Using the Schoolwide Enrichment Model Reading Framework (SEM-R) to Increase Achievement, Fluency, and Enjoyment in Reading

Update for Teachers for a New Era Project Grant

Faculty Award Division

Submitted by: Dr. Sally Reis
            Dr. Michael Coyne
            University of Connecticut

            Dr. Elizabeth Fogarty
            East Carolina University

January 30, 2007
Table of Contents

1. Progress Toward Achieving Goals and Objectives 1
2. Budget Expenditures 7
3. Papers, Presentations, and Publications 7

Bibliography 10

Appendices

Appendix A: Abstract 11
Appendix B: Description of SEM-R 12
Appendix C: Reading Classroom Practices Record 13
Appendix D: SEM-R Treatment Fidelity Scale 26
Appendix E: Budget Expenditures 34
Using the Schoolwide Enrichment Model Reading Framework (SEM-R) to Increase Achievement, Fluency, and Enjoyment in Reading

1. Progress Toward Achieving Goals and Objectives:
This research study, “Using the Schoolwide Enrichment Model Reading Framework (SEM-R) to Increase Achievement, Fluency, and Enjoyment in Reading” was carried out during the 2005-2006 school year. The purpose of the grant was to determine whether the model could be used effectively in a middle school setting. The researchers had already demonstrated success in using the program with students in grades 3-6 in previous studies of the SEM-R, and this grant enabled us to investigate whether use of the SEM-R might also yield improvement in reading comprehension and fluency, as well as overall enjoyment in reading in middle school students.

Project Recap
The research was conducted at a middle school in Manchester, Connecticut. The researchers were able to follow the original timeline for the project closely with some exceptions due to changes in the school personnel. As planned, teachers were solicited for participation in the study during May of 2005. Originally eight teachers agreed to participate in the study. These teachers were then randomly assigned to either the treatment or control conditions. Those randomly assigned to the treatment condition, or six of the nine teachers, attended a full day of training on the SEM-R in early June of 2005. During the training, teachers received a SEM-R manual and other materials that they would need to implement the program during the following school year. During July, the school liaison for the study attended the liaison training sessions at Confratute, the summer program on enrichment teaching and learning held annually at the University of Connecticut.

Prior to the start of the 2005-2006 school year, the administration at the school in which the study was being conducted, rearranged the teaching assignments for many of the language arts faculty. Over the summer months, the school administrators had received notification that the school had not met AYP in math during the previous school year. Having received a letter from the state indicating that the school had not met AYP, many parents chose to pull their students out of the school to send them to the other middle school in town. Changes in teaching assignments were made to change the faculty members who would be preparing students for the math tests and due to a largely decreased sixth grade class; the shifts also affected the language arts faculty. Prior to the first few days of school, it was still unclear as to which teachers would be teaching language arts in grades six and seven.

At the start of the school year, the original faculty members who had been trained were no longer equally distributed across the sixth and seventh grade language arts classes. One of the faculty members had also been transferred to a science classroom and we forced to drop her from the study. After all of the changes, there were 5 experimental teachers and 3 control teachers. Four of the five experimental teachers were teaching sixth grade and all of the control teachers were teaching seventh. Although it was not the way we had originally devised the participants, we were forced to start the study with the limitation that there would be no 6th grade control classrooms.

Within the first few weeks of school, teachers sent home parental consent forms with students. Shortly after the SEM-R research team began to pre-assess the students in the study using the Reading Comprehension subtest of the Iowa Test of Basic Skills, a reading fluency test, and the ERAS (Elementary Reading Attitude Survey, McKenna & Kear, 1990), a survey measuring students’ enjoyment of reading. At the conclusion of the pre-assessments, at the end of September, the treatment teachers began to implement the study. The classroom materials received approximately two weeks after the beginning of the intervention. Teachers had begun the study with the free reading materials that were already in their classrooms. Teachers in both conditions were observed on a regular, bi-weekly basis by the researchers.
using the SEM-R Treatment Fidelity Scale created for the study, as well as the Reading Classroom Practices Record (Fogarty, 2005) developed for the study from October 2005 through March of 2006. The researchers made a decision not to re-administer the reading fluency test half way through the study, as was originally planned believing that it was unnecessary. Researchers returned to collect posttest data in April of 2006 and re-administered the Reading Comprehension subtest of the Iowa Test of Basic Skills, the reading fluency test, and the ERAS.

Project Goals

The original proposal was aligned with TNE Principle One which included decisions driven by data. We used the Schoolwide Enrichment Reading Model (SEM-R), an enriched and accelerated approach to reading that is effective in increasing the reading achievement and fluency of economically disadvantaged students from diverse cultural and linguistic backgrounds who have potential for academic success, to change the way that students in grades six and seven received reading instruction (see Appendix B for further description of the SEM-R).

An observation checklist, the SEM-R Treatment Fidelity Scale was developed to detail the level of treatment fidelity in each of the classrooms in the experimental condition. Each of the treatment and control classroom were observed numerous times by various individuals (SEM-R research team members, district coordinators, and coaches to monitor treatment fidelity. Three of the middle school teachers were determined to implement the SEM-R at a level that exceeded expectations, while one implemented at a level that met expectations, and another was found to be below the implementation expectations. These levels of implementation will be used as a part of our hierarchical linear modeling analyses. We expect to be able to determine whether level of implementation affected student reading fluency and reading comprehension.

Each student in the treatment group used a reading log to record his or her reading experiences (e.g., titles of books, minutes spent reading, reflections on reading) daily. The logs have been collected, but have not yet been analyzed. The research team hopes to use the logs to determine the difficulty levels of books read by students in the experimental condition to determine the relative difficulty level of book that the group read. We will also analyze the reading levels of individual students and compare them to the students’ ability levels to see if there is a correlation between the difficulty level of the book students read and their overall reading ability level (as determined by a combination of reading fluency scores and scores on the reading subtest of the Iowa Test of Basic Skills).

Observations in classrooms of both conditions showed that reading instructional practices varied greatly between treatment and control classrooms. The researchers found that students in control classrooms read fewer minutes on average during a class period ($M = 10.80, SD = 3.82$) than did students in the treatment condition ($M = 35.68, SD = 5.94$). These differences were significant ($t = -9.604, p = .01$) indicating that students in the treatment classrooms spent over 3 times as many minutes reading as students in control classrooms. Several methods were used more frequently in the control classrooms in the study, including: round-robin reading, test preparation strategies, guided reading, worksheets, and whole group reading of novels. The teachers in the treatment group, however, conducted book talks and had a conference at least once each week with the treatment group students individually to discuss the reading materials self-selected by the student, provide differentiated instruction, and engage in conversation regarding the readings. As indicated by the observations, treatment teachers were able to differentiate the conferences, with very different reading strategies used for students of different levels of achievement (Fogarty, 2006). We also found, over the course of this study, that teachers offered more reading strategy instruction to low achieving readers during the conferences than to high achieving readers [$\chi^2 (2, N=28) = 11.77, p < .01$]. Dr. Fogarty is in the process of planning a follow-up research study to determine why there might be such a marked difference in the strategy instruction used with readers of
differing ability levels. Observations from this study suggest that this finding might have occurred because some teachers allowed talented readers to read books that were not sufficiently challenging for them so that the talented readers did not require help in strategy use, or the teachers felt that they needed to provide more support for the struggling readers to enable their success.

When we analyzed the pre-assessment data, we found that an achievement difference existed between the treatment and control groups, due to the reassignment of teachers and a larger number of treatment classes in one grade than another. The achievement differences favored the control group for the ITBS and reading fluency.

**Reading Achievement**

There was a statistically significant difference on the pre-assessment scores on the Iowa Test of Basic Skills for the treatment group ($M=222.66$, $SD=33.15$), and control group [$M=236.88$, $SD=35.01$; $t(274)=3.47$, $p<.001$]. According to Cohen's guidelines, the magnitude of the differences in the means was small ($\eta^2 = 0.013$).

A one-way between-groups analysis of covariance was conducted to determine whether use of the enrichment based reading program SEM-R would increase middle school students' reading achievement. The independent variable was the type of group (SEM-R intervention vs. control) and the dependent variable consisted of scores on the Reading Subtest of the ITBS administered at the conclusion of the intervention. The students' scores on the pre-assessment of the Reading Subtest of the ITBS were used as the covariate. Tests were conducted to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariate. After adjusting for pre-assessment scores, there was no significant difference between the two groups on the posttest ITBS scores, $F (1, 270)=1.43$, $p = .23$, $\eta^2 = .005$. There was a strong relationship between the pre-assessment and posttest scores on the ITBS, as indicated by an $\eta^2$ value of .69.

The fact that no significant difference existed between the two groups at the end of the study indicates that when taking the fact that the experimental group started out so much lower than the control group, there are actually no significant differences between their reading achievement at the end of the study. This indicates that the SEM-R intervention produced gains in reading achievement similar to the practices used in the control classrooms.

**Reading Fluency**

As with the reading achievement findings, there was a statistically significant difference between the treatment group ($M=127.05$, $SD=37.11$), and control group [$M=137.10$, $SD=34.85$; $t(275)=2.31$, $p<.02$]. According to Cohen's guidelines, the magnitude of the differences in the means was very small ($\eta^2 = 0.008$).

A one way between-groups analysis of covariance was conducted once again to determine whether use of the SEM-R increased middle school students' reading fluency. The independent variable was the type of group (SEM-R intervention vs. control) and the dependent variable consisted of a reading fluency score that was the average from three passages read by the students which was taken at the conclusion of the intervention. The students’ scores on the reading fluency pre-assessment were used as the covariate. Tests were conducted to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariate. After adjusting for pre-assessment scores, there was no significant difference between the two groups on the posttest reading fluency scores, $F (1, 271)=.12$, $p = .72$, $\eta^2 = .001$. There was a strong relationship between the pre-assessment and posttest scores on the ITBS, as indicated by an $\eta^2$ value of .88. Therefore the covariate explained 88 percent of the variance in the dependent
variable. The estimated marginal means give the adjusted means on the dependent variable for the experimental ($M=151.22$) and control ($M=150.67$) groups and show very little difference between them.

**Attitude toward Reading**

Unfortunately, we were unable to collect pretest data on many of the control participants and nearly three times as many students in the experimental group filled out the Elementary Reading Attitude Survey (ERAS) prior to the intervention and the unequal group size may have had some affect on the statistical analyses. The surveys were analyzed, however, using the total score on the survey which was obtained by adding the totals from the recreational and academic reading subscales. The pretest totals ranged from 13 to 78, while the posttest totals ranged from 20 to 75 and a greater range of scores was found on the pretest than the posttest. This data continues to be explored by the researchers.

**Qualitative Analyses**

All teachers, principals, literacy coaches, and media specialists/librarians who were involved in implementing the SEM-R were interviewed at the beginning and end of each SEM-R research project. All interviews with teachers were conducted and analyzed using the Strauss and Corbin paradigm, using open, axial and selective coding. Common perceptions of teachers were identified across the study. Qualitative research procedures were implemented to identify core categories in the data. Interviews and observation data emerged from trust developed over multiple classroom visits and interviews with principals, reading consultants, media specialists/librarians, classroom teachers and coaches.

**Core Category: Challenging All Students**

The core category identified in this phase revolved around teachers' perceptions about the challenge level for reading of each student. Most teachers and literacy coaches admitted having inaccurate perceptions about their students' reading levels. The majority of teachers reported that students in their classes were able to handle higher levels of challenge than the teachers had previously believed. They also discussed the implementation of SEM-R with students of very different levels of reading achievement, explaining that the attempt to increase the challenge level affected students differently at different levels. In particular, many mentioned their belief that they had increased the level of reading challenge for their average achieving and advanced students. For example, teachers consistently indicated that they learned in using this approach that their more talented readers could achieve at much higher levels than their teachers had previously believed. In all grade levels, in this urban school, teachers explained that using the SEM-R had positively affected their higher level readers and were able to provide specific examples, including students use of advanced thinking skills and questioning skills, reading and discussing more challenging books, and the self-regulation of advanced readers.

My average to above average readers really surprised me. They went really beyond what I ever thought they could do with advanced thinking skills and questioning skills. These readers were able to go well beyond what I had thought they could do and connect with their experiences and the challenge level really inspired them. They could read much more advanced material than I had previously assigned.

The teachers also explained that it was not always easy to encourage the highest level readers to read appropriately challenging books, and two teachers discussed differences they noticed between some of the boys and some of the girls, as explained below;
My higher level readers (boys) gave me a lot of challenges, as they could not initially find anything to read. They just could not settle down and had problems focusing. I finally found them 12 books and made them choose. They just did not want to read anything, and it took a long time to get them to start. That has been frustrating and it made me somewhat frustrated. For the most part, the kids really liked doing this. The content was more advanced, and that really enabled them to fly—many gained the background level they needed to understand the context. They really learned how to do this. Kids came up to me continually and talked to me about their books and their choices.

Teachers believed that the reason that students of all achievement levels were able to read at appropriately challenging levels was twofold. First, because students’ interests were a focus of this study, students of all levels were able to select books based on their interests and they began to enjoy reading more. Second, because of these interest-based opportunities, students were exposed to literature that both motivated and intrigued them. Many of these books were teachers who believed that they could select better books, because the SEM gave them the freedom to move beyond the basal reading program.

I think having the kids choose an interest area made a huge difference. We think that they should know background areas of some of the books that we are asking them to read, but many times they do not. By enabling kids and letting them choose books that are in their own area of interest, students were able to choose some books in which they have some background knowledge areas and they really were able to build upon their own prior knowledge. Interests were a huge key to understanding and wanting to read. Many of my students picked non-fiction and especially historical fiction. That really surprised me.

Several of the teachers also believed that lower achieving students needed different types of skill instruction than could be provided during conferences. One representative comment about this illustrates how some of the teachers were able to expand and modify the SEM-R approach and how they hoped to enhance it in the future:

The kids who were below average readers tried to pick harder books and then they did not have the strategies to read the books. With the individual kids who did this, I tried to help them gain the strategies during conferences. It worked with some students, but it would be easier for me to group the kids together who did not have the strategies for short lessons in strategy use. Next year, I will try to occasionally group some of the students together to have them learn the skills. I was able to individually identify the lower readers very easily by using the SEM-R. The individual conferences were so helpful.

The most frequent comments of teachers concerned how they tried to increase the level of challenge for all students. Teachers believed that across levels, many students made good progress, and most did well with the increased level of challenge, but this was not always easy:

I found the challenge level issue to be preferential to the old system. The kids preferred it, too. Initially, the kids were prone to go for the comfort level books. For the most part, the kids were all good at finding books that were slightly above level. Interest was a key factor.

Some of the teachers discussed how some of their lower achieving students struggled with certain tasks and how they used different strategies to address these issues, including helping these students gain general background knowledge, listening to books on tape first and then reading them, and dealing with
students with special needs by helping them identify appropriately challenging, high interest books and learning to increase self-regulation to read them.

I did find resistance from three kids initially who could not find an appropriately challenging book. Once they had the opportunity to choose books from the school library, they found books. I alternated sometimes between easy and hard for some of my kids. Some of them had never been encouraged to read books that were slightly above their level and they had learned to be a bit lazy. I had kids rate the books they were reading, so it was more enjoyable for them. Sometimes it was hard because of the background that they did not have regarding general knowledge. When they gained some general knowledge, the reading became easier for them because they could connect prior knowledge with the new reading material.

In summary, several commonalities existed across the issue of the challenge that students experienced. Most teachers believed that students had higher achievement because of the increasing challenge level and their belief that students were reading more at home, as demonstrated in the following representative comment:

I think you will see improvements in the achievement and fluency scores of all of the students. I think you will also find differences in attitude about reading, because I sat in a PPT for one of the students, one of the girls, and the parents said that she was reading and enjoying reading at home and that it was the first time that she had ever read at home.

**Differential Student Benefits**

When asked about their perceptions of differential student benefits, the majority of teachers said that they believed that students from high to low reading levels all benefited from the implementation of SEM-R, including students with special needs and students for whom English is not their first language (ESOL). There was no consensus about which students benefited most from the SEM-R, as almost all teachers believed that students from all different achievement levels has all benefited from SEM-R, and most students began by discussing one student and then added that others had made similar types of progress.

This is a great program for low and high kids! My lowest reader gained so much. He is reading easy chapter books, now, that is as long as they are about animals. And then the higher readers benefited too! Two girls just blew the rest of the class away! We had to search for 10 minutes to find the second Harry Potter book in this third grade classroom. I have to say that every child’s desire to read has increased.

Others commented on the gains and reading fluency and comprehension increases in their classroom:

The scores and the learning gains have been amazing! Students’ enjoyment of reading was wonderful. In my 2 classes of 31 students, all scored above goal, except for 3 and those students were all identified as special education students. Remember, these are all high poverty kids and the majority of them speak English as a second language.

**Professional Development Findings**

Teachers were asked an open-ended question about whether the use of this intervention affected their own professional development. Every teacher in both schools responded positively to this question. Most mentioned growth related to freedom and having professional choices themselves. Teachers also
were quite eloquent about why they believed they had grown in this process, and two reasons were most often mentioned. First, teachers believed that students had grown in reading, were able to read at higher levels, and liked the opportunity to select more challenging books in their areas of interest. A related issue was that teachers believed that students were increasing their skills and improving in reading and that this was happening because teachers were able to give up some of the control associated with the basal reading program.

All of the teachers indicated that they loved one or two components of the SEM-R and that they believed that these components helped them to be more effective at delivering certain parts of reading instruction. For example, they liked the book hooks as a way to get students interested.

Phase 3 was great for me. In the beginning of the year, we did different stations and I made sure that my students were using Renzulli Learning. I brought in different independent tasks. I tried to make sure that the tasks were challenging. They are all doing different things and they are really enjoying the independent projects, and my kids are doing all different projects: nano-rovers, historical stuff, time capsules from Jamestown. This is so much fun for me.

Teachers also mentioned the opportunity to incorporate different types of “gifted education pedagogy” to motivate and increase the challenge level for all students, and apply this type of teaching to other content areas:

The more I used the gifted types of questions from the bookmarks and the kinds of these types of opportunities that I used in the study, the more I realized that these types of opportunities can transform learning. I should have used these more often years ago. I transferred some of what I learned from the study into my other content area classes. That was really helpful. I incorporated advanced material into my other afternoon classes. In depth questioning was used in my social studies classes, and I even used ideas from this study in my science class as well.

Many teachers mentioned what they perceived to be their students’ own increasing level of exciting and joy about reading and said that for this reason alone, they would continue using aspects of this approach.

My students were so excited about selecting a book of their own. The students loved the fact that they could choose a book of their own. They also loved having some choice in writing. They simply loved the program and were happy to read.

It was interesting; most of the kids sighed with unhappiness that the intervention (SEM-R) was over. There were cheers when I said that we would continue with the intervention.

2. Budget Expenditures:

The budget was computed based on the grant award of $8,000. Personnel funding accounted for $1,650 of the grant money in the form of a summer assistantship stipend for the graduate student. An in-kind contribution of $8,826 in UConn funding was designated toward project personnel. This support was in the form of personnel summer stipends and fringe benefits, as well as 25% of the graduate assistant’s academic time.

Non-personnel funding totaled $6,350 and included expenses for the liaison to attend summer training at UConn, mileage for weekly travel to and from the research site in Manchester, Connecticut, books for the site classrooms and library, and fees for the Iowa Test of Basic Skills. Including in-kind
contributions and the TNE grant award, expenses for this project totaled $16,826.

3. Papers, presentations, and publications:

Funding from this grant enabled the researchers to scale up efforts to study the effectiveness of the SEM-R in a middle school and through the creation of additional research instruments, study materials, and through extended professional development experiences with teachers across the country. The instruments that researchers were able to add to the pre-existing set included: The Reading Classroom Practices Record (Appendix C) and the SEM-R Treatment Fidelity Scale (Appendix D). Both instruments were used in observations of teachers in both treatment and control conditions.

The book that explains the implementation of the SEM-R is currently being revised as a result of 4 years of experimental research, including the one year of funding from this grant. The current revision will include results from the study that was facilitated by this grant and will include data and information pertinent to implementing the SEM-R in middle school classrooms. The book list is one feature of the new draft that will need to be revised to include selections for middle grades readers of all ability levels and data regarding the books that students read during this study will be used to generate the list.

Papers

One completed publication from this grant was the dissertation of one of the researchers on this grant. This grant enabled much of the observational research conducted in the middle school classrooms to be conducted.


Presentations


Currently, an SEM-R website has been developed (http://www.gifted.uconn.edu/semr) with general information available to all and specialized study information available to teachers currently participating in the experimental condition of the study. The website includes the theoretical background of the SEM-R, links to previous research results, resource links, links for reading on the web, sample teaching strategies, and weekly study updates. The book list created for talented readers is available to all treatment teachers and students via the website. Additionally, recent keynote and conference presentations on the SEM-R are also available to all on the NRC/GT website homepage (http://www.gifted.uconn.edu). The challenge projects (SEM-Xplorations) have been incorporated into technology that teachers can access and hardcopies of the projects were distributed to all treatment teachers for use with treatment students.

Training courses were offered at Confratute, the annual summer institute on enrichment teaching and learning held at the University of Connecticut. These courses included training for teachers wishing to implement the model, as well as “Train the Trainer” courses offering training for people wishing to train others to use the SEM-R. These classes were among the most widely attended classes at Confratute. All curriculum materials and instruments designed for the study will be made available through the NRC/GT website at the culmination of the project, as will a distance learning web class on the SEM-R.

Publications
We had anticipated that at least two major research articles and a full-length technical report would come out of this work. The full-length technical report will be completed in 2008 after data from the final year of this SEM-R scale-up is collected. This report will be published by The National Research Center on the Gifted and Talented. Two publications have already been completed using this data, some are submitted, and others are expected to follow.


Bibliography


Appendix A: Abstract

ABSTRACT
This study describes the scaling up of the Schoolwide Enrichment Reading Model (SEM-R), an enriched and accelerated approach to reading that has been shown to be effective at raising reading comprehension, fluency, and attitude scores for economically disadvantaged students from diverse cultural and linguistic backgrounds. Educators in five different elementary schools (four of which are among the lowest scoring schools in their state) have been successful at implementing this approach. The SEM-R is based on Joseph Renzulli’s Enrichment Triad Model and has these distinct goals: to increase enjoyment in reading, to encourage students to pursue independent reading and develop self-regulation, and to improve reading comprehension and fluency in three phases of reading instruction. Phase 1 employs strategies designed to engage students in the world of books: including high interest read alouds, accompanied by high level questioning. Phase 2 includes opportunities for structured independent reading and teacher guided instruction with self-selected high interest reading materials that are above the student’s current reading level. Phase 3 provides opportunities for selected work in a variety of enrichment opportunities in reading. Previously, the SEM-R has been successfully implemented with researchers acting as coaches. In this scale-up application, the intervention was expanded for use with middle school students in a Connecticut school. The SEM-R was implemented in this school for an academic year, during September through April of 2005-2006.

Two separate ANCOVAs were used to analyze the reading comprehension and reading fluency data. After adjusting for pre-assessment scores, there was no significant difference between the two groups on the posttest ITBS scores, $F(1, 270) = 1.43, p = .23$, eta squared $= .005$. After adjusting for pre-assessment scores, there was no significant difference between the two groups on the posttest reading fluency scores, $F(1, 271) = .12, p = .72$, eta squared $= .001$. The researchers continue to analyze the data on students’ attitude toward reading. Overall, these data indicate that the SEM-R produces gains in reading fluency and reading comprehension similar to those expected in traditional reading instruction. Although results are not as favorable as when used with elementary students, these data indicate that the SEM-R has promise for more widespread use in middle schools.
Appendix B: Description of the SEM-R

The SEM-R includes three general categories of reading instruction that are dynamic in nature and are designed to enable some flexibility of implementation and content in response to both teachers’ and students’ needs. This approach is based on Joseph Renzulli’s Enrichment Triad Model (1977) that includes three levels of enrichment: exposure, training and self-selected reading, and investigations of self-selected topics respectively implemented in three phases.

Phase 1 of SEM-R includes listening comprehension skills, as teachers read aloud from high quality, exciting literature and use follow-up strategies including thinking skills instruction and higher-order questioning book marks developed for this study (Appendix F). Bookmarks with higher-order questions are placed in all the books, and teachers are also provided with suggestions for engaging students’ interests and helping them to enjoy listening to high quality biographies, autobiographies, mysteries, poetry, historical and science fiction, and non-fiction books.

Phase 2 of the SEM-R emphasizes the development of students’ capability to engage in supported independent reading of self-selected high interest books. Students select books based on their interests, but the reading level must be above students’ current reading levels. Reading material for these sessions is at least 2 years above students’ current reading level and teachers are trained by researchers to be able to assess appropriate levels of challenge. During this reading time in class, classroom teachers and instructional aides, coached by research team members, provide individualized instruction in strategy use, including phonics and vocabulary, as students read aloud to teachers, aides, and researchers. Teachers engage more advanced readers in book discussions relating to higher-order themes and critical questions using materials prepared for the study. A thorough and comprehensive list of appropriately challenging, high interest non-fiction and fiction materials is provided for reference and selection. In addition, students are trained in creative and critical thinking and in advanced training in the use of the web to find information about fiction, non-fiction, authors, biographies and autobiographies.

Phase 3 of SEM-R encourages students to move from teacher-directed opportunities to self-choice activities. Activities include, but are not limited to, opportunities to pursue technology, discussion groups, advanced questioning and thinking skills, language arts creativity training, learning centers, independent projects, free reading, and book chats. The intent of these experiences is to provide time for students to pursue areas of personal interest and enjoyment through the use of interest centers, technology, and the web, so they learn to read critically to locate especially high quality challenging literature. Options for independent study are also made available to students during this phase of the SEM-R.

Appendix C: Reading Classroom Practices Record

Reading Classroom Practices Record
# Treatment Classroom
(modified from Westberg et al., 1993)

## I. General Information

<table>
<thead>
<tr>
<th>Classroom Teacher</th>
<th>Observer</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>School</th>
<th>Observation Start Time</th>
<th>Observation Stop Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Length of SEM-R Treatment ________________ (in minutes)

<table>
<thead>
<tr>
<th>Number of Students in the Class</th>
<th>Total number of reading conferences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes on Classroom Environment:**

**Room Diagram:**

Circle the room diagram that most closely matches this classroom:

![Room Diagram Options]

**II. Phase 1: Building Student Interest**
### Activity
(1) Discussion  
(2) Oral Reading – Teacher  
(3) Oral Reading - Student  
(4) Silent Reading  
(5) Project Work  
(6) Student Book Talks  
(7) Other

### Reading Strategies
(L) Lower Level Strategies  
(H) Higher Level Comprehension Strategies  
(P) Procedural  
(1) Decoding or Phonics  
(1) Synthesizing  
(5) Visualizing  
(I) Interest  
(2) Slowing down or Rereading  
(2) Making Inferences  
(6) Questioning  
(C) Clarification  
(3) Using pictures  
(3) Making Connections  
(7) Metacognitive  
(4) Knowledge/Comprehension  
(4) Determining Importance  
(5) Other

<table>
<thead>
<tr>
<th>Begin Time</th>
<th>Rdg Activity</th>
<th>Rdg Strategy</th>
<th>Miscellaneous Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Script questions from lesson</strong></td>
</tr>
</tbody>
</table>

### III. Phase 2: Individual Reading Conferences

#### Reading Strategies
<table>
<thead>
<tr>
<th>Reading Strategies</th>
<th>Notes</th>
</tr>
</thead>
</table>

**Reading Strategies**

(L) Lower Level Strategies  (H) Higher Level Comprehension Strategies  (P) Procedural

1. Decoding or Phonics  
2. Slowing down or Rereading  
3. Using pictures  
4. Knowledge/Comprehension  
5. Other

<table>
<thead>
<tr>
<th>H</th>
<th>A</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boy</td>
<td>Girl</td>
<td></td>
</tr>
</tbody>
</table>

Start Time: __________  End Time: __________  Total minutes: ______

- Was there a discussion of the challenge level of the book? □ Yes □ No
  - If so, was it based on the student’s oral reading? □ Yes □ No
- Was there a discussion of the student’s reading interest? □ Yes □ No
Conference #2

Name _____________________________  _____ H  _____ A  _____ L

_____ Boy  _____ Girl  Start Time: __________  End Time: __________  Total minutes: ______

Book student is reading ___________________________________________________________

Was there a discussion of the challenge level of the book?  □ Yes  □ No

    If so, was it based on the student’s oral reading?  □ Yes  □ No

Was there a discussion of the student’s reading interest?  □ Yes  □ No

<table>
<thead>
<tr>
<th>Reading Strategies</th>
<th>Notes</th>
</tr>
</thead>
</table>

Reading Strategies

(L) Lower Level Strategies         (H) Higher Level Comprehension Strategies         (P) Procedural
(1) Decoding or Phonics           (1) Synthesizing           (5) Visualizing           (I) Interest

16
IV. Phase 3: Open-ended Reading Activities

**Activity**
(1) Discussion  
(2) Oral Reading – Teacher  
(3) Guided Reading  
(4) Silent Reading  
(5) Literature Circles  
(6) Student Book Talks  
(7) Reading Reflection/Log  
(8) Creativity Training  
(9) SEM-X Projects  
(10) Other project work  
(11) Reading Conferences  
(12) Worksheets  
(13) Basal reader  
(14) Books on CD or tape  
(15) Other  

**Group size**  
(1) Individual  
(2) Group of 2-6 students  
(3) Group of 7 or more students  
(4) Whole Class  

**Group composition**  
(H) Heterogeneous ability grouping  
(Hm) Homogeneous ability grouping  

**Targeted Students**  
(H) High Achiever  
(A) Average Achiever  
(L) Low Achiever  

<table>
<thead>
<tr>
<th>Begin Time</th>
<th>End Time</th>
<th>Activity Code</th>
<th>Reading Strategy</th>
<th>Group Size</th>
<th>Group Composition</th>
<th>Miscellaneous Notes</th>
</tr>
</thead>
</table>

V. Observation Summary
I. General Information

Classroom Teacher ____________________________
Observer ____________________________ Date __________
Grade __________ School ________________ Observation Start Time __________
Observation Stop Time ________________
Number of Students in the Class __________

Notes on Classroom Environment:

Room Diagram:

Circle the room diagram that most closely matches this classroom:
II. Curricular Activities

**Group Size**
- (W) Whole Group
- (S) Small Groups (3-6)
- (P) Pairs
- (I) Individuals

**Activity**
- (1) Basal reader
- (2) Worksheets
- (3) Literature Circles
- (4) Discussion
- (5) Guided Reading
- (6) Phonics Instruction
- (7) Spelling Instruction
- (8) Silent Reading
- (9) Writing Instruction
- (10) Oral reading – Student
- (11) Oral Reading – Teacher
- (12) Project Work
- (13) Book Talks
- (14) Reading Conferences
- (15) Reading Reflection/Log
- (16) Other

**Reading Strategies**
- (L) Lower Level Strategies
- (H) Higher Level Comprehension Strategies
- (P) Procedural
- (I) Interest
- (C) Clarification
- (M) Metacognitive

**READING INSTRUCTION**

<table>
<thead>
<tr>
<th>Begin Time</th>
<th>Group Size</th>
<th>Activity Codes</th>
<th>Reading Strategy</th>
<th>Miscellaneous Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21
**Group Size**
(W) Whole Group (S) Small Groups (3-6) (P) Pairs (I) Individuals

**Activity**
(1) Basal reader (2) Worksheets (3) Literature Circles (4) Discussion
(5) Guided Reading (6) Phonics Instruction (7) Spelling Instruction (8) Silent Reading
(9) Writing Instruction (10) Oral reading – Student (11) Oral Reading – Teacher (12) Project Work
(13) Book Talks (14) Reading Conferences (15) Reading Reflection/Log (16) Other

**Reading Strategies**
(L) Lower Level Strategies (H) Higher Level Comprehension Strategies (P) Procedural
(1) Decoding or Phonics (1) Synthesizing (5) Visualizing (I) Interest
(2) Slowing down or Rereading (2) Making Inferences (6) Questioning (C) Clarification
(3) Using pictures (3) Making Connections (7) Metacognitive
(4) Knowledge/Comprehension (4) Determining Importance
(5) Other

### READING INSTRUCTION

<table>
<thead>
<tr>
<th>Begin Time</th>
<th>Group Size</th>
<th>Activity Codes</th>
<th>Reading Strategy</th>
<th>Miscellaneous Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Group Size**
(W) Whole Group  (S) Small Groups (3-6)  (P) Pairs  (I) Individuals

**Activity**
(1) Basal reader  (2) Worksheets  (3) Literature Circles  (4) Discussion  
(5) Guided Reading  (6) Phonics Instruction  (7) Spelling Instruction  (8) Silent Reading  
(9) Writing Instruction  (10) Oral reading – Student  (11) Oral Reading – Teacher  (12) Project Work  
(13) Book Talks  (14) Reading Conferences  (15) Reading Reflection/Log  (16) Other

**Reading Strategies**
(L) Lower Level Strategies  (H) Higher Level Comprehension Strategies  (P) Procedural  
(1) Decoding or Phonics  (1) Synthesizing  (5) Visualizing  (I) Interest  
(2) Slowing down or Rereading  (2) Making Inferences  (6) Questioning  (C) Clarification  
(3) Using pictures  (3) Making Connections  (7) Metacognitive  
(4) Knowledge/Comprehension  (4) Determining Importance  
(5) Other

<table>
<thead>
<tr>
<th>Reading Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Begin Time</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

23
### Group Size
- (W) Whole Group
- (S) Small Groups (3-6)
- (P) Pairs
- (I) Individuals

### Activity
- (1) Basal reader
- (2) Worksheets
- (3) Literature Circles
- (4) Discussion
- (5) Guided Reading
- (6) Phonics Instruction
- (7) Spelling Instruction
- (8) Silent Reading
- (9) Writing Instruction
- (10) Oral reading – Student
- (11) Oral Reading – Teacher
- (12) Project Work
- (13) Book Talks
- (14) Reading Conferences
- (15) Reading Reflection/Log
- (16) Other

### Reading Strategies
- (L) Lower Level Strategies
- (H) Higher Level Comprehension Strategies
- (P) Procedural
- (C) Clarification

- (1) Decoding or Phonics
- (2) Slowing down or Rereading
- (3) Using pictures
- (4) Knowledge/Comprehension
- (5) Other
- (1) Synthesizing
- (2) Making Inferences
- (3) Making Connections
- (4) Determining Importance
- (5) Visualizing
- (6) Questioning
- (7) Metacognitive
- (I) Interest

### READING INSTRUCTION

<table>
<thead>
<tr>
<th>Begin Time</th>
<th>Group Size</th>
<th>Activity Codes</th>
<th>Reading Strategy</th>
<th>Miscellaneous Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. Observation Summary
Please note: If your observation is conducted on a day that is devoted to Phase 3 only, complete items 8 and 9 on page 1 as well as the information on page 7.

<table>
<thead>
<tr>
<th>Phase</th>
<th>SEM-R Components</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>1. Provided exposure by introducing books with a book discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Read aloud from books that appeared to be selected in advance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Integrated reading strategies and/or higher-level thinking questions (e.g., bookmark questions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 2</td>
<td>4. Provided time for students’ supported independent reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Established an environment in which students utilized self-regulation for supported, independent reading time</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Listened to students read in individual conferences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Provided differentiated reading strategies and/or literary discussions during conferences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 3</td>
<td>8. Made time available for Phase 3 independent or small group enrichment choices</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Provided 3-4 choices for students such as: creativity training, Renzulli Learning, opportunities for individual reading, buddy reading, and other choices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All 3 Phases</td>
<td>10. Had an organized, cohesive implementation of SEM-R during observation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research for this observation scale was supported under the Javits Act Program (Grant No. S206A040094) as administered by the Institute of Education Sciences, U.S. Department of Education. Grantees undertaking such projects are encouraged to express freely their professional judgment. This instrument, therefore, does not necessarily represent positions or policies of the Government, and no official endorsement should be inferred.
General Notes or Observations:
# PHASE 1

Time Phase 1 began: _________  Time Phase 1 ended: _________

Book(s) used for the book hook: ____________________________________________________________

Did one or more students ask to read the book independently?  □ Yes  □ No

<table>
<thead>
<tr>
<th>Notes on Phase 1</th>
<th>Below Expectations</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Showed evidence of planning in the choice of books selected for “book hooks”</td>
<td>Did not discuss reason for book choice; and/or appeared to select book at random or without attention to purpose</td>
<td>Addressed reason for selecting book and/or specific passage during book chat; AND book choice is appropriate for purpose</td>
</tr>
<tr>
<td>b</td>
<td>Discussed genre</td>
<td>Identified genre without explanation, OR did not address genre</td>
<td>Identified or asked students to identify genre of book, followed by explanation of genre-specific characteristics</td>
</tr>
<tr>
<td>c</td>
<td>Read with expression</td>
<td>Read in a way that volume, voice, phrasing, and/or pace detracted from listeners’ connections to text</td>
<td>Demonstrated volume, voice, phrasing, and pace in a way that allowed listeners to connect to text</td>
</tr>
<tr>
<td>d</td>
<td>Engaged students with read-aloud</td>
<td>Many students seemed inattentive and/or bored by the book</td>
<td>Most students were attentive and/or responsive to the book</td>
</tr>
<tr>
<td>e</td>
<td>Scaffolded higher order thinking skills or literary concepts into the read-aloud</td>
<td>Used only low-level questions for all students and did not address literary concepts</td>
<td>Provided instruction and/or modeling for use of higher order thinking skills, and/or discussed literary concepts relevant to read-aloud</td>
</tr>
<tr>
<td>f</td>
<td>Asked questions or provided reading strategies on differentiated levels</td>
<td>Asked no questions, provided no strategies, OR used only low-level questions and strategies</td>
<td>Asked questions or provided strategy instruction that addressed different levels of complexity and difficulty</td>
</tr>
<tr>
<td>g</td>
<td>Encouraged text to self, text to world, and/or text to other text connections</td>
<td>Did not directly model, solicit, or expand upon text to self, text to world, and/or text to text connections</td>
<td>Modeled or asked students to make text to self, text to world, and/or text to text connections</td>
</tr>
</tbody>
</table>
**PHASE 2**

Time Phase 2 began: ___________  Time Phase 2 ended: ___________

What percentage of students was able to read for all of Phase 2? ___________

Number of conferences held: ___________

<table>
<thead>
<tr>
<th>Notes on Phase 2</th>
<th>Below Expectations</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Provided a smooth transition between Phase 1 and Phase 2</td>
<td>Many students required repeated reminders about beginning Phase 2 and/or many students did not have a book</td>
<td>Most students had a book and started to read without repeated reminders</td>
<td>Most students started to read without any reminders beyond initial direction</td>
</tr>
<tr>
<td>b Conducted conferences throughout Phase 2</td>
<td>Conducted conferences but with frequent interruptions for management or other activities; OR did not conduct conferences for extended time within Phase 2</td>
<td>Conducted conferences throughout Phase 2 with minimal time spent on management or other non-conference activities</td>
<td>Conducted conferences without interruption throughout Phase 2</td>
</tr>
<tr>
<td>c Had students read for the first part of their conferences</td>
<td>Did not have students read during the first part of their conferences</td>
<td>Had students in each conference read for the first part of the conference time</td>
<td>Communicated a purpose for each student’s oral reading prior to listening to students read</td>
</tr>
<tr>
<td>d Guided students to appropriate book choices</td>
<td>Asked students to choose different books without justification or guidance; OR did not address book selection at all</td>
<td>Discussed or suggested other book choices as alternatives to or extensions of current book</td>
<td>Extended discussion beyond next book choice to address book selection habits in general</td>
</tr>
<tr>
<td>e Used differentiated questions in conferences</td>
<td>Asked no questions, OR used only low-level questions for all students</td>
<td>Used questions within and across conferences that addressed different levels of complexity and difficulty</td>
<td>Used questions at multiple levels across conferences AND used one or more higher-level questions in every conference</td>
</tr>
<tr>
<td>f Introduced differentiated reading strategies during the conference</td>
<td>Offered no strategies, OR used only low-level strategies across all conferences</td>
<td>Integrated varied strategies for fluency and comprehension across conferences</td>
<td>Diagnosed individual needs from student’s oral reading, and integrated varied strategies clearly connected to demonstrated reading behaviors</td>
</tr>
<tr>
<td>g Enabled students to remain actively involved in reading and encouraged self-regulation strategies</td>
<td>Provided limited or no verbal guidance or environmental reminders, and/or many students did not use self-regulation strategies</td>
<td>Provided verbal guidance and/or environmental reminders of self-regulation strategies for reading (e.g., verbal reminders at start of Phase 2, use of sun/cloud cards, self-regulation strategies posted in classroom)</td>
<td>Provided verbal guidance and/or environmental reminders of self-regulation strategies for reading (e.g., verbal reminders at start of Phase 2, use of sun/cloud cards, self-regulation strategies posted in classroom) All or most students were self-regulated in their behavior throughout Phase 2</td>
</tr>
</tbody>
</table>
**PHASE 3**

Time Phase 3 began: _______  Time Phase 3 ended: _______

Was Phase 3 time provided? □ Yes  □ No

How many Phase 3 choices were provided? _____ (List choices on next page)
If not provided, did the teacher show evidence of providing Phase 3 at another time? □ Yes  □ No
(List evidence on next page)

<table>
<thead>
<tr>
<th>Notes on Phase 3</th>
<th>Below Expectations</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Made a smooth transition between Phase 2 and Phase 3</td>
<td>Many students required reminders about beginning Phase 3</td>
<td>Most students started to work without reminders</td>
</tr>
<tr>
<td>b</td>
<td>Provided Phase 3 choices with different entry points and different levels of complexity and depth</td>
<td>Activity choices do not vary in level of complexity, depth or entry point</td>
<td>The range of activity choices included different entry points and different levels of complexity and depth</td>
</tr>
<tr>
<td>c</td>
<td>Provided Phase 3 choices that extended interests and encouraged creative productivity</td>
<td>Activity choices do not allow a wide range of interests to be pursued, OR result in development of creative products</td>
<td>The range of activity choices allowed extension of varied student interests and encouraged development of creative products</td>
</tr>
<tr>
<td>d</td>
<td>Enabled students to remain actively involved in Phase 3 choices and encouraged self-regulation strategies</td>
<td>Provided limited or no verbal guidance or environmental reminders, and/or many students did not appear to use self-regulation strategies</td>
<td>Provided verbal guidance and/or environmental reminders of self-regulation strategies for activities (e.g., verbal reminders at start of Phase 3, self-regulation strategies posted in classroom); AND most students self-regulated with brief individual guidance</td>
</tr>
<tr>
<td>e</td>
<td>Provided choices that engaged the majority of students</td>
<td>Many students seemed bored or off-task or requested an activity change</td>
<td>Most students demonstrated task commitment to their chosen activity in Phase 3</td>
</tr>
<tr>
<td>f</td>
<td>Organized the classroom to support Phase 3</td>
<td>Did not prepare space or resources in advance to support Phase 3 activities</td>
<td>Coordinated space and resources for students to work independently throughout Phase 3</td>
</tr>
</tbody>
</table>

33
Notes on Phase 3:
Appendix E: Budget Expenditures

Elizabeth Fogarty  
TNE Grant Application  
Budget - July 1, 2005 thru June 30, 2006

<table>
<thead>
<tr>
<th>Personnel:</th>
<th>UCONN</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reis, Sally Principal Investigator-Summer Stipend</td>
<td>0</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Coyne, Michael Research Consultant-Summer Stipend</td>
<td>0</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Fogarty, Elizabeth Graduate Assistant-Academic Year (25%)</td>
<td>0</td>
<td>5,288</td>
<td>5,288</td>
</tr>
<tr>
<td>Fogarty, Elizabeth Graduate Assistant-Summer Stipend</td>
<td>1,500</td>
<td>0</td>
<td>1,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fringe Benefits:</th>
<th>UCONN</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reis, Sally Principal Investigator-Summer Stipend</td>
<td>0</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Coyne, Michael Research Consultant-Summer Stipend</td>
<td>0</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Fogarty, Elizabeth Graduate Assistant-Academic Year (25%)</td>
<td>0</td>
<td>1,058</td>
<td>1,058</td>
</tr>
<tr>
<td>Fogarty, Elizabeth Graduate Assistant-Summer Stipend</td>
<td>150</td>
<td>0</td>
<td>150</td>
</tr>
</tbody>
</table>

**TOTAL PERSONNEL AND FRINGE BENEFITS**

<table>
<thead>
<tr>
<th></th>
<th>Grant</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,650</td>
<td>8,826</td>
<td>10,476</td>
</tr>
</tbody>
</table>

**Non-Personnel:**

**Travel:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Grant</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost for Liaison to attend Summer Institute at UConn</td>
<td>1,000</td>
<td>0</td>
<td>1,000</td>
</tr>
<tr>
<td>Mileage to/from Site in Manchester, CT</td>
<td>1,620</td>
<td>0</td>
<td>1,620</td>
</tr>
</tbody>
</table>

**Total Travel**

<table>
<thead>
<tr>
<th></th>
<th>Grant</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,620</td>
<td>0</td>
<td>2,620</td>
</tr>
</tbody>
</table>

**Supplies & Miscellaneous:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Grant</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books for Site Classrooms and Library</td>
<td>3,000</td>
<td>0</td>
<td>3,000</td>
</tr>
<tr>
<td>Iowa Test of Basic Skills</td>
<td>730</td>
<td>0</td>
<td>730</td>
</tr>
</tbody>
</table>

**Total Supplies & Miscellaneous**

<table>
<thead>
<tr>
<th></th>
<th>Grant</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,730</td>
<td>0</td>
<td>3,730</td>
</tr>
</tbody>
</table>

**TOTAL NON-PERSONNEL**

<table>
<thead>
<tr>
<th></th>
<th>Grant</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,350</td>
<td>0</td>
<td>6,350</td>
</tr>
</tbody>
</table>

**TOTAL PERSONNEL AND NON-PERSONNEL EXPENSES**

<table>
<thead>
<tr>
<th></th>
<th>Grant</th>
<th>In-Kind</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8,000</td>
<td>8,826</td>
<td>16,826</td>
</tr>
</tbody>
</table>