teachers to enable these strategies to be used more often in classrooms across the country to effectively engage, differentiate, and encourage self-regulation in reading.

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