



Evaluation Report/Impact Study:
**Virginia Striving Readers Intervention
Initiative (VSRII)**

March 15, 2012



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(VSRII)**

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TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF FIGURES	iii
LIST OF TABLES	iii
EXECUTIVE SUMMARY	iv
INTRODUCTION AND BACKGROUND	1
Background.....	1
Process	2
Context.....	3
PART I: INTERVENTION AND LOGIC MODEL	5
Description of the Intervention Model	5
Classroom Intervention	5
Professional Development.....	7
Assessments.....	9
Target population.....	10
Desired characteristics of the interventionists.....	10
Desired characteristics of the classrooms.....	10
Recommended intensity for the students.....	10
VSR II Logic Model	11
Overview	11
VSR II professional development model	16
Planned classroom instruction.....	18
Characteristics of interventionists	19
Classroom characteristics	20
Assessments.....	20
VSR II eligible students.....	21
Expected student outcomes	22
Planning Year (2009-2010)	22
Preparing for the implementation.....	22
Preparing for the study	23
PART II: IMPLEMENTATION STUDY	25
Study Design.....	25
Overview	25
Research questions	25
Data Collection Plan.....	26
Defining fidelity of implementation.....	28

Implementation Year 1 (2010-2011)	31
Control students' instruction during intervention period	31
Other Tier 2 interventions for study students (treatment and control)	31
Context of <i>PRJ</i> implementation	31
Implementation of professional development model	34
Implementation of the classroom model	39
Factors Influencing Fidelity of Implementation	44
Ramifications of implementation results for impact analyses	47
PART III: IMPACT STUDY	49
Study Design	49
Sample selection	49
Data collection	51
Data analysis	51
Description of the Year One Sample	53
Student demographic characteristics	53
Student baseline achievement	54
Impact of <i>PRJ</i> Participation on Student Reading Achievement	55
Impact on all students	55
Impact on students in each grade	55
CONCLUSION	57
REFERENCES	59
APPENDIX A: Final Model Results for Impact Analyses	62
APPENDIX B: Implementation Study Protocols	68

LIST OF FIGURES

Figure 1. Logic model - Virginia Striving Readers Intervention Initiative (VSRII)	12
Figure 2. VSRII – management chart	14
Figure 3. VSRII – organization chart.....	15
Figure 4. Fidelity of implementation framework.....	30
Figure 5. Consort diagram of eligibility, random assignment, and attrition.....	50

LIST OF TABLES

Table 1. Information on VSRII schools (school year 2009-2010).....	4
Table 2. VSRII – planned professional development activities.....	16
Table 3. VSRII - list of assessments	21
Table 4. Alignment between IFI and evaluators’ observation rubric	29
Table 5. Calculating the classroom implementation fidelity score.....	30
Table 6. Treatment class size per school and grade.....	32
Table 7. Allocated time for instruction.....	33
Table 8. School closures and class cancellations.....	33
Table 9. Percentage stating “almost all students attended class” during the monthly check-ins..	34
Table 10. Professional development activities.....	35
Table 11. Hours of professional development	36
Table 12. Hours of coaching from Cambium Learning Group.....	37
Table 13. Index of fidelity of implementation – professional development model.....	38
Table 14. Lessons completed within class time.....	39
Table 15. Number of Expeditions completed	41
Table 16. Journeys I and II – benchmark data	42
Table 17. Scoring for the classroom observation rubric	43
Table 18. Fidelity to the classroom instruction model (weighted)	44
Table 19. Fidelity scores per school	44
Table 20. Demographic characteristics of the ITT sample.....	54
Table 21. Comparison of treatment and control groups on Spring 2010.....	54
Table 22. Impact of <i>PRJ</i> participation on Spring 2011 scores on the GMRT and SOL for all students	55
Table 23. Impact of <i>PRJ</i> participation on Spring 2011 scores on the GMRT and SOL.....	56

EXECUTIVE SUMMARY

Virginia Department of Education (VDOE) was awarded a four-year Striving Readers grant from the U.S. Department of Education (USED) to start in school year (SY) 2009-2010. The Striving Readers program funded studies on the impact of supplemental reading interventions on adolescents whose reading skills were below grade level.

The VDOE project, called Virginia Striving Readers Intervention Initiative (VSR II), focused on the implementation and impact of *Passport Reading Journeys (PRJ)* for seventh and eighth grade students who were in need of further reading instruction. *PRJ*, published by Cambium Learning Group, is a supplemental reading intervention offered to students from grades six to nine. For each grade level, the topic areas remain the same but are explored from different perspectives and with grade-appropriate content. The intervention is organized into 15 Expedition lesson series taught daily in 50-minute periods during one school year. Each Expedition comprises two two-day sequences that include a day of teacher-directed whole group instruction followed by a day of whole group review and small group instruction. This sequence is then followed by a fifth day of student individualized computer-based practice. After the fifth day, the two two-day sequence and a day of individualized practice are repeated to complete the ten lessons that form each Expedition. The materials for the intervention provided by *PRJ* include teacher guidebooks, student workbooks, DVDs, and a library of fiction and non-fiction books and magazines that are age-appropriate and intended to engage the adolescent reader.

VSR II served students at nine middle schools located in three school divisions in the east, central, and west part of the state. Eligibility for participation in the study included students who scored at least two years below grade level on the Gates-MacGinitie (GMRT) 4th Edition when in the sixth and seventh grades. Also eligible were students in grades 6 and 7 who did not attain the proficient performance level on the Virginia Standards of Learning (SOL) English/ Reading assessment, regardless of their GMRT score. A total of 913 students were eligible for the study. Eligible students were randomly assigned to treatment and control groups. The treatment group was instructed using *PRJ*, while the control group received no supplemental reading instruction. RMC Research Corporation (RMC) was responsible for the VSR II implementation evaluation and impact study. Data for the implementation evaluation were collected through interviews, site visits, and review of documents. The impact study focused on results from the GMRT (comprehension, vocabulary, and total reading) and the SOL English/Reading assessment for control and treatment students.

On April 12, 2011, Striving Readers grantees were informed that Congress had not appropriated funding for the 2011 Fiscal Year and the study was halted. With the first year (September 2009 to June 2010) dedicated to planning, *PRJ* implementation was limited to one year (September 2010 to June 2011). This report reflects findings from this initial year of implementation and the preliminary impact of the intervention on treatment students compared to control students. A summary of key findings are presented next.

Year One Implementation Study

- Findings from the first implementation year suggest that the interventionists received the planned professional development and supports, with the exception of one school, where the interventionist left the school before the end of the year.
- The delivery of classroom instruction was similar across interventionists. However, the interventionists varied on the amount of material covered (measured as Expeditions completed).
- Three factors found to influence the implementation across all participating schools: (1) the planning year facilitated the implementation of the project by allowing the implementers to familiarize themselves with the intervention and the study, and opening the lines of communication across all participants; (2) the professional development and supports was a second “general” positive contributor that enhanced teachers’ knowledge of the program and helped them move from learning into implementing within a short period of time; (3) alternatively, the elimination of the Striving Readers grant before the end of the school year created a challenge to the implementation as teachers and key players started looking for jobs.
- Factors that appear to be specific to one or a small group of schools included: (1) actual time of instruction, including instruction periods below the required 50 minutes; (2) days dedicated to instruction, defined as total school days minus days of cancelled instruction; (3) technology glitches that influenced actual time of instruction; and (3) classroom management or teachers’ ability to engage students. Data from the first implementation year suggest that these “specific factors” had moderator roles, either reducing or strengthening the impact of the general factors on the fidelity of implementation.

Year One Impact Study

- A total of 913 students were eligible for the study. Of these, 481 students were in grade 7 and 432 in grade 8. The eligible students were then randomly assigned to treatment (457 students) and control (456 students) groups.
- Students in the treatment and control groups performed equally well on both the GMRT and the SOL at the end of the first implementation year. After adjusting for the student level covariates that were retained in the final analysis model, the difference between the two groups on all test scores was less than two scale score points. Similarly, the effect sizes were virtually zero.
- When the analysis was disaggregated by grade, the pattern of non-significant results was repeated, except for the GMRT Comprehension subtest. For this subtest, grade 7 students in the treatment group did significantly better ($p \leq 0.05$) than control students, but the effect size (0.21) was relatively small.

INTRODUCTION AND BACKGROUND

By the end of school year (SY) 2008-2009, Virginia Department of Education (VDOE) applied for and was awarded a four-year Striving Readers grant to implement the *Virginia Striving Readers Intervention Initiative* (VSR II). VSR II proposed to implement a supplemental reading intervention with students in seventh and eighth grades at nine public schools in three school divisions in Virginia. The school division representatives chose to implement *Passport Reading Journeys* (PRJ), an intervention that was already in use in many Virginian schools. PRJ had been studied previously in other school districts using quasi-experimental designs, but had not been tested with an experimental study. A total of 913 students were eligible to participate. This report presents provisional findings from the first implementation year of VSR II (SY 2010-2011) and its preliminary impact on participating students. The report is organized in four parts:

- *Introduction and Background* places the study within a conceptual and geographical framework. It introduces the reader to the Striving Readers program and VDOE's previous participation in reading initiatives, and briefly describes the schools that participated in the study.
- *Part I* offers an overview of the intervention, as proposed by the developers, and describes the logic model that informed the VSR II.
- *Part II* focuses on the implementation study. It includes a description of the study design and methods of data collection and analysis, and discusses findings.
- *Part III* describes the design for the impact study and presents findings.

The report is supplemented by two Appendices. *Appendix A* includes the final model results for the impact analysis. *Appendix B* includes copies of the forms used for data collection for the implementation study. It is important to emphasize that findings are preliminary since the study, originally planned for three years, was interrupted at the end of its first implementation year.

Background

Striving Readers was a U.S. Department of Education (USED) program that reflected a joint effort from the Office of Elementary and Second Education (OESE) and the Institute of Education Sciences (IES). The program had a dual purpose: (a) improve the reading skills of middle and high-school students who were reading below grade level, and (b) build a scientific base to identify effective strategies that improve adolescent literacy skills. Striving Readers was geared to Title I eligible schools that have significant percentages of students reading below grade level and/or schools that were not meeting or at-risk of not meeting adequate yearly progress (AYP) requirements under the *No Child Left Behind Act* (NCLB). The program included three key components: (a) supplemental literacy interventions targeted to students who are reading "significantly below grade level;" (b) cross-disciplinary strategies for improving adolescent literacy, including professional development and research-based reading and comprehension strategies; and (c) an evaluation component that uses an experimental design (USED, 2008).

The Commonwealth of Virginia has a long tradition in providing support to reading initiatives. In 1997, the state leveraged resources to implement the *Early Intervention Reading Initiative*, based on the work of Reid Lyon, Connie Juel, and Marilyn Adams (Wright, 2007). To support the initiative, researchers from the Curry School of Education, at the University of Virginia, developed the *Phonological Awareness Literacy Screening* (PALS). PALS is a research-based assessment of literacy fundamentals in children from preschool to grade three. The assessment is now used on almost all Virginian schools and early literacy programs, as well as schools around the country.¹

Continuing with this focus on early intervention for struggling readers, in 2002, Virginia's governor launched the *Partnership for Achieving Successful Schools* (PASS). PASS represented a statewide partnership of government officials, state and local school educators, and business and community leaders who shared a common concern with boosting student achievement in more than 100 academically struggling schools. Virginia was also one of the earliest recipients of a USED *Reading First* grant, in 2003. The *Reading First Initiative* involved about 90 elementary schools across the state. In 2007, Virginia was one of three states to be awarded the USED *Reading First Targeted Assistance Grant* (TAG) for demonstrating increased reading achievement over two consecutive years.

Adolescent literacy was the theme of the 2007 Virginia Board of Education summit, "*Closing the Achievement Gap: A Focus on Adolescent Literacy*." The following year, Virginia's Governor assumed the chair of the Southern Regional Education Board (SREB) Committee to Improve Reading and Writing in Middle and High Schools. The Committee proposed strategies geared toward improving reading skills for adolescent struggling readers at public schools. The Striving Readers program aligned with this continuum of initiatives for improving literacy for students from early childhood to grade 12.

Process

VSR II built on VDOE's experience with the previous work and the lines of communication between the state and the school divisions that had been strengthened through the *Reading First* project. Representatives from VDOE, the school divisions, and RMC organized a planning team to prepare for the response to the Striving Readers' Request for Proposal (RFP) in 2008. The team had three main goals: select the intervention to be implemented, organize the study, and write the proposal. Each team member explored a number of adolescent supplemental reading interventions that were based upon reading research and had been studied with the use of rigorous evaluation methods. VDOE and RMC staff helped with preparing a list of reading interventions that qualified under the Striving Readers program requirements, and answering research-related questions about those programs. Yet, the final selection was made by the school divisions, in conversation with the schools. One of the participating school divisions had previous experience with *PRJ* and helped the other two school divisions come to a consensus.

PRJ is a supplemental reading intervention for students in grades 6 through 9. The intervention is planned for daily, 50-minute period lessons throughout the school year. *PRJ Beginnings* is offered to students in grade 6, *PRJ I* is for students in grade 7, while students in grade 8 are

¹ Information on PALS can be found at <https://www.palsmarketplace.com/about/>

taught with *PRJ II* and those in grade 9 are taught with *PRJ III*. The intervention provides a standard protocol, easy-to-follow lesson plans, an assessment system, and supporting materials for teachers and students. The lessons offer a mix of teacher-directed whole group, small group instruction and student individualized practice organized in Expeditions that focus on themes of interest for adolescent readers. For example, Expedition 3 of *PRJ I*, “What’s Out There?” is organized around the theme of space exploration and search for life outside the solar system. Expedition 11, “Things in Motion,” includes readings on acceleration using a number of topics popular among adolescents, such as bikes, motorcycles, skateboarding, baseball, and the breaking of the sound barrier. The intervention presents itself as open to a diverse student population, including students with disabilities and English language learners, and does not propose a minimum reading level for participants.

Addressing the Striving Readers requirements, *PRJ* is based on findings from reading research and is being implemented in many school districts nationwide, including Virginia. It has been studied through the use of quasi-experimental designs (Denton, 2008; Shneyderman, 2006), but no experimental study was conducted prior to *VSR II*. *Part I* of this report provides a detailed description of the intervention and how it was planned to be implemented under *VSR II*.

Context

To select the participating schools, VDOE initially reviewed results from the Virginia Standards of Learning (SOL) English/Reading assessments conducted in spring of 2007 and 2008. School divisions that had schools with large numbers of striving readers in seventh and eighth grade were then invited to participate. The three participating school divisions – Norfolk City Public Schools (Norfolk), Richmond City Public Schools (Richmond) and Roanoke City Public Schools (Roanoke) – are located in urban, high poverty settings. All participating schools serve students from grades 6 through 8. Two of the three participating school divisions, Norfolk and Richmond, had been part of the *Reading First Initiative*. Roanoke, although not involved in *Reading First*, expressed strong interest and commitment to the study when approached by VDOE.

Norfolk City, the second largest independent city in Virginia, is located on the eastern side of the state and overlooks the Chesapeake Bay. The city is headquarters for the Norfolk Naval Base and the North Atlantic Treaty Organization (NATO) Allied Command Transformation. The school division had three of its seven middle schools participating in the project: Azalea Gardens Middle School, Blair Middle School, and Norview Middle School. In SY 2009-2010, the year prior to the *VSR II* implementation, Norfolk served 34,068 students in 51 elementary, middle and high schools. The student enrollment in Azalea Gardens totaled 832 students and the school was in Year 2 of school improvement, according to the *NCLB* accountability requirements. Blair Middle served 967 students while Norview Middle served 925 students. Both schools were in Year 4 of school improvement.²

² Information on the school performance for this section was retrieved from the Virginia Department of Education, School Report Card, <https://p1pe.doe.virginia.gov/reportcard/>; demographics were retrieved from the fall membership site, http://bi.vita.virginia.gov/doe_bi/rdPage.aspx?rdReport=Main&subRptName=Fallmembership

Richmond City, centrally located, is the state capital and the third largest city in Virginia. Lucille M. Brown Middle School was the only one of the eight Richmond City middle schools that participated in VSR II. In SY 2009-2010, the school division served 22,994 in 47 schools. Lucille M. Brown served 701 students and offered a Title I Schoolwide Program. The school had made AYP in SY 2009-2010.

Roanoke City, located in the Blue Ridge Mountains, is a commercial hub for the southwest Virginia—southern West Virginia corridor. All five of its middle schools were part of VSR II. In SY 2009-2010, the school division served 12,948 students in 25 schools. Lucy Addison Aerospace Magnet Middle School, which served 474 students, was a Title I – Targeted Assistance Program school in Year 2 of school improvement. James Breckinridge Middle School served 612 students while James Madison Middle School, served 593 students. Both schools were in Year 3 of school improvement. Stonewall Jackson Middle School, with 492 students, offered a Title I Schoolwide Program, and made AYP that school year. Woodrow Wilson Middle School served 459 students and also made AYP. Table 1 summarizes the enrollment, minority status, and AYP status of participating schools in the fall of 2009-2010, the school year prior to the VSR II implementation.

Table 1. Information on VSR II schools (school year 2009-2010)

School Division	Schools	Student Enrollment		NCLB Status
		Total (N)	Minority (%)	
Norfolk City	Azalea Gardens	832	43.5	Year 2 of school improvement
	Blair	967	62.7	Year 4 of school improvement
	Norview	925	79.1	Year 4 of school improvement
Richmond City	Lucille M. Brown	701	84.2	Made AYP
Roanoke City	Lucy Addison Aerospace	474	86.7	Year 2 of school improvement
	James Breckinridge	612	68.3	Year 3 of school improvement
	James Madison	593	43.3	Year 3 of school improvement
	Stonewall Jackson	492	37.0	Made AYP
	Woodrow Wilson	459	44.9	Made AYP

The next section provides a description of the intervention, as proposed by the publisher, and the adaptations that were made to the intervention to address the needs of each participating school during the VSR II project.

PART I: INTERVENTION AND LOGIC MODEL

Description of the Intervention Model³

Classroom Intervention

Published by Cambium Learning Group (Cambium), *Passport Reading Journeys (PRJ)* is an adolescent reading intervention that blends teacher-led targeted instruction with student-centered strategies, and uses information technology to engage student and reinforce instruction. The program is formatted as a series of lessons designed to be delivered over the course of one school year. Across grade levels, the intervention maintains the same structure but the content and reading level changes. The intervention is called *PRJ Beginnings* for sixth graders; *PRJ I* for seventh graders; and *PRJ II* for eighth graders. *PRJ III* focuses on struggling ninth grade readers. VSRII schools implemented *PRJ I* and *PRJ II*.

The intervention encompasses daily, 50-minute lessons that provide explicit, systematic instruction in critical reading skills. The lessons are organized in Expeditions, for a total of 15 Expeditions per grade level. Each Expedition is organized in ten-lesson routines to facilitate teacher-led instruction and students' independent practice. Lessons one, three, six, and eight of each Expedition are organized around whole-group instruction in which students are introduced to new vocabulary and a new reading passage. Lessons two, four, seven, and nine include whole-group review of the previous day's instruction and the opportunity for students to re-read the passage to build fluency, independently or with a partner. During this period of independent or small-group structured practice, the interventionists are expected to work intensively with students who present specific needs. Lessons five and ten of the Expedition are spent in independent or paired practice on *Strategic Online Learning Opportunities (SOLO)*. *SOLO* is an interactive, web-based reading resource component that provides students with opportunities to engage in self-paced practice of vocabulary and comprehension skills, and assess their learning.

Core instructional elements in reading

PRJ blends reading foundational skills, vocabulary instruction, direct and explicit comprehension strategies, text meaning and interpretation, and writing. The intervention is based on reading research and research in learning, including works from Baker, Simmons, & Kame'enui (2004), Beck, McKeown, & Kucan (2002), Biancarosa, & Snow (2006), Deshler, Palincsar, Biancarosa, & Nair (2007), Gersten, Fuchs, Williams, & Baker (2001), Graham & Perin (2007), Marzano (2004), Mastropieri, Scruggs, & Graetz (2003), Scammacca, Roberts, Vaughn, Edmonds, Wexler, Reutebuch, and Torgesen (2007), and Schatschneider, Buck, Torgesen, Wagner, Hassler, Hecht, & Powell-Smith (2004).

Instruction in reading foundational skills is provided through the word study component of the Expeditions. The students with the lowest word reading ability are taught with a thirty-lesson word study program, beginning with a review of single letter-sound correspondences. These explicit word study lessons may be provided prior to implementing the first Expedition lesson or

³ This sub-section was reviewed by Cambium Learning Group staff for accuracy.

on alternate days once the intervention sequence has begun. Explicit instruction is delivered with a focus on decoding, spelling, vocabulary, comprehension, and fluency. In addition, the students receive continued systematic and explicit instruction in practices that teach them to be flexible decoders. Lessons offer instruction in affixes, sight words, decoding multisyllabic words, spelling, and word or phrase fluency.

Vocabulary instruction is addressed through the use of explicit instruction of word meanings and development of strategies to determine unknown words through morpheme analysis. A planned sequence of vocabulary skills and multiple exposures of high-utility words are meshed within the passages, comprehension activities, and text discussions. Affixes and roots are explicitly taught to students in a sequential pattern that is supported by the identified words in the passages. *SOLO* provides self-paced practice on vocabulary and comprehension skills. Multiple tools help students determine word meaning and contextual use in self-selected, Lexile-leveled⁴ reading passages. New words are introduced with age-appropriate definitions and examples. Supports include automated clues or prompts and a function that allows students to click on difficult words to hear their pronunciation and definition.

Direct and explicit comprehension strategies are woven into instruction to help students develop skills that are traditionally lacking among striving readers, such as making and confirming predictions, identifying or generating main ideas, summarizing, and making inferences (Baumann, Font, Edwards, & Boland, 2005). Comprehension skills are taught explicitly and applied to expository passages both in the text and in *SOLO*. The lessons incorporate strategies for making connections, asking questions, visualizing, and making inferences. Students also examine organizational text features that serve as frames for information and logical links between ideas. Comprehension strategies are scaffolded in three stages: interventionist modeling, interventionist assistance with student practice, and student independence. The stages represent a gradual shift in responsibility for learning from the interventionist to the students. Direct instruction includes modeling in which the interventionist reads aloud to show students how to use the reading strategies. A thinking aloud process is employed to make thought processes transparent to students. Modeling is followed with direct, guided practice and self-assessment to enable students to apply the newly learned skills and strategies in a variety of texts that cover varying levels of reading ability.

Discussion of the text meaning and interpretation are elicited through questions posed by the interventionist during and after reading. In the first reading of the selection, the interventionist asks literal comprehension questions to ensure understanding and to model the metacognitive process of self-monitoring. After students complete their reading, the interventionist asks critical thinking questions that reflect the various levels of the revised Bloom's Taxonomy (Anderson & Krathwohl, 2001). This interventionist-directed questioning is integrated with student-generated questions as a key reading comprehension strategy during reading and a way for students to monitor and deepen their understanding of the text.

⁴ Lexile is a numeric representation of an individual's reading ability or a text's readability based on the work of Jackson Stenner, from MetaMetrics, Inc.

PRJ includes a two-fold approach to writing. One approach is writing in response to reading, which helps students check their understanding, reinforces returning to the text for more information, and sharpens critical thinking skills. Every Expedition integrates writing practice and instruction. The second writing approach is a writing lesson at the end of each Expedition that extends the comprehension skills and content into a writing topic. These lessons are designed to help students develop writing proficiency. Writing instruction includes a focus on generating ideas, elaboration, organization, word choice, sentence fluency, and conventions. Lessons employ explicit instruction, models of effective writing, and lesson-specific rubrics to enable self- and peer-evaluation.

Motivation and engagement in literacy

To improve student motivation and engagement in literacy learning, *PRJ* offers a library as part of its instructional materials. The primarily nonfiction texts have been field-tested for high interest with middle school students and reach across the curriculum to foster literacy development in social studies and science content areas. Examples of topics for the Expeditions include *The Science of Catching Criminals*, *Predicting the Perfect Storm*, *The Internet: A Wired Word*. The characters, content, and activities target students who represent diverse cultural and linguistic groups. DVD segments are presented before and after each Expedition to provide background knowledge and create the foundation for understanding of content. Each video segment is hosted by a teen who asks probing questions, highlights essential content-area vocabulary words, makes relevant connections to students' lives and engages them in thinking about the topics at hand.

Use of technology

Technology is incorporated into *PRJ* through the *SOLO* component. In addition, lessons one, six, and nine include video technology in the form of DVD segments. *SOLO* is based on Computer Assisted Collaborative Strategic Reading (CACSR). Research has found that computer-assisted reading instruction helps struggling readers by providing individualized instruction, immediate feedback, a motivating learning environment, a way to monitor student progress, and a way to maintain student interest (Kim, 2002; Kim, Vaughn, Klingner, Woodrugg, Reutebuch & Kouzekanani, 2006).

Professional Development

Cambium Learning Group offers diverse professional development activities for the interventionists that include launch training, online product training, ongoing consultative support, coursework on adolescent literacy, and data analysis meetings. The launch training, the online product training, and the online support are part of the intervention's package, while the other activities depend on separate contracts between the schools or school divisions and the developer.

Group professional development

The launch training is a six-hour, two-day session that introduces the interventionists to *PRJ*. The objective of the launch training is to prepare the interventionists to implement the intervention with fidelity. Participants learn about the intervention, and are instructed in specific practices, such as administering the assessment measures, grouping students, setting up their classrooms, structuring small and large group instruction, and using all intervention materials. The training includes time for practice on lesson delivery, and instruction in a computer lab on *SOLO*, the technology components of the intervention. Training on Voyager data management system (VPORT) and classroom management are also included.

During launch training, participants are invited to observe and reflect as the trainer demonstrates a lesson. Following the demonstration, participants have opportunities to practice teaching the lesson. They regroup at the end of the training to debrief and plan next steps. Materials include DVD footage of classroom instruction, illustrations of program features, and the measures to practice administering and scoring the assessments. Tutorial booklets introduce the key features and components of the program, present sample lessons at each grade level and a review of the assessment component, including entry points, and provide suggestions for managing time and working with students with special needs.

The online training modules provide instruction in a self-paced, interactive environment that allows the interventionists to search, annotate, and bookmark information. Each module includes curriculum, assessment, and implementation overviews, and provides links to a library of video segments. The modules also offer suggestions on classroom management, and on understanding Lexile levels. At the conclusion of each section, the interventionists take a quiz to check the knowledge gained. They can redo the modules to improve knowledge or come back to them later to refresh information.

Coursework on adolescent literacy are delivered through VoyagerU, Cambium’s professional development arm. Two 15-hour courses present foundational information about adolescent literacy, define the specific reading skills the students need in order to master each academic subject, and identify the best strategies to help middle school students develop their reading comprehension skills in these subjects. These courses were developed by Deborah Reed, principal investigator and project manager for the Texas Adolescent Literacy Academies, Diane Lapp, Distinguished Professor of Education, San Diego State University and a member of the International Reading Association Hall of Fame, and Douglas Fisher, professor of language and literacy education at San Diego State University and co-director for the Center for the Advancement of Reading at the California State University. Details about the professional development planned for VSR II are provided in the next section (*VSR II Logic Model*.)

Individual supports

Cambium offers individualized supports for teachers who are implementing *PRJ* through trained experts, the Voyager Implementation Specialist (VIS). The VIS visits each participating schools to observe how the intervention is being implemented. Debriefings are conducted with each interventionist, the building principal, and other designated parties. The frequency of visits is

dictated by interventionists' needs, but also by the contract established between Cambium and the school or school division. The VIS review student data with the interventionist on an ongoing basis to accurately formulate prescriptive technical assistance, which must be geared towards each interventionist's needs. The interventionists are also provided with the VIS' phone number and e-mail address, and are encouraged to contact them as needed.

Assessments

The assessment system within *PRJ* includes benchmark assessments, fluency measures, end-of-lesson assessments, progress monitoring, and student self-assessments through *SOLO*. These assessments are based upon Lexiles to allow educators to quickly estimate expected reading comprehension and monitor progress. Lexile, developed by MetaMetrics, Inc., is a measure of the difficulty of comprehension of a text (Stenner, 2001; Stenner & Wright, 2004). The measure, based on calculations of word frequency and sentence length, is presented on a scale that ranges from 0L to 2,000L. Text measures at or below 0L (zero Lexiles), are reported as BR (Beginning Reader).

The benchmark assessments were developed using the Rasch one-parameter item response theory model to relate a reader's ability with the difficulty of the items. The primary sources of validity evidence for Lexiles come from examining the content of the *PRJ* assessments and the degree to which the assessments measure reading comprehension (Lennon & Burdick, 2004). The *Reading Benchmarks* are expected to be administered in a whole group format three times per school year during specified periods to assess comprehension (MetaMetrics, 2009). The *Reading Benchmark I*, conducted at the beginning of the school year (September), is used to place students in the appropriate level of reading materials and in one of three appropriate levels of text in *SOLO*. The *Reading Benchmarks II* and *III*, conducted in January and May, are used to monitor student progress on vocabulary and comprehension.

The *Vital Indicators of Progress* (VIP) measures identify students who have underlying decoding problems and who can benefit from targeted word study. VIP was developed by Roland Good and colleagues at the University of Oregon, and includes six tests: Letter Naming Fluency, Initial Sound Fluency, Phoneme Segmentation Fluency, Nonsense Word Fluency, Reading Connected Text, and Retell Fluency (Peyton & Macpherson, 2008). Only the Reading Connected Text assessment is used in *PRJ I* and *II* to identify students who would benefit from instruction in reading foundational skills. The test is administered three times per school year.

Formative assessments are also conducted at the end of each two-week Expedition lesson series. These are criterion-referenced tests that measure comprehension and vocabulary skills that have been taught during the lesson series. Additionally, student self-assessments are available through the *SOLO* Progress Report. The *SOLO* reports provide students guided feedback on their reading speed and accuracy scores for comprehension as they progress in each Expedition. The interventionists can review the feedback provided to students by logging into VPORT. Based on student performance on these assessments, the interventionists are directed to re-teaching opportunities that are targeted to the specific skills where students have demonstrated difficulty.

Target population

PRJ I and *II* are geared to students in grades 7 and 8, respectively, who are defined as struggling readers by their schools. The intervention does not propose a maximum cut score for participation. Likewise, there is no established minimum cut score. The intervention incorporates a number of differentiating strategies that are designed to address students with a broad range of reading levels and students who have limited English proficiency. *PRJ* also addresses the needs of students with disabilities who are able to receive instruction in a classroom environment and can be served through group instruction.

Desired characteristics of the interventionists

PRJ reflects a prescriptive intervention. Each interventionist receives a teacher's guide that includes an explanation of the intervention, the goals, scope and sequence of each component, followed by detailed guidelines on how the lesson must be taught. The interventionist is expected to follow the guidelines, and maintain the scope and sequence of each lesson's components. Small variations within the lessons are allowed to address differences in class period and students' needs, as explained below.

Decisions about hiring interventionists are left to the local education agencies (LEAs). The intervention's scripted format and the professional development offered are intended to facilitate instruction by experienced and non-experienced interventionists alike. For teachers who do not have a reading background, Cambium provides additional training on reading through its professional development branch (VoyagerU).

Desired characteristics of the classrooms

Cambium's requirements for *PRJ* classrooms include appropriate space for small group instruction and for storage and use of material connected to the lessons, including teacher guide book, students' workbook, and the library. Additionally, the classrooms should have a DVD projector and computers for *SOLO* lessons. Cambium recommends a maximum of 20 students per classrooms.

Recommended intensity for the students

PRJ is to be taught daily in a 50-minute period class within one school year. The intervention has been adapted for block time implementation (e.g. 90-minute period), as more schools adopt the longer periods of instruction. Interventionists are expected to cover one lesson per period or two shortened lessons in the 90-minute time. The pacing of the lesson should be a balance between the expected one lesson per period and students' needs. If the lesson cannot be completed within the allotted period, the interventionists are instructed to continue it the following day, starting from the point they stopped the day before. Reducing writing time is an allowed strategy to accommodate the pacing, but reducing reading time is not recommended. The interventionists are not expected to complete all 15 Expeditions within the year, although they should try to cover as many as possible. *PRJ* students are assessed frequently for progress

on vocabulary, comprehension, and fluency, with the assessments described above, and results from the assessments are used to plan instruction.

VSRII Logic Model

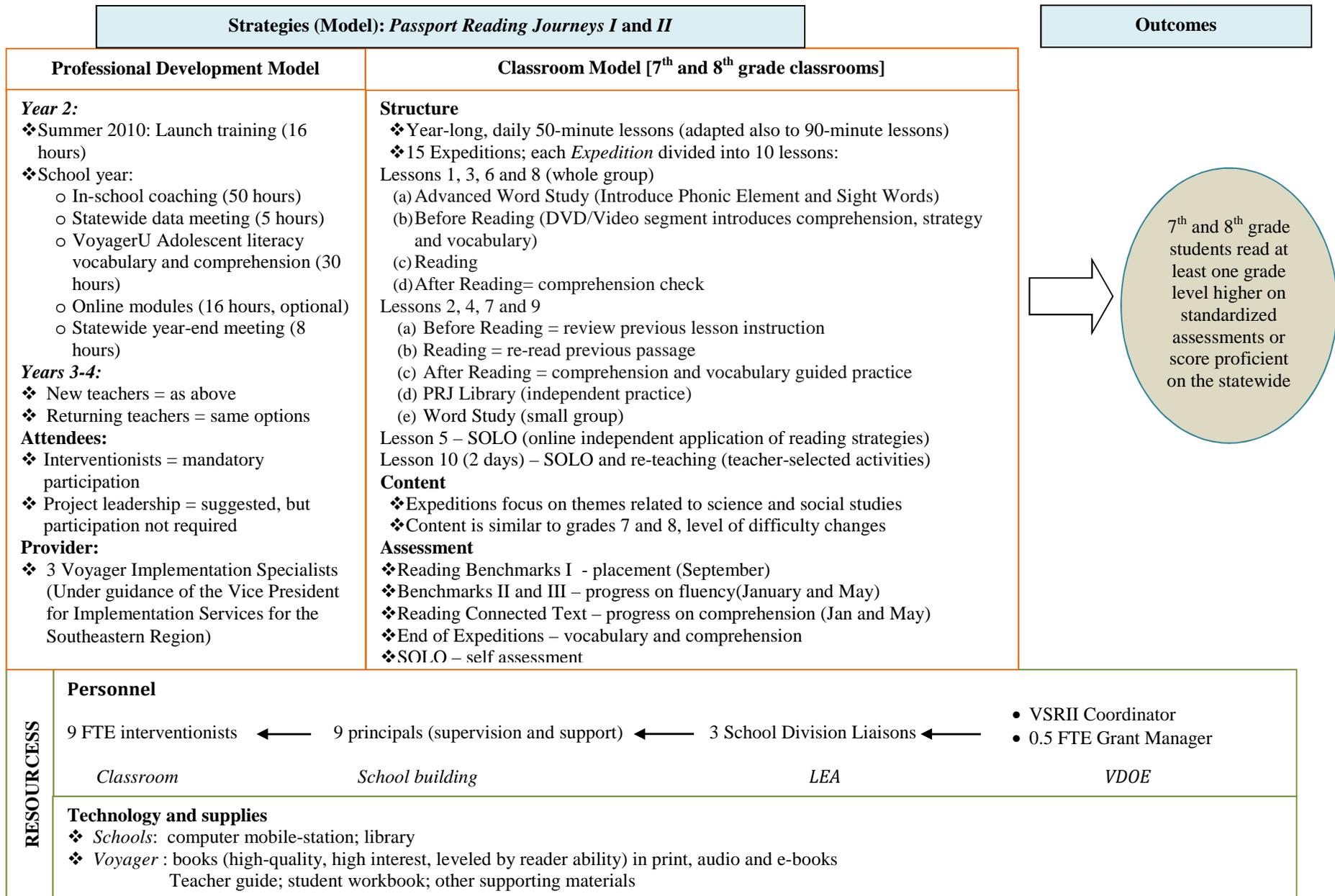
Overview

Figure 1 displays a graphic representation of the logic model that informs VSRII. The model includes two components and one outcome. The components are the professional development model and the classroom instruction model. These two models follow as close as possible the model proposed by the *PRJ* developers, with a few variations that addressed the specific needs of participating schools. The expected outcome at the end of the initiative was that students in seventh and eighth grades who participated in the project read at least one grade level higher on standardized assessments and/or score proficient on the statewide assessment.

The personnel resource available to support VSRII implementation included 23 educators located within the schools, LEAs, and the state education agency. Each participant had defined roles and responsibilities within the project and in relation to the study conducted by RMC, as explained below.

At the state level, the Director of Elementary Instruction Services was responsible for overseeing the project and its interaction within VDOE's overall strategic plan. Together with the Project Coordinator (henceforth called VSRII Coordinator), they worked in close collaboration with the VDOE's Office of Middle and High School Education and Office of School Improvement to ensure that the intervention was aligned with the state standards and school improvement priorities. The VSRII Coordinator was responsible for the daily leadership of the project and held four major roles: (1) monitor the distribution of grant money to the schools and project-related materials and activities; (2) facilitate communication between the state, school divisions, schools, developers, and evaluators; (3) help participants to find solutions to potential challenges; and (4) support and monitor the project implementation. Two people held this position successfully. The first VSRII Coordinator had a background in elementary school reading and had been the coordinator for the *Reading First Initiative*. By the end of the planning year, he moved to another position within VDOE and was replaced by a new coordinator in July 2010. The second VSRII Coordinator, who had a title of Grants Specialist, was a reading coach with experience in middle schools. The project coordination represented a Full Time Equivalent (FTE) position paid with Striving Readers' funds. Additionally, the grant paid a part-time Grant Manager who helped with the finances and purchase aspects of the project, including the disbursement of funds to the schools and consultants.

Figure 1. Logic model - Virginia Striving Readers Intervention Initiative (VSRII)



Each of the three participating school divisions identified a LEA liaison who worked with the VSR II Coordinator, the school administrators, and *PRJ* developers to ensure the successful implementation of the intervention. The LEA liaison (1) monitored the use of grant money by the schools; (2) supported the school principals in the hiring and supervision of interventionists; (3) received reports from the *VIS* regarding the implementation of the intervention at each school; and (4) helped developers and principals find strategies to overcome challenges to the implementation. He/she was also the contact person for the implementation and impact study conducted by RMC. In this role, the LEA liaison facilitated the evaluators' entrance into the schools and was responsible for the provision of student demographic and assessment data to the evaluators. The liaison for Roanoke City was the English Language Arts Supervisor. The liaison for Norfolk was the Senior Coordinator of Instruction, English. Richmond divided the responsibilities among two representatives. One liaison, the Title I Reading Instructional Specialist, was responsible for issues related to the intervention and its implementation in the classroom; the second liaison, the Grant Manager, was the point of contact for finances and data.

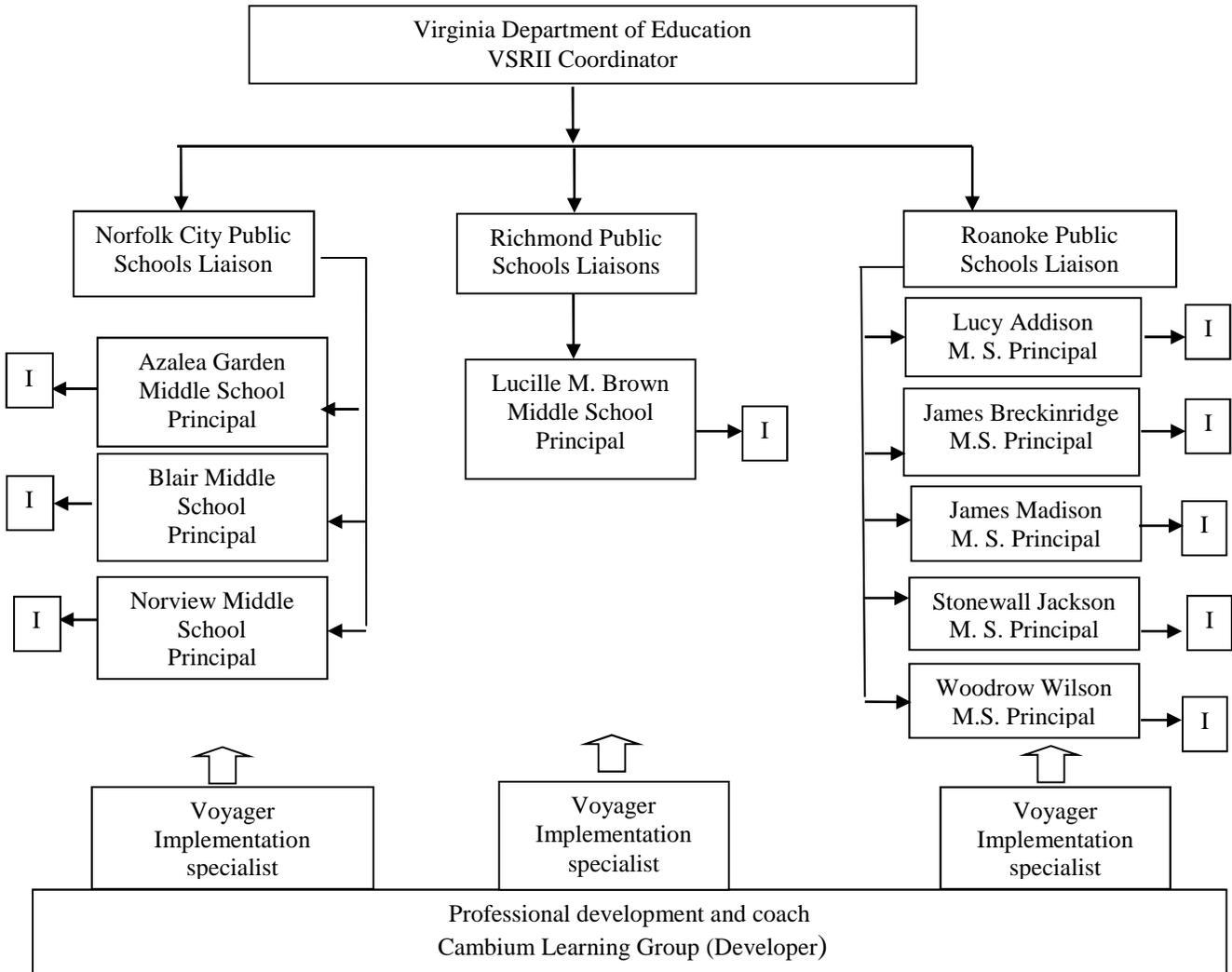
At each of the nine schools, the principal or a designated representative assumed the school liaison role. Their responsibilities regarding the implementation included (1) hiring and supervising the interventionists as members of the school teaching staff; (2) monitoring the interventionists' attendance at required state and *PRJ* training sessions; (3) ensuring that the intervention classrooms were adequately equipped; and (4) acting on formative feedback received from the *VIS* regarding the implementation of the intervention within the schools.

For Cambium, the Vice President of Implementation Services in the Southeastern Region was responsible for overseeing the implementation at the VSR II schools. The Vice President supervised a team of three *VIS* assigned to the project (one per school division). At the assigned school, each *VIS* was responsible for (1) providing professional development and coaching for the interventionists; (2) supervising the work of the interventionists at each school; and (3) communicating their findings to the interventionists, the school principals and to the Vice President.

Grant funds were used to pay the interventionists, the VSR II Coordinator and VDOE Grant Manager, purchase computers, DVD projectors, computer mobile station, and support material that were needed to equip the *PRJ* classrooms. The contract with Cambium included professional development, individual supports through a coaching system, and the provision of materials, such as guidebooks, workbooks, classroom library, and DVD library.

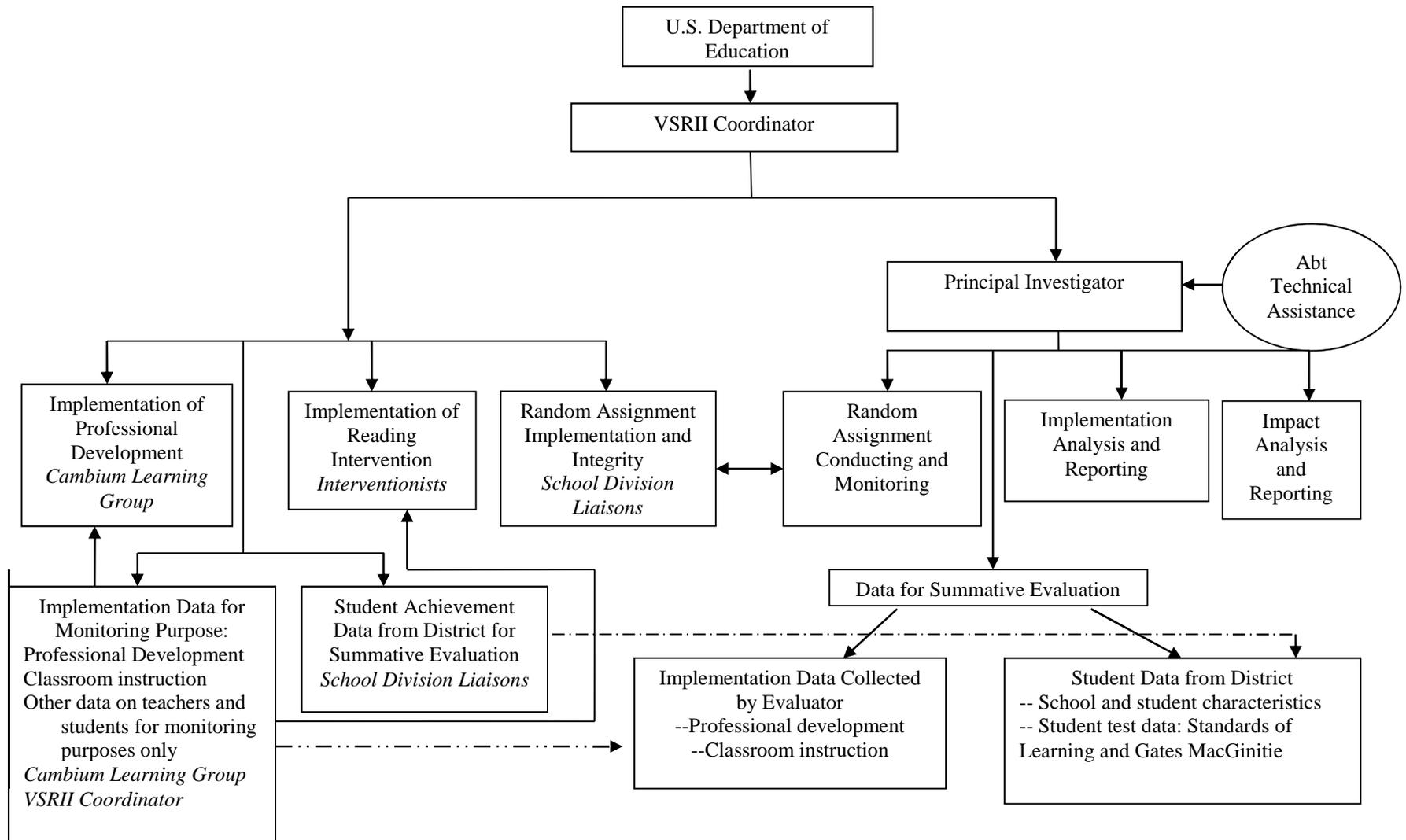
RMC Research Corporation (RMC) was contracted by VDOE to conduct the implementation and impact study. The RMC team worked with the VSR II Coordinator, the school division liaisons, school administrators, and interventionists to plan the study and ensure its integrity. On the next pages, Figure 2 displays the *VSR II* management chart for the implementation, while Figure 3 displays the intersection of the implementation and impact study within the VSR II organization.

Figure 2. VSR II – management chart



I = Interventionist

Figure 3. VSRII – organization chart



VSRII professional development model

Group professional development

Table 2 summarizes the professional development activities that were planned for the interventionists and key VSRII participants for the first implementation year.

**Table 2. VSRII – planned professional development activities
(summer 2010 – spring 2011)**

Format	Trainer	Content	Open to	Hours
Whole group, face-to-face	Cambium Learning Group (Vice President of Implementation Services and Voyager Implementation Specialists)	Launch Training, including: administering assessment measures, grouping students, classroom set up, use of curriculum materials, practice lesson delivery, SOLO instruction, pacing, use of the Voyager data management system (VPORT)	Interventionists, VSRII Coordinator, school division liaisons, school principals and two members of the evaluation team.	16
Online, individual	Cambium Learning Group (Modules created by Cambium consultants)	Two 15-hour online modules on research on adolescent literacy focusing on vocabulary and comprehension for middle school students	Interventionists	30
Whole group, face-to-face	Cambium Learning Group (Vice President of Implementation Services)	Instruction on how to interpret student achievement data and use it to tailor instruction in the classroom	Interventionists, VSRII Coordinator, principals, school division liaisons	5
Whole group, face-to-face	Cambium Learning Group	Networking, information sharing, exchanging experiences (successes and challenges), reviewing assessment data and program updates.	Interventionists, VSRII Coordinator, school division liaisons, school principals	8
Required, intervention-related, total hours:				59
Whole group (<i>required; study-related</i>)	VSRII Coordinator	Startup meeting: Introduce participants, clarify expectations, roles and responsibilities, and introduce the study.	Interventionists, VDOE staff, school division liaisons, school administrators, evaluators	4
Online, self-paced, individual modules (<i>optional</i>)	Cambium Learning Group (Modules created by Cambium consultants)	Modules that supplement launch training, including: curriculum, assessment, implementation, classroom management, understanding Lexile levels, and other topics (modules are being expanded); include video of model lessons.	Interventionists	16

VSR II incorporated a total of 59 hours of required, intervention-related professional development for the interventionists. The required professional development included 16 hours of launch training, 30 hours of online modules on adolescent literacy, 5 hours on interpreting the formative assessment data, and 8 hours on revising and reflecting on the lessons learned during the first implementation year, and preparing for the second year. The interventionists were also required to participate in 4 hours of a statewide, startup meeting with the school principals, school division liaisons, VDOE staff, and evaluators that introduced all participants to the implementation and impact study.

The professional development on adolescent literacy comprised two 15-hour courses offered through VoyagerU. The courses provided information on the basic literacy skills that are missing for adolescent struggling readers and on interventions that research has shown to be successful to build those skills. Another 16 hours of online professional development were available to the interventionists as needed. The optional modules are intended to reinforce or clarify the topics discussed during the launch training or coaching sessions.

As faculty members within their schools and school divisions, the interventionists were also required to join the professional development days offered to all faculty members. These activities were not related to intervention and, therefore, were not included in the logic model.

The group professional development activities were available to the VSR II Coordinator, school division liaisons, and school principals or representatives. Attendance for this group was not required, except for the startup meeting and the meeting planned for the end of the first implementation year. The evaluator team was represented in the launch training by two reading specialists who led the site visits.

Individual supports

VDOE contracted Cambium Learning Group to provide face-to-face individualized coaching supports for each interventionist. Three VIS were identified, one for each school division, and worked under the supervision of Cambium's Vice President for Implementation Services in the Southern Region. The VIS worked with the interventionist for a full day during each visit, but the number of days they were expected to provide coaching was negotiated a priori with the school divisions. VDOE budgeted for a total of ten full-days of on-site coaching for each interventionist. As the implementation started, the full coaching day was established as an average of five hours per visit, with a maximum of 50 hours per implementation year. The VIS was also available to address questions and concerns as needed via conference call and e-mail.

The topic of the individual on-site coaching support was tailored to the interventionists' needs, but the coaching model followed a similar format in each school. First, the VIS observed a lesson taught by the interventionist. The VIS would then model a lesson, followed by a debriefing session during which the VIS discussed the observation with the interventionist and made recommendations for improvement. After that, the VIS observed the interventionist teaching another lesson on a different day to see if he or she was implementing the recommendations. During the coaching visits, each VIS used the Cambium Learning Group's Index of Fidelity of Implementation (IFI) to assess how close the intervention implemented in

the classroom was to the model intervention. The IFI was used as a foundation for the observation instrument used by the evaluators during the site visits.

The first VSR II Coordinator decided to leave the coaching process to the VIS, but the second VSR II Coordinator, who started in the summer of 2010, planned monthly visits to the schools as a second line of face-to-face support to the interventionists. The visits would be used to observe the interventionists, provide feedback, and maintain communication with the school principals. As faculty members, the interventionists were directly supervised by the school principal or a designated assistant principal. Yet, this supervision and supports were related to topics outside the intervention, such as understanding school regulations and expectations, ensuring that students abided by the school's code of conduct and similar topics. The school division liaisons were also planning to visit the classrooms to follow through on recommendations made by the VIS and ensure that the implementation was progressing without problems.

Planned classroom instruction

Adaptations to the classroom model

The VSR II planned classroom model followed the developer's model, as described in the previous section. Adaptations were discussed during the planning year to address the different class periods at the participant schools. Two schools were using block scheduling with 90-minute classes. For these schools, Cambium suggested that interventionists present two lessons in one day, reducing writing time to adapt to a 45-minute lesson rather than 50 minutes. For schools with class periods of less than 50 minutes, the proposal was to shorten writing time and continue the lesson the following day. Another strategy to balance pacing included using an extra day in the final Expedition lesson (Lesson 10) to complete instruction or re-teaching. Cambium proposed a menu of options that interventionists could use for this extra day. These options addressed the possibility that some interventionists would need fewer re-teaching strategies and could use the time for enrichment. Alternatively, the menu also contained options for students who required further support. While writing time could be curtailed or even eliminated to maintain the pacing, the developers reinforced the need to maintain time reserved for reading, the sequence of the different components of the lessons, and the overall structure of the Expeditions. Cambium specialists were working on adapting some of the presentations to use with interactive white boards, which are commonly present in Virginia's classrooms.

Experiences for control group students

The school year in Virginia extends for approximately 180 days. Each school planned for daily lessons with seventh and eighth grade students being taught separately. The classes were planned to coincide with time reserved for electives to ensure that students participating in the study could attend the core content area classes offered to all students in the same grade level. The school division liaisons assumed the commitment that control group students would not receive *PRJ* or other supplemental reading instruction.

Roanoke and Norfolk planned to invite students in the control group to join elective classes that included arts, foreign languages, physical education (in Roanoke), and expansions of core content area classes, such as literature. Richmond was scheduling *PRJ* for fifth period and students in the control group would be offered enrichment classes that were not reading supplemental. It is of note that Richmond schools were providing instruction with *PRJ* for all its middle school students. At Lucille M. Brown, *PRJ* was provided to sixth graders and students in grades 7 and 8 who were not eligible for Striving Readers, such as those who scored one year below grade level on the GMRT or, although proficient on the statewide assessment, were close to the cut score.

Remediation classes

By law, Virginia schools are required to provide supports to all students who do not attain proficiency on the statewide assessments. Most schools offer supports during regular English classes, through small group instruction, but remediation classes are also offered after school, on Saturdays, and during summer vacation. These supports are offered to all students in need. The remediation classes focus on providing students with better understanding of the standards and skills to succeed in the state assessment. The classes are held by the regular school faculty.

After a lengthy discussion among developers, VSR II key participants and the evaluators, it was agreed that these supports did not represent supplemental reading instruction, were provided to all students eligible to remedial education (therefore, treatment and control group students had equal chance to participate), and did not involve the interventionists. Therefore, they were not considered to be in conflict with the Striving Readers' requirements.

Characteristics of interventionists

A total of nine teachers were hired to provide instruction in *PRJ I* and *II*. Initially, two schools in Roanoke planned to share one Full Time Equivalent teacher. Eventually, with support from VDOE, the school division decided to hire 4.5 FTE interventionists; with one interventionist per school to facilitate scheduling (the smallest school had a 0.5 FTE).

The hiring of the interventionists followed the process used by the school divisions to hire their regular teaching staff. The position was announced on the school divisions' web sites and in local newspapers, and the applicants were interviewed by a panel that included the school principals, who made the final decision. The teachers were required to have a valid Virginia teaching license with an elementary or middle education endorsement that included grades seven and eight. No reading certification or endorsement was required, although two of the interventionists had reading certification. Four of the schools hired existing faculty for the position. Five other interventionists were new to the schools; of these, only one was a newly graduated teacher.

The teachers were required to dedicate at least 80 percent of their time to the intervention, while the remaining 20 percent was divided between planning time and administrative duties. Some of the activities that the interventionists were involved included cafeteria and hall duty during the beginning and end of the day and during lunch time.

Classroom characteristics

Assigning permanent classrooms to the interventionists was the ideal proposal, as they could leave the intervention material in the classroom. However, the schools were facing overcrowding and accommodations were a challenging process, as explained in *Part II*. All participating schools had computer laboratories that were used for *SOLO*. Additionally, VDOE allocated funds in each school budget for the purchase of software and hardware, including 14 computers and a DVD projector per school. Since the principals could not assure that the interventionists would be assigned permanent classrooms for the year, VDOE allocated money for the purchase of carts that could transport computers, DVDs, and the *PRJ* library from a secure location to the classroom, if needed. Money was also planned for additional computers to be purchased during the implementation years two and three. The schools planned to maintain the available slots per classroom to not exceed 15 students.

Assessments

As described in *Part I* (p. 9), *PRJ* uses a number of assessments to identify students' needs and inform instruction. Conducting, analyzing and using the assessments to manage student learning were part of the launch training and the individual support that each *VIS* provided to the interventionists. A full-day workshop was also planned for the middle of the year to refresh information about data analysis from these assessments.

VSRII used the Group Reading Assessment and Diagnostic Evaluation (*GRADE*) as a diagnostic tool to identify reading skills that students have mastered and those where they needed intervention. Published by Pearson Learning Group, *GRADE* is a norm-referenced test that can be group administered. The test has eleven levels and can be applied to grades K-12; *M* is the level corresponding to middle school. Subtest and composite scores can be converted to stanines, standard scores, percentiles, normal curves equivalents (*NCE*), and grade equivalents. Reliability coefficients for alternate form and test-retest were in the 0.90 range. Concurrent and predictive validity was assessed with other standardized reading assessments, such as *Terra Nova* and *Iowa Test of Basic Skills*. *GRADE* was administered to the students in the treatment group in early September, and information was used to help the interventionists make decisions about reading levels for each treatment student.

The impact study employed two assessments that were used for determining eligibility for the study and assessing outcomes. These assessments were the *Gates-MacGinitie Reading Test (GMRT)*, 4th Edition, and the *Virginia Standards of Learning (SOL) English/Reading* assessment. The *SOL* tests were developed by a testing contractor under the guidance of VDOE staff. Statistics were established for all grade levels based on samples of 8,000 students or more and included traditional difficulties (*p-values*), item-option response distributions (all respondents, high-, middle- and low-ability; gender and ethnic groups); and biserial and point-biserial correlations (Virginia Department of Education, 2005). Results for the *English/Reading* test are presented as raw scores, scaled scores, and performance levels (below basic, basic, proficient, and advanced). *SOL* results are used to assess *AYP*.

The psychometric qualities of the GMRT 4th Edition, including evidence of reliability and validity, are well documented in a 2002 technical report (MacGinitie, MacGinitie, Maria & Dryer, 2002). Alternate form reliability coefficients for test levels appropriate for grades 6-8 range from 0.82 to 0.91. K-R 20 estimates of reliability range from 0.90 to 0.95. The GMRT has been normed for both fall and spring administration and a variety of score types are available to support analysis and interpretation (e.g., extended scale scores, percentiles, stanines, and grade equivalents). The test was renormed during SY 2005-2006 (Maria & Hughes, 2008). The school divisions administer the GMRT in April and the SOL in May of each school year.

Study eligibility was assessed with results from the GMRT and SOL English/Reading administered to students in grades 6 and 7, while outcomes were measured by GMRT and SOL results for students in grades 7 and 8. Table 3 summarizes the assessments used in VSR II.

Table 3. VSR II - list of assessments

Purpose	Name	Timeline	Application
Instruction			
Reading Diagnostic	Group Reading Assessment and Diagnostic Evaluation (GRADE)	Twice per year (fall and spring semesters)	Diagnose students' reading needs
Placement and Monitoring	Reading Benchmark I	September	Place students at appropriate reading levels
	Reading Benchmarks II and III	January and May	Monitor student progress on vocabulary and comprehension
	VIP Reading Connected Text (RCT)	Ongoing	Monitor student progress on fluency
Impact study			
Eligibility	Virginia Standards of Learning (SOL) – grade 6 & 7	Spring of the previous school year (generally May)	Identify struggling readers
	Gates-MacGinitie Reading Tests (GMRT) 4th Edition – grades 6 and 7	May of the previous school year	
Outcomes	Virginia Standards of Learning (SOL) – grades 7 & 8	May of the school year being studied	Impact evaluation
	Gates-MacGinitie Reading Tests (GMRT) 4th Edition – grades 7 & 8	April of the school year being studied	

VSR II eligible students

VSR II served students in seventh and eighth grades at nine middle schools located in three school divisions in Virginia, as listed in the Introduction. For the rest of this report, the schools will be named by numbers, randomly attributed, to maintain their privacy. In SY 2008-2009, these nine schools served a total of 5,492 students in grades six through eight. Students

eligible for the free and reduced meals (FARM) program comprised 61 percent of the schools' population. Six of the nine VSR II schools did not make AYP in the SY 2008-2009. In spring 2010, the schools administered the GMRT 4th Edition to all students in sixth and seventh grades. Students whose test results were equivalent to two or more years below their grade level were eligible for VSR II. Additionally, students in sixth and seventh grades who did not pass the spring 2010 SOL English/Reading assessment were also eligible for the intervention regardless of their GMRT scores. This process would have been repeated in spring 2011 and spring 2012 with all sixth and seventh grade students had the VSR II project continued.

Two exclusion criteria were adopted for VSR II eligibility: students with an Individual Education Plan (IEP) that precluded their participation in the study, and students whose parents requested their children be exempt from the study. The processes used to determine eligibility and randomly assign students to the treatment and control group are detailed in *Part III*.

Expected student outcomes

VDOE proposed two outcomes for the project: (a) all students receiving the intervention would improve their reading skills by a minimum of one grade level or its equivalent, as measured by the GMRT; and (b) at least 50 percent of students receiving the intervention would score at or above the proficiency level on the Standards of Learning English/Reading.

In conversations with the VSR II Coordinator, school division liaisons, and school principals, the evaluators offered to measure other student outcomes, such as motivation or changes in reading strategies. The participants decided to focus solely on assessing student reading levels through standardized tests to minimize interference in the schools' daily routines.

Planning Year (2009-2010)

Preparing for the implementation

As SY 2009-2010 started, the VSR II Coordinator established a schedule of monthly phone calls with the school division liaisons, school principals, representatives from Cambium research and implementation divisions, and the evaluators. The calls were used to clarify questions regarding the intervention and the study, finalize the selection of schools, and define a Memorandum of Assurance (MOA) between VDOE and the school divisions. The MOAs outlined responsibilities for each VSR II school, and were signed by the school principals and school division superintendents. During the months that extended from September and December 2009, two schools dropped out of the project due to conflicting requirements from another grant they were receiving, and Roanoke added one more school, to include all its middle schools in the study. USED approved the changes, which did not impact the potential number of students in the project.⁵

⁵ Table 1, in the Introduction section, displays the final list of participant schools.

Two statewide meetings were planned to bring all VSR II participants together. The first meeting was held on January 20, 2010. Present at the meeting were VDOE Director of Elementary Instruction Services, VSR II Coordinator, VDOE Grant Manager, LEA liaisons, principals for the nine participating schools, and evaluation team members. During the meeting, the VSR II Coordinator clarified the state management timeline, while the school divisions offered a brief presentation on their plans regarding the intervention and options for control group students.

The hiring process for the interventionists started around May 2010 and followed the process used for the hiring of regular school faculty members. By the beginning of summer, nine interventionists had been hired, one for each school, reflecting 8.5 FTE.

The second statewide meeting was held on August 11, 2010, following the *PRJ* launch training, and was attended by the VDOE Director of Elementary Instruction Services, the VSR II Coordinator, the VDOE Grant Manager, the LEA liaisons, the school principals, the interventionists, the evaluation team, the three VIS and their supervisor, and Cambium's Senior Research Analyst. The meeting focused on the implementation timeline, the Voyager coaching activities, and the final details of the implementation and impact study.

Preparing for the study

RMC evaluation team was a constant presence in all phone calls and statewide meetings held by VDOE. RMC used the monthly conference calls to listen to the school division and school representatives about their previous experiences with similar grants, their concerns related to the study, and their resources to deal with the study requirements. They also used the calls to become familiar with the school divisions' scheduling and regulations as they prepared to finalize the evaluation design.

During the January 2010 meeting, the evaluation team presented the evaluation design, detailed the random assignment process, discussed the data requirements for the implementation and impact study, made suggestions on obtaining parental consent, and opened the forum for questions and answers. The school principals shared their concerns on how to deal with the randomization and explain to parents that control group students would be denied the intervention. Roanoke's representative explained that buy-in was facilitated by the fact that the intervention was limited to one year and that eligible students could be assigned to the intervention the following year. The other two divisions were grasping with similar concerns of buy-in within the schools. Another concern shared during the meeting was related to scheduling, as the intervention would be a new course that had to fit within an already tight schedule, without sacrificing the other courses. School principals also raised concerns about space. The schools were overcrowded, they argued, and they had no rooms to accommodate extra classes. All principals were committed to finding a solution that avoided carting *PRJ* materials and computers from one room to the other.

At the end of the meeting, three decisions were made. First, VDOE's secure data transfer site, Single Sign-on for Web Systems (SSWS), was chosen as the locus for exchanging of student-level data between the schools and the evaluators, with VDOE providing the evaluation team

leader with access to the site. The second decision was related to the liaison staff between the schools and the evaluators for all data exchange activities. The school division liaisons accepted this responsibility. The final decision was related to parental consent. It was agreed that school principals would use their LEA procedures to communicate with the parents and allow them to exclude the child from the study (opt-out). The evaluators offered to help them through the process while not imposing their own procedures.

In April and May 2010, the evaluation project director and the evaluators responsible for the random assignment process visited all nine VSR II participant schools. The evaluators proposed to meet with the whole school staff, if needed. In Roanoke, the evaluators were accompanied by the school division liaison and met with principals, assistant principals, and, in some schools, with members of the English Department. The evaluators also met with the data officer for the school division to finalize the data needs and transfer process. In Richmond, the evaluation meeting was held with the Assistant Superintendent, the school division liaisons, and the school principal. In Norfolk, the evaluators met with the school district liaison, the principals from two of the schools, and the assistant principal from the third school. The evaluators used these visits to explain the random assignment process once more, finalize decisions regarding parental consent and data transfer, and answer any questions that the school administration and faculty still had regarding the study.

The start-up meeting in August 11, 2010 was the last planning activity and the first that included the interventionists. At that time, the evaluators answered final questions regarding the study and explained to the participants the meaning of the firewall between implementers and evaluators requested by USED. A level of trust had been established at this point and the school division liaisons and school principals expressed being comfortable with the study and the relationships with the evaluators.

PART II: IMPLEMENTATION STUDY

Study Design

Overview

The evaluation of the VSR II implementation focused on assessing how closely the implemented intervention was to the proposed model. This information was to be used to further the understanding of the findings from the impact study.

As described in *Part I, PRJ* is a highly-structured intervention in which the interventionists are expected to attend the required professional development and follow a script that details what, how, and when they will teach. Diversions from the model are not expected or welcomed, except for minor adaptations to adjust the required pacing within allocated classroom time. The intervention's structure provided the framework upon which the research questions and the development of instruments for data collection were built.

The evaluation strived to be as unobtrusive as possible to reduce the possibility of a "Hawthorne effect" (Gillespie, 1991). This effort was facilitated by the fact that Virginia school divisions already place students in remedial or enrichment classes in response to student academic indicators. Additionally, the students are tested with the two assessments that were used in the impact study. Moreover, the evaluators had no direct contact with the students involved in the project, except for silent classroom observations to which students are accustomed as a part of regular administrative visits.

Research questions

The implementation evaluation focused on the fidelity to the intervention model that had been proposed by the developers and incorporated in the VSR II Logic Model. The study was guided by two sets of questions. The first set explored the implementation of the intervention model. A second group of questions investigated factors that influenced the implementation.

- To what extent did the *PRJ* implementation in the *VSR II* schools reproduce the proposed model?
 - a. What types and how many hours of professional development were offered to the interventionists?
 - b. What types and how many hours of professional development did the interventionists attend?
 - c. How many hours of support did the Voyager Implementation Specialists (VIS) offer to the interventionists?
 - d. What types of support did the VIS provide (e.g. lesson modeling, feedback) to the interventionists?
 - e. How many hours of classroom instruction were planned?
 - f. How many hours were provided?

- g. To what extent did the interventionists follow the intervention's structure (sequence of topics and allocated time)?
- h. To what extent did the interventionists use assessments to inform instruction, as prescribed?
- What factors influenced the *PRJ* implementation?
 - a. What factors facilitated the implementation?
 - b. What factors created barriers to the implementation?

Data Collection Plan

Professional development model

To document attendance to the professional development activities, the evaluators collected data from the following key informers:

- *Trainers* – Cambium maintains logs with the types and hours of professional development offered, who attended, and what was covered during the activities. These data were accessed through VPORT. The evaluators also interviewed the VIS to obtain information regarding the coaching services provided and their perceptions about the *PRJ* implementation in the different schools, including the barriers and the facilitators encountered.
- *Trainees* – The evaluators scheduled monthly check-ins with the interventionists to obtain their perspectives on project implementation. Due to difficulties contacting all of the interventionists by telephone on a monthly basis, beginning in early 2011 the interventionists could choose between telephone and online check-ins. A total of six check-ins should have been completed, but despite efforts, the number of check-ins varied with four interventionists completing all six check-ins, three completing five, one completing four, and one with only three check-ins. The check-in was complemented with short interviews conducted during the site visits.
- *VSR II Project Staff* – The evaluators also collected information about participation in PD activities and coaching from the VSR II Coordinator and school division liaisons in each of the three districts. Additionally, the evaluators participated in regularly scheduled phone conferences with the VSR II project staff.

Classroom model

Data for the evaluation of the level of implementation of the *PRJ* classroom model were collected from the following sources:

- *Interventionists* – As mentioned above, the evaluators scheduled regular phone or online check-ins with the interventionists to collect data on professional development, but also on classroom implementation, including scheduling of classes, planning time, other assigned duties, and reflections about the intervention and its implementation.
- *Voyager Implementation Specialists* – The evaluators interviewed the three VIS to obtain information regarding their work with the interventionists and their perceptions of the barriers to or facilitators of project implementation.

- *VSRII staff* – The school division liaisons and VSRII Coordinator were also contacted regarding their assessment of how the implementation was occurring from the point of view of the school divisions and VDOE.
- *Classroom visits* – Two evaluation teams observed the intervention classrooms, with each school being visited by one team. Each team was comprised of an evaluator with a reading background and an evaluator with a methods background. Four visits were initially planned: a month from the start of classes (October), middle of the winter semester (January or February), beginning of the spring semester (April), and end of the school year (end of May).

The evaluators took extensive notes during the interviews. The interview data were then analyzed using categorizing and connecting qualitative data analysis (Maxwell & Miller, 2008), and coded thematically to reflect the *PRJ* components highlighted by the developer in its Index of Fidelity of Implementation (IFI). These components included: amount of instruction, quality of instruction, classroom management, use of assessment, and differentiation. Information from the interviews was used to foster understanding of the process of implementation in the different schools from the different actors' perspectives, as well as to provide information regarding the barriers and facilitators to implementation. The check-in questionnaires, classroom observation rubrics, and interview protocols are included in *Appendix B*.

Initially, the evaluators planned to interview the building administrators that had been assigned to supervise the interventionists at each school. However, during the planning year, it was clear that building administrators' relationship with the interventionist was not directly related to the study and, attending their request, interviews were not conducted with them.

The two of the evaluators who are reading specialists attended the launch training to become familiarized with the intervention. They then trained the other members of the evaluation team. They were also instrumental in developing the rubrics used for the site visits and supporting decisions regarding data to be collected and analyzed. Although the evaluators wanted to make unannounced visits, the complexity of school scheduling and the varying nature of the *PRJ* instruction made that impossible. To organize the visits, the evaluators obtained schedules from each school highlighting the weeks when the schools would be occupied with statewide tests, spring break and/or other events that disrupt regular classroom instruction. Additionally, they coordinated with the interventionists to avoid visits on days when the lesson time was used for assessments or independent work on the computer. The visit schedule was also coordinated with Cambium and VDOE so that evaluators were not present at the same time as the VIS or the VSRII Coordinator.

The evaluators conducted two visits to each of the VSRII schools as planned—one in October 2010 and the other in February 2011—for a total of 47 observations. With the abrupt cancellation of the Striving Readers grant, and the need to maintain funding for the data analysis, the two final visits were cancelled.

Defining fidelity of implementation

Professional development (PD) model

Interventionists' attendance to launch training, data training, and adolescent reading modules was required and facilitated through a number of measures. First, the interventionists were paid stipends for attendance to PD, including the online modules. Secondly, they had the opportunity to complete the 30 hours of online PD at a time that was convenient for them. Additionally, if they could not attend a scheduled training, the VIS provided the information at a more convenient time. Statements on the quality of the training were deemed unnecessary due to Cambium's quality control measures. The face-to-face PD activities were conducted by the developers' trained experts, and observed by a Cambium supervisor and their senior research staff. The online modules were created by reading experts and maintained by Cambium's research division.

Prior to entering the data collected into the PD database, the evaluators made attempts to resolve discrepancies between the hours found in the VPORT logs and those provided by the interventionists through conversations with the different groups of key informers. The evaluators then created a spreadsheet that included the types and hours of PD and support activities offered and the types and hours attended for each interventionist. As mentioned previously, the interventionists were required to attend 59 PD hours in the first implementation year. However, with the abrupt cancellation of the grant, the final statewide meeting was cancelled, thus bringing the required PD to 51 hours. Of these, 30 hours were offered through Web-based, asynchronous modules.

While PD activities were required, coaching hours depended on the willingness and need of the interventionist as well as the availability of the VIS coach. Therefore, the score for the fidelity of implementation of the professional development model was calculated as the number of total PD hours attended relative to the number of required PD hours. The index was computed by school, since each school had one interventionist, and although they were teaching two different grades, the PD was the same. For instance, if an interventionist attended 67 hours of professional development out of 51 required hours, the interventionist/ school score was 1.31. The evaluators established a score of 1.00 or above as adequate fidelity to the professional development model. Scores below 1.00 were considered inadequate. The assessment of fidelity of PD implementation was limited to the interventionists. VDOE staff, school division liaisons and school administrators were invited, but not required to participate.

Classroom model

The evaluators worked closely with Cambium's research department to ensure that the site visit rubric reflected *PRJ*'s conceptual framework and format, and included all the essential components of the intervention. The rubric included four components. The first component – Section A: classroom environment – provided a descriptive overview of classroom size, desk arrangements, technology elements, and materials required for the intervention. These elements were not part of Cambium's IFI, but reflected the evaluators' experience with the role of context in the implementation of education programs. The three other sections were aligned

with the IFI. Section B and Section C focused on the quality and amount of instruction and use of differentiation strategies, which were the focus of IFI. Section B provided an overview of the lesson, while Section C was lesson-specific, and the template changed according to the lesson number within the Expedition. For instance, Section C for lessons two, four, six and eight included the Word Study element that was not present in lessons one, three, seven and nine. Section D had elements of the classroom management component of the IFI. Since the observers would not be present during assessment time, all information from the assessments was obtained through VPORT. Table 4 displays the alignment between Cambium’s IFI and the rubric developed for the site visits (see *Appendix B* for a copy of the rubric).

Table 4. Alignment between IFI and evaluators’ observation rubric

Voyager Index of Fidelity of Implementation (IFI)	RMC Classroom Observation Rubric
	A. Classroom environment
Quality of instruction	B. Lesson planning and delivery – Overview C. Lesson planning and delivery - Lesson-specific
Amount of instruction	
Differentiation	
Classroom management	D. Classroom behavior/management
Use of assessments	Obtained through VPORT

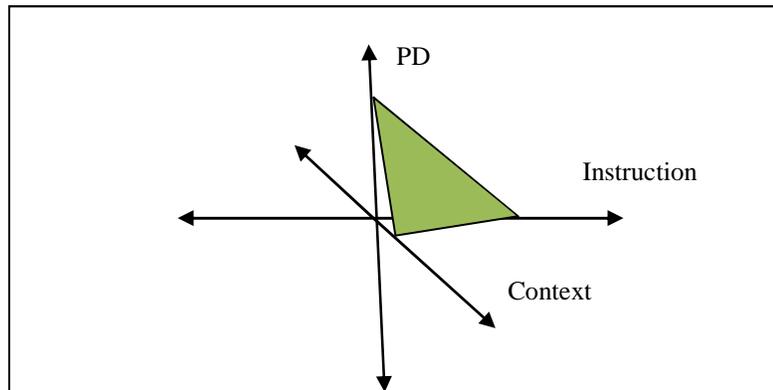
During each school visit, two evaluators observed the interventionist during an entire class period and each observer completed the observation rubric independently. Following each observation, the evaluation team met to discuss their ratings. After the first round of observations (approximately 10 classroom observations), the evaluators met to discuss any needed changes to the observation rubric and to address questions regarding the observation process and ratings. The discrepancies in observer ratings were minimal and did not indicate any problems with the overall scoring process.

The process to calculate the fidelity score for the classroom model followed three steps: (1) all observation rubrics completed by every member of the evaluation team were entered into the observation database; (2) the different observations for each evaluation team were combined to get an average score across all observers for each lesson; and (3) the scores for both rounds of observations were then combined to get an average score for each interventionist. Because each school had only one teacher, the teacher score equals the school score. Given the limited number of observations per school, grade level was not considered in the calculation of scores. Based on feedback from Cambium, the evaluators established the fidelity levels in the following manner: scores below 0.70 were defined as inadequate or low implementation, scores between 0.70 and 0.89 reflected medium fidelity; scores of 0.90 or above were considered high fidelity.

As data from the site visits started to be collected, the evaluators observed that classroom space and instruction time (both length of daily instruction and days dedicated to instruction) differed broadly from one school to another and strongly influenced the pacing of instruction. Two hypotheses were discussed on how to incorporate this finding into the fidelity of implementation model. The first hypothesis considered context as a moderator of the

classroom implementation. That is, context would favor or hinder how the classroom instruction model was implemented, but had no impact of its own. The second hypothesis considered fidelity of implementation as a function of the professional development received, the implemented classroom instruction, and school context, including classroom size, time dedicated to instruction, and days dedicated to instruction. This hypothesis is reflected in Figure 4.

Figure 4. Fidelity of implementation framework



Plans were made to collect further data on the role of context in the implementation as the evaluators returned to the schools for two more visits before the end of the implementation year. Plans were also made to collect attendance data that would provide a more reliable source of information regarding the intensity of intervention for individual students. However, with the abrupt cancellation of the grant, priorities were placed on maintaining the goodwill of the school administrators and interventionists and conserving funds for data analysis and reporting. Plans for further data collection on implementation were cancelled, and the two final site visits were also cancelled. The final model for calculating the index of fidelity of classroom implementation, displayed in Table 5, considered context as part of the overall classroom implementation model, and is limited to what was observed during the site visits.

Table 5. Calculating the classroom implementation fidelity score

Weight			Section Score	Total Possible Weighted Score
Section A	.20	x	$X_A/6$.20
Section B	.30		$X_B/(12 - \text{number of N/A})$.30
Section C	.30		$X_C/8$.30
Section D	.20		$X_D/(\text{total time intervals} - \text{number of N/A})$.20
Total possible score				1.00
Levels:	0.0 – 0.69 = low		0.70 – 0.89 medium	0.90 – 1.0 = high

Implementation Year 1 (2010-2011)

Control students' instruction during intervention period

According to the MOA the schools signed with VDOE, all control group students were enrolled in elective classes that did not contain supplemental reading instruction. The evaluators checked student enrollment in the treatment group in January and March 2011. Except for one school, where two control group students were receiving treatment, all other control group students were attending elective classes that were not related to supplemental reading instruction. A decision was made to maintain these students in the impact study.

Other Tier 2 interventions for study students (treatment and control)

As part of their regular instructional practices, the participating schools provided a number of remediation or recovery supports to students who did not attain proficiency in the statewide assessments. These supports included: (a) remediation during the students' regularly scheduled English or mathematics classes; (b) tutoring by classroom teachers before or after school, during Saturday school, and/or during summer school; and/or (c) an additional class period during the school day (not for students participating in the Striving Readers study). These interventions were geared toward the statewide assessments, rather than improving the reading skills of struggling readers. Furthermore, none of the interventions fell under the definition of reading programs, nor were they provided by reading specialists.

Context of *PRJ* implementation

Interventionists

Nine interventionists were hired by the VSR II project, one per school, following the procedures established at the outset (see *Part I*). All teachers had a valid Virginia teaching license with teaching endorsement that included grades seven and eight. The interventionists taught from two to six classes daily divided between *Journeys I* (for seventh grade students) and *Journeys II* (for eighth grade students).

One interventionist left in March 2011 for a more stable (not grant-funded) teaching position. The potential cancellation of the study was already being discussed, and for this reason, the school division did not hire a new interventionist. The position was provisionally filled with two substitute teachers who had previous training in *PRJ*. The other interventionists remained with their classrooms until the end of the school year, although most of them were actively looking for jobs as soon as the news that funding for the study had not been renewed was communicated to all VSR II participants at the end of April 2011. Seven of the remaining interventionists were re-hired for other teaching positions within the same school division and at least one continued providing *PRJ* instruction. Of the nine VSR II schools, five are using general funds to continue *PRJ* in SY 2011-2012, with three using *Journeys I and II*, and two using *Journeys Beginnings* (sixth grade).

Classroom space

A total of 913 seventh and eighth graders were eligible for the study; 457 students were randomly assigned to the intervention group and 456 to the control group. Details about the random assignment process are provided in *Part III*. Table 6 presents the student enrollment information for the different schools and grade levels for the end of the school year according to VPORT. As the table suggests, approximately 12 percent of the treatment group left the program with time. This information reflects the number of students that were actually entered into the system as participants in the intervention and remained in the list (input into VPORT was interventionists' responsibility), and not the number of students who took the outcome assessments. As the table indicates, each interventionist taught from two to six classes with average enrollment per class of 9.2 to 21.0 students. The average size of VSR II classes was 13.2, below the 15 to 20 students suggested by Cambium.

Table 6. Treatment class size per school and grade

School	Classes taught	Number of students			Average students/class
		Grade 7	Grade 8	Total	
1	5	24	22	46	9.2
2	6	35	28	63	10.5
3	4	20	20	40	10.0
4	4	23	27	50	12.5
5	4	28	17	45	11.3
6	2	20	15	35	17.5
7	2	22	20	44	21.0
8	4	29	26	55	13.8
9	2	14	12	31	13.0
Total		212	192	404	13.2

Source: VPORT enrollment records

All teachers had “permanent” classrooms, that is, they had regularly scheduled space to conduct the intervention. However, not all classrooms were deemed adequate for the intervention by the interventionists and evaluators alike. One school assigned a computer lab where the computers occupied most of the desk, thus blocking the students’ view of the interventionist and leaving almost no space for the students to complete work. This was the school that lost the interventionist by March 2011. In another school, the interventionist was teaching in a windowless room with inadequate space for the teacher to move and for small group instruction. Two other schools also assigned classrooms that were not adequate for organization of small group spaces. Therefore, of the nine *PRJ* classrooms, four were deemed by the evaluators as non- conducive to instruction in general, and particularly to an intervention that strongly relied on small group work.

Instruction time (Dosage)

Three factors were found to influence instruction time: minutes dedicated to instruction each day (or allotted classroom time), days dedicated to instruction within the school year, and classroom attendance.

Allocated instruction time: Table 7 displays the allotted daily classroom time dedicated to *PRJ* instruction, that is, the official minutes dedicated to intervention. As stated before, 50 minutes was the recommended daily instruction time, with an adaptation for 90 minutes provided by the developer. Most classrooms offered the minutes indicated by the developer, except for school 4, where the daily time dedicated to the intervention was 10 minutes shorter than the required time.

Table 7. Allocated time for instruction

Time in minutes	Schools									
	1	2	3	4	5	6	7	8	9	
Classroom time – Grade 7	52	52	50	40	50	87	90	88	90	
Classroom time – Grade 8	52	52	50	40	50	90	87	90	92	
Recommended class time	50					90				

Actual instruction days: *PRJ* is designed to be delivered within one school year, which, in Virginia, extends for about 180 school days. However, a number of incidents influenced the actual number of instruction days. During the monthly check-ins, the evaluators asked interventionists to report the number of days the school was closed as well as the number of classes that were cancelled during the time period covered by the check-in. As displayed in Table 8, between 4 to 12 classroom days were missed in the *Journeys I* classrooms, and from 4 to 13 days in *Journeys II* classrooms.

Table 8. School closures and class cancellations

Grade	Number of Days	Schools								
		1	2	3	4	5	6	7	8	9
7	School closures	2.0	3.5	1.0	4.0	2.0	2.0	2.0	2.0	4.0
	Cancelled classes*	7.0	8.0	3.0	1.0	2.0	7.0	2.0	0.0	3.5
	Missed classes	9.0	11.5	4.0	5.0	4.0	9.0	4.0	2.0	7.5
8	School closures	2.0	6.5	1.0	4.0	2.0	2.0	1.0	2.0	5.0
	Cancelled classes*	10.5	5.0	9.0	2.0	3.5	7.0	3.0	3.0	3.5
	Missed classes	12.5	11.5	10.0	6.0	5.5	9.0	4.0	5.0	8.5

*Schools were open but the class was cancelled for assemblies, test preparation and other reasons.

Overall, based on the interventionists’ responses, it does not appear that school closures were out of the ordinary for a typical school year. Most of the closures were due to parent teacher conferences or adverse weather. Class cancellations were mostly due to test preparation. These are activities conducted by the regular content area teachers for English and mathematics, or Title I resource teachers, when available, and geared toward all students who are at risk of not achieving proficiency in the statewide assessments. The extra lessons are used to re-teach standards where the students show the greatest difficulties.

Student attendance was the final element considered to influence the dosage of the intervention. The evaluators had initially planned to request student attendance records from the participating schools, but once the Striving Readers grant funding was cancelled the evaluators chose not to place this additional burden on the schools and to focus resources on obtaining the student achievement data. Nevertheless, during the monthly check-ins, the evaluators asked interventionists to report on student attendance. As seen in Table 9, most interventionists reported that “almost all of their students attended” classes during the month for seventh and eighth grades. School 5 had the most sporadic attendance (33 percent of check-ins for both grades). Sporadic attendance was mostly due to student suspension.

Table 9. Percentage stating “almost all students attended class” during the monthly check-ins

Grade	Schools								
	1	2	3	4	5	6	7	8	9
7	83.3	100.0	83.3	75.0	66.7	100.0	80.0	100.0	100.0
8	100.0	60.0	83.3	75.0	66.7	83.3	60.0	83.3	100.0

Implementation of professional development model

Group training

Table 10, on the next page, displays the list of professional development conducted during the first implementation year, and the number of attendees. The newly-hired interventionists attended 16 hours of *PRJ* launch training on August 9 and 10, 2011, at the Lewis Ginter Botanical Garden, Richmond. The training was provided by the Cambium’s Vice-President of Implementation Services in the Southeastern Region, with the support of the three VIS assigned to the project. Cambium’s Senior Research Analyst was present as an observer to ensure that the training was provided with fidelity. The materials that the interventionists and the students were to use during the intervention year had already been distributed to the schools before the training. The materials included teacher guides, student workbook and library. The interventionists were asked to bring the materials and a computer in order to model the lessons. To supplement the materials brought with them, each attendee was given a *PRJ* training manual that provided detailed information on the curriculum, the VPORT, the assessments, and the implementation process along with appendices of sample schedules and tip sheets.

Table 10. Professional development activities

Session	Date	Time	Topics	Attendance	
				Interventionist	Other
PRJ Launch Training	8/9/2010 – 8/10/2010	16 hours	Framework and components of the intervention; assessments and classroom management	8	LEA liaisons, school administrators, VDOE project director, RMC evaluation team (N=14)
VSR II Start-up	8/11/2010	4 hours	Roles and responsibilities, management timelines, assessment timeline, evaluation activities	9	As above + Cambium representatives (N=21)
Launch Training make up session	8/23/2010	8 hours	(interventionist could not attend launch training)	1	
GRADE	8/31/2010	2 hours	Overview of GRADE, how to administer, how to score	4 (Norfolk & Richmond)	
GRADE	9/1/2010	2 hours		5 (Roanoke)	School division liaison
Voyager U	1/2011 – 5/2011	15 hours	Adolescent Vocabulary Strategies	9	
Voyager U	1/2011 – 5/2011	15 hours	Adolescent Comprehension Strategies	9	
VSR II Statewide Benchmark data meeting	2/11/2011	5 hours	Analyze data from Voyager benchmark 2, determine the needs of schools, teachers, students based on the data, plan for continued Voyager implementation	9	School Principals, LEA liaison, VIS, evaluation team
Online modules (optional)	n/a	16 hours maximum	Classroom instruction, classroom management, assessments	9	
Statewide meeting	Summer 2011	8 hours	The meeting was cancelled as the Striving Readers program lost fund and the intervention was ending.		

The launch training objectives were centered on three main areas: curriculum, assessment, and implementation. The curriculum objectives included: identify each curriculum component and describe its intended purpose, prepare to teach a typical 10-lesson Expedition unit, and learn how to navigate and utilize the *SOLO* online component. The assessment objectives were

describe each part of the assessment system and its purpose and timeline, administer and score each of the assessments, utilize assessments to inform and adjust instruction, and use the VPORT online data management system to enter scores and review reports. Finally, the implementation objectives included explore the responsibilities of personnel involved in implementation, examine groups for whole-group and flexible small-group instruction, and explore options for arranging and managing the classroom. By the end of launch training, all objectives had been met.

The launch training was followed by a 4-hour session that had two purposes: introduce the VSR II participants and clarify the requirements for the implementation and impact studies. Interventionists also were required to attend 30 hours of online PD on research on adolescent literacy, what was accomplished between January and May 2011. Depending on their needs, the interventionists had access to another 16 hours of online modules that reinforced or clarified the topics covered during the launch training, such as classroom management, use of the benchmark assessments, differentiating instruction, and others. The VPORT data indicated that the interventionists used from 5 to 9 of those 16 hours.

On February 11, 2011, the interventionists attended a five-hour data meeting to discuss findings from the formative assessment and how to use these findings to diversify instruction. The meeting, held in a conference room at the University of Virginia in Charlottesville, was conducted by the Vice-President of Implementation and the three VIS. The presenters explained how the data were analyzed and used to improve instruction. After the general presentation, interventionists, school principals and school division liaisons got together with the VIS to analyze the data from their classrooms/schools and draw conclusions about instruction. The meeting planned for the end of the school year was cancelled when USED announced that it was terminating the Striving Readers program.

Table 11 displays the hours of professional development for each interventionist. All interventionists completed the launch training. One of the interventionists was unable to attend the August launch training, but received instruction later. Since instruction was provided individually, the time required for the launch training was reduced from 16 to 8 hours. All the interventionists attended the VSR II start-up meeting, and the training on GRADE. These hours were extra to the professional development model, as they were not connected to *PRJ* implementation, and were integrated into “other VSR II PD” hours in the table below. Additionally, the interventionists completed different hours of the optional online PD.

Table 11. Hours of professional development

PD	Schools								
	1	2	3	4	5	6*	7	8	9
Launch training	16.0	16.0	16.0	16.0	16.0	8.0	16.0	16.0	16.0
Adolescent literacy	30.0	30.0	30.0	0.0	30.0	30.0	30.0	30.0	30.0
Other VSR II PD	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Online PD (optional)	2.0	3.0	0.0	0.0	0.0	0.0	1.0	9.5	2.5
Total PD Hours	59.0	60.0	57.0	27.0	57.0	49.0	58.0	66.5	59.5

*The interventionist attended an 8-hour individual makeup session; the index was calculated on required 43 hours.

The VSR II Project Director, LEA liaisons and school principals or representatives were invited to attend the launch training, the startup training, the data training, and the end of the year training. Two principals attended the launch training, but one had to leave approximately halfway through to attend to school-related demands. All schools but one were represented by the principal or an assistant principal in the meeting held at the end of the launch training to discuss the proposed evaluation activities. The LEA liaisons were present at all activities. Considering the focused nature of the intervention, participation in professional development for other than the interventionists was not considered part of the fidelity of professional development model.

Individual Supports

Voyager Implementation Specialists (VIS) were contracted to provide a maximum of 50 hours of on-site coaching to each interventionist (10 visits per teacher with 5 hours per visit). All interventionists reported receiving regular visits from the VIS. The evaluators talked with all three VIS and the VSR II Coordinator regarding the individual supports that had been offered to the interventionists. Interviews with VIS and the interventionist check-ins provided conflicting information regarding hours offered. Despite attempts to clarify the information, conflicts could not be resolved.

From the interventionists’ perspective, weather conditions that led to school cancellations were the principal reason cited for not receiving coaching visits during the period covered by the check-in. From the VIS’ perspectives, the main reason for missing coaching days was the difficulty to coordinate time with the schools or the interventionists for the coaching visit. One school in particular was reported to be blocking the VIS from conducting coaching visits, unless a central office staff was present during the visits. Additionally, all interventionists reported receiving coaching from the VIS through email and phone. Although these visits addressed the needs of each interventionist, interviews and check-ins indicated that three topics dominated the conversation: analyzing student data, modeling instruction, and classroom management.

Table 12. Hours of coaching from Cambium Learning Group

	Schools								
	1	2	3	4	5	6	7	8	9
Months reported	6	5	6	4	3	6	5	6	5
% of monthly visits	83.3	80.0	83.3	100.0	100.0	66.7	80.0	83.3	100.0
Number of expected hours VIS coaching	30.0	25.0	30.0	20.0	25.0	30.0	25.0	30.0	25.0
Number of actual hours VIS coaching	37.0	27.0	38.0	34.0	17.5	34.0	20.5	49.0	22.0
Ratio actual/expected	0.81	0.93	0.79	0.59	1.43	0.88	1.22	0.61	1.14

Table 12 includes information related to the coaching that each interventionist reported receiving from the VIS. To estimate the intensity of supports, the evaluators calculated the total number of coaching hours that the interventionists reported receiving from the VIS

relative to the total number of hours that would be expected according to the total number of check-ins. For example, School 1 had six check-ins, so it would be expected that the interventionist should have received 30 hours of coaching (5 hours per check-in). The interventionist reported receiving 37 hours of coaching, in excess to the expected 30 hours. Part of this discrepancy can be attributed to the fact that interventionists received coaching support via e-mails and conference calls, two activities that were not included in the calculation.

Until leaving the position in April 2011, the VSR II Coordinator conducted monthly visits with interventionists and school division liaisons. Each interventionist received an average 12 hours of individualized support between October 2010 and March 2011, when the last visit occurred. During the visits, the VSR II Coordinator observed the interventionists teaching a lesson and provided feedback. Topics also included classroom management, assessment, use of VPORT, and planning. These hours were in addition to the professional development included in VSR II logic model.

Index of fidelity of implementation: professional development model

Table 13 summarizes information from the professional development and supports and includes the index for fidelity of implementation for the professional development model. As the table indicates, during the first year of the VSR II implementation, each interventionist received between 72 and 127 hours of professional development that included face-to-face and online training, and individual supports from VIS and VSR II Coordinator. Considering the discrepancies in the data collected and the many factors that influenced the presence or absence of the individual supports in a specific school, coaching hours were not incorporated into the final professional development index.

Table 13. Index of fidelity of implementation – professional development model

	Schools								
	1	2	3	4	5	6**	7	8	9
Hours of individual supports (VIS) ¹	37.0	27.0	38.0	34.0	17.5	34.0	20.5	49.0	22.0
Hours of individual supports (VSR II Coordinator) *	11.0	11.0	11.0	11.0	11.0	13.0	13.0	13.0	12.0
Hours of group professional development (PD)	59.0	60.0	57.0	27.0	57.0	49.0	58.0	66.5	59.5
Total hours PD and supports	107.0	98.0	106.0	72.0	85.5	94.0	89.5	126.5	92.5
Required hours of group PD	51.0	51.0	51.0	51.0	51.0	43.0	51.0	51.0	51.0
Fidelity of implementation PD model	1.16	1.18	1.12	0.53	1.12	1.14	1.14	1.30	1.17

*Not included in the index calculation

**8 hours individual launch training replaced the 16 hrs. of group training.

Based on the required professional development hours, the index of fidelity of professional development ranged from 0.5 (school 4) to 1.3 (school 8). All interventionists, except for School 4, received an index at or above 1.0, which was defined as adequate. It is unclear whether School 4 interventionist truly did not attend all of the required hours of PD, since that interventionist left the project in March 2011. It is possible that the interventionist did complete the online adolescent literacy but did not have an opportunity to report it to the evaluators before leaving the position (the evaluators had no access to the VoyagerU information).

Implementation of the classroom model

As previously discussed, *PRJ I* and *II* are formatted as a series of lessons, or Expeditions, each comprised of ten 50-minute lessons. The initial expectation was that interventionists would cover one lesson per day, such that they would complete one Expedition every ten days, with an optional day for re-teaching. Interventionists could decide to use this extra day of instruction based on student need, based on results from the formative assessments. For classrooms with 90 minute instruction, the interventionists were expected to cover two lessons a day. In all cases, Cambium staff provided suggestions on how to modify the lessons to fit the classroom period.

At the training, the overall understanding was that the interventionists should complete one lesson per class period without modifications. Pacing became a major challenge for many, if not all interventionists. As a result, the VIS suggested either completing the remainder of the lesson at the next class period or making modifications as appropriate to cover the entire lesson in a day, while still keeping with the scaffold structure and providing as much reading time as possible to students. Yet, during the check-ins with the evaluators, the interventionists expressed confusion about whether they should include adaptations to finish the lesson in one day or make no modifications and carry over any activities to the following day as needed. They also felt that they were receiving conflicting advices from VIS and VSR II Coordinator.

The evaluators conducted two visits to each of the *VSR II* schools to monitor classroom instruction—one in October 2010 and the other in February 2011—for a total of 47 observations, with five or more lessons observed for all but one interventionist. Due to scheduling conflicts, the evaluators were unable to observe the interventionist at School 3 during the first round of visits, even after multiple attempts. Table 14 lists the number of lessons observed, time available for *PRJ* instruction, and number of lessons completed during the observation (the evaluators stayed for the full class period).

Table 14. Lessons completed within class time

	Schools								
	1	2	3	4	5	6	7	8	9
Number of lessons observed	5	5	2	5	5	8	6	6	5
Average class length (minutes)	55	54	49	40	50	84	85	86	90
Expected class time (minutes)	50	50	50	50	50	90	90	90	90
Lesson Completed in the period*	0	1	2	0	5	0	0	2	0

*Number of lessons completed across all observations

Almost all interventionists had sufficient scheduled class time to complete a full lesson, with the exception of School 4, which had only 40 minutes. However, as discussed before, allocated class time did not necessarily correspond to actual instruction time. Those interventionists who taught *PRJ* during the first period had their actual class time reduced because of morning announcements, while interventionists with afternoon classes often saw their class periods cut short due to early release schedules, assemblies or other activities. In fact, during the check-ins with interventionists the issue of pacing was one of the most commonly-cited problems. This was echoed by the three VIS and the VSRII Coordinator.

Two of the VIS noted that student off-task behavior was a significant hindrance to instruction in some of the schools and the evaluators had occasion to observe the effect of student behavior on instruction. For instance, in one of the classroom visits in October, the evaluators noted that due to student disruptions or other off-task behavior, the interventionist in School 9 was unable to complete even one lesson, despite having a longer period for instruction. The last row in Table 14, above, provides some indication of the impact of behavior and actual classroom time on completion of lessons. As can be seen, only one interventionist was able to complete the lessons during all the observations.

The three VIS worked with the teachers to revise the pacing calendars for each of their classes, as necessary, but pacing was a challenge throughout the intervention. The VIS expected that the interventionists would improve pacing as they became more familiar with the intervention. Therefore, the expectations were that pacing would become less of a problem in the second implementation year.

Actual student use of technology

The VSRII budget included money for the purchase of software and hardware. During *SOLO*, an activity that occurred in Lessons 5 and 10 of each Expedition, the students had the opportunity to practice on the computer the skills they had learned during the week. The evaluators had the opportunity to observe two *SOLO* lessons (one in grade 7 and one in grade 8) and noted that students were engaged in the task. However, in some of the check-ins, the interventionists remarked that students got “bored” with the *SOLO* lessons, especially when they had to repeat sections they had already completed due to problems with the software. Additionally, interventionists reported having problems with the online connection. As one interventionist observed, “*SOLO has become a very big issue for my students; it continues to freeze and lock my students out.*” To avoid problems with the time it took students to load the program, interventionists started asking students to log-in to the *SOLO* at the beginning of class so that it would be ready to use when needed.

Interventionists also reported having difficulty with the DVDs provided for the intervention. DVD segments were included in Lessons 1, 6 and 9 of each Expedition, and covered topics designed to engage students into further reading. The evaluators observed interventionists struggling to find the correct location on the DVD to correspond with a particular lesson or having problem with the DVD not loading correctly. Cambium was responsive to interventionists’ requests for assistance with the DVDs, and it is the evaluators’ understanding that Cambium even made some changes to the DVDs based on the interventionists’ feedback.

Further, at the request of the interventionists, Cambium prepared electronic copies of the student worksheets and other handouts so that the interventionists could display them on interactive white boards.

Actual intensity of intervention students received

Table 15 displays the number of Expeditions completed during the school year, as reported in VPORT, and the ratio between the number of Expeditions completed and the total number of Expeditions in the intervention. The required number of Expeditions and the number of Expeditions completed were the same across the two grade levels and therefore, only one grade is presented. Additionally, it is important to observe that information on VPORT was entered by the interventionists and reflect mostly when the assessments were conducted, rather than the final day of class. As seen in the table, the most an interventionist was able to cover was 80 percent of the Expeditions, while the least amount covered was 30 percent.

Table 15. Number of Expeditions completed

Expeditions	Schools*								
	1	2	3	4	5	6	7	8	9
Completed	10	9	12	11	12	10	8	5	8
Maximum	15	15	15	15	15	15	15	15	15
Ratio	0.7	0.6	0.8	0.7	0.8	0.7	0.5	0.3	0.5

*Allotted time of instruction: Schools 6-9 = 80 to 90 minutes; Schools 1, 2, 3, 5 =50 minutes; School 4 = 40 minutes.

The actual intensity of the intervention the students received appeared to have been affected by four primary elements: (a) actual instruction time; (b) the interventionists’ skills in maintaining pacing; (c) actual days of instruction, and (d) student attendance (or the need to re-teach for absent students). Interestingly, despite having a shorter class period (40 minutes, with approximately 35 minutes of actual instruction time), the interventionist at School 4 was able to cover almost three-fourths of the Expeditions. The VIS observed that the School 4 interventionist was doing “an exceptional job moving the lessons forward.” The observations suggested that the interventionist was indeed skillful with maintaining pacing, but not enough observations were made (five lessons throughout the year) to confirm that statement.

Another factor that merited further exploration was the impact of block scheduling on the interventionists’ ability to maintain pacing. As Table 15 suggests, the interventionists from schools with block scheduling (schools 6-9) completed fewer Expeditions than their colleagues from schools where class time ranged from 40 to about 52 minutes. Unfortunately, the early cancellation of the grant impaired the evaluators’ ability to further investigate the relationship between block scheduling and slower pacing.

Student assessment procedures actually carried out

As detailed in *Part I*, the *PRJ* assessment system includes measures of text fluency and comprehension, end-of-lesson assessments, progress monitoring, and student self-assessments. The assessments were conducted as planned. The *Reading Benchmark I* was conducted at the

beginning of the school year and was used to place students in the appropriate level of reading materials and in one of three appropriate levels of text in *SOLO. Reading Benchmarks II and III* were administered in January and May. Comprehension and vocabulary assessments were administered at the end of each Expedition and the scores were recorded in VPORT. In the monthly check-ins, interventionists reported using student assessment data to choose appropriate re-teaching opportunities targeted to specific skills where students demonstrated difficulty. The re-teaching activities were conducted on day 11 of the Expeditions. The school divisions also used the GMRT and SOL assessments for grades 6 through 8 to determine eligibility to the study and for the impact study, as discussed in *Part III*. The GMRT was administered in April 2011, while the SOL English/Reading was administered in May 2011.

Teacher use of ongoing assessments

The VIS and the interventionists confirmed that they were using the *PRJ*-specific assessments to guide instruction. Assessment results were posted on VPORT. The evaluators avoided coming during assessment days and they were also unable to observe planning time. Table 16 summarizes one of the data reports provided by VPORT.

Table 16. Journeys I and II – benchmark data

School	Seventh Grade Scores				Eighth Grade Scores			
	B1 Lexile	B2 Lexile	Avg. Gain	Expedition Complete	B1 Lexile	B2 Lexile	Avg. Gain	Expedition Complete
1	589	769	180	Exp. 6 Les. 7	601	698	97	Exp. 6 Les. 9
2	491	583	92	Exp. 7 Les.7	596	662	66	Exp. 7 Les. 7
3	589	691	102	Exp. 7 Les. 1	553	692	139	Exp. 7 Les. 1
4	548	691	143	Exp. 6 Les. 9	627	661	34	Exp. 6 Les. 9
5	612	791	179	Exp. 7 Les. 2	627	777	150	Exp. 7 Les. 2
6	666	790	124	Exp. 5 Les. 3 & 4	776	832	56	Exp. 5 Les. 3 & 4
7	644	766	122	Exp. 4 Les. 4	739	781	42	Exp. 4 Les. 4
8	676	808	132	Exp. 5 Les. 2 & 3	745	759	14	Exp. 5 Les. 2 & 3
9	566	663	97	Exp. 5 Les. 1 & 2	620	716	96	Exp. 4 Les. 9 & 10

In February 2011 Cambium hosted a data meeting for the interventionists, during which the trainers talked about the assessment data and provided instruction on how to interpret the data and use the results to inform instruction. In the monthly check-ins, interventionists mentioned that the data meeting was helpful and informative and that they liked getting the opportunity to compare their student data with that of the other interventionists.

Index of fidelity of implementation for the classroom model

Table 17, on the next page, displays the average scores obtained for each item of the classroom observation rubric. Sections A (context) and B (general lesson plan and delivery) were scored on a two-point scale whereby 0 = inadequate and 1 = adequate. Section C (specific lesson plan and delivery) used a three-point scale for C1 and C2, and a two-point scale for C3. Section D

(classroom behavior and management) reflected percent of time where the specific behaviors were observed.

Table 17. Scoring for the classroom observation rubric

	Schools								
	1	2	3	4	5	6	7	8	9
Number of classes observed	5	5	2	5	5	8	6	6	5
Classroom time (minutes)	55	54	49	40	50	84	85	86	90
Section A: Context									
A1 - Sufficient space	2.00	1.20	1.00	1.00	2.00	1.00	2.00	2.00	1.00
A2 - Instructional areas	2.00	1.20	1.00	1.40	2.00	1.00	2.00	2.00	0.60
A3 - Teacher resources	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
A4 - Student materials	2.00	2.00	2.00	1.60	2.00	2.00	2.00	2.00	2.00
Section score: $X_A/8$	1.00	0.80	0.75	0.75	1.00	0.63	1.00	1.00	0.70
Section B: General lesson plan and delivery									
B1 - Follows curriculum guide	2.00	2.00	2.00	1.70	2.00	1.53	2.00	1.64	1.70
B2 - Brisk pace	1.75	0.80	2.00	2.00	2.00	1.80	1.33	2.00	1.80
B3 - Skills modeled	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.80
B4 - Correction procedures	2.00	2.00	n/a	1.50	1.00	2.00	2.00	2.00	2.00
B5 - Students in groups	1.80	2.00	1.00	2.00	1.60	2.00	0.67	1.73	2.00
B6 - Differentiation	n/a	2.00	2.00	2.00	2.00	1.73	1.67	2.00	2.00
Section score: $X_B/(12 - N/A)$	0.96	0.90	0.90	0.93	0.88	0.92	0.81	0.95	0.94
Section C: Lesson specific planning and delivery									
C1 – Components delivered in order	3.00	2.75	3.00	3.00	3.00	3.00	2.50	3.00	2.57
C2 – Steps delivered in order	2.74	2.57	2.75	2.11	3.00	2.18	2.33	2.44	2.20
C3 - Completed within suggested timeframe	0.93	0.60	1.50	1.24	1.63	0.82	0.33	1.13	1.38
Section score: $X_C/8$	0.84	0.74	0.91	0.79	0.95	0.75	0.65	0.82	0.77
Section D: Classroom behavior and management									
D1 - % time students pay attention	0.90	0.86	0.60	0.77	1.00	0.99	1.00	0.96	0.96
D2 - % time students respond to prompts	0.75	0.63	0.58	0.72	0.90	0.98	0.88	0.98	0.93
D3 - % time students actively participate	0.76	0.83	0.60	0.67	1.00	0.99	0.98	0.96	0.96
D6 - % time students follow expectations for group work	0.77	0.85	0.55	0.70	1.00	1.00	1.00	0.94	0.92
D4 - % time teacher addresses behavior (x2)	1.59	1.54	0.25	1.75	2.00	2.00	2.00	1.81	2.00
D5 - % time teacher involved engaging students (x2)	1.19	1.58	0.60	1.23	2.00	2.00	1.42	1.04	1.60
Section score: $X_D/(\text{total time intervals} - \text{number of N/A})$	0.74	0.78	0.40	0.73	0.99	1.00	0.91	0.84	0.92

Each section received a weight that addressed the importance of the section within the overall classroom implementation model, as adapted from Cambium’s IFI. Table 18 displays the results. As the table shows, based solely on the adequacy of delivery observed during the site visits, two of the nine interventionists were classified as attaining high fidelity of implementation (score above 0.9), while the remaining seven attained adequate (medium) fidelity of implementation levels.

Table 18. Fidelity to the classroom instruction model (weighted)

Sections	Weight	Schools								
		1	2	3	4	5	6	7	8	9
A	.20	0.20	0.16	0.15	0.15	0.20	0.13	0.20	0.20	0.14
B	.30	0.29	0.27	0.27	0.28	0.27	0.28	0.24	0.28	0.28
C	.30	0.25	0.22	0.27	0.24	0.29	0.22	0.19	0.25	0.23
D	.20	0.15	0.16	0.08	0.15	0.20	0.20	0.18	0.17	0.18
Classroom Fidelity Index		0.86	0.89	0.81	0.77	0.81	0.95	0.83	0.82	0.90

Fidelity of implementation scores

Table 19 displays the scores for the fidelity of implementation of the professional development and classroom models. According to these indices, all but one school attained adequate implementation of the professional development model. Regarding the classroom model, seven schools attained an adequate (medium) implementation level, while two attained high fidelity.

Table 19. Fidelity scores per school

Components	Schools								
	1	2	3	4	5	6	7	8	9
PD	1.16	1.18	1.12	0.53	1.12	1.00	1.14	1.30	1.17
Instruction	0.86	0.89	0.81	0.77	0.81	0.95	0.83	0.82	0.90
	Levels								
PD	A	A	A	I	A	A	A	A	A
Instruction	A	A	A	A	A	H	A	A	H

Legend: I= Inadequate; A = Adequate; H= High

Factors Influencing Fidelity of Implementation

Two groups of factors were found to influence the implementation process: general factors that either facilitated or hindered the fidelity of implementation across all participant schools, and factors that were specific to one or a small group of participant schools.

General factors

Among the three factors that influenced the project implementation in general, planning year and professional development and supports were seen as facilitators. Alternatively, the abrupt

ending of the Striving Readers grant created a challenge for the schools, as it will be explained below.

Planning year: USED incorporated one full planning year under the Striving Readers funding. From the perspective of the implementation, the planning year provided time for the representatives from the state, LEAs and schools to talk among themselves and with the developers, ask questions and share concerns. The developers had time to address the questions brought by the school personnel before the actual instruction started, and propose adaptations to the intervention to address the uniqueness of each school. At the start of the implementation year, all participants had a clear idea of their roles, responsibilities and expectations. They also had become familiar with the intervention. From the perspective of the study, the planning year was essential for the evaluators to build trust with the implementers, learn about the different policies and regulations that could affect the study in each of the participant school districts, address questions and assuage fears from school administrators and school division representatives. Furthermore, the planning year provided the evaluators with enough time to become familiar with the intervention and to develop and test data collection instruments that were faithful to the intervention model.

Intensive coaching and supports: As previously discussed, the VSR II project included approximately 50 hours of on-site coaching services for each interventionist, or approximately one visit per month. Coaching activities included modeling lessons, observing lessons and providing feedback, discussing student data and how to use the data for lesson planning, clarifying questions, and supporting the interventionists as they implemented the intervention. During the interviews, the VIS mentioned that they could see improvements in the interventionists' classroom instruction following the coaching visits. As one VIS explained, the coaching provided opportunity to *“really see how the teachers are teaching and actually coach them based on observations of whole lessons.”* As part of the overall supports, VDOE dedicated a full time staff for the project and the two people who held the position at different times demonstrated a high level of dedication. Monthly phone calls and face-to-face meetings started from the planning year. These activities were essential to bring all participants together and highlight VDOE's commitment to the success of the project. The second VSR II Coordinator also had a role in offering individualized supports to the interventionists that complemented the VIS supports.

Elimination of the Striving Readers Grant Funding: With the announcement in April 2011 that funds for the grant had been cancelled, the VSR II Coordinator, a position fully paid by the grant, decided to find a more stable position and left the project one month later. Since the grant was coming to an end, VDOE decided to eliminate the position, and the Grant Manager assumed the sole leadership for the project. At the schools, the school administrators started to make provisions for other initiatives that would replace *PRJ*, or search for new source of funds to continue with the intervention. As for the interventionists, knowing that the position would no longer be available, they started looking for jobs. Two comments from interventionists summed up the general feeling among VSR II participants when they heard the news of the cancellation:

In the end, the students who hung in there with me and worked consistently got the greatest increase in Lexile scores. I have really grown to love my readers ... and I am concerned that there will be no further reading safety net for those who made progress but are still not at grade level.

I have seen the growth of my students this year and hate to see the end of this program.

Specific factors

Reviewing Table 18 (p. 44), two components of the classroom model showed the greatest variance: context (Section A) and classroom management (Section D). These two components appeared to behave not as factors in themselves, but as moderators for lesson plan and delivery (Sections B and C) by creating a “disturbance” in the model. That is, although interventionists were implementing the intervention in relatively similar ways, context and classroom management might explain why they ended up completing different numbers of Expeditions with somewhat different fidelity scores. These factors are discussed below.

Context: Under context, actual time of instruction was the component that appeared to bring the greatest variation to the classroom implementation model. Actual time of instruction is defined as allocated time for instruction (or classroom time) minus time taken away from instruction due to interruptions.

Regarding *allocated time for instruction*, one interventionist had 40 minutes of class time, 10 minutes fewer than the 50 minutes a day recommended by the developer. Interesting enough, this interventionist appeared to have completed 11 Expeditions, a high number compared to peers. The unexpected finding was that interventionists with 90 minutes of class time completed even fewer Expeditions than their colleagues with 50 minutes. This finding merited further investigation in the second implementation year, particularly due to the fact that many schools are moving into block schedule and the impact of such schedule on lesson planning should be explored. It is of note that even when interventionists had sufficient allocated class time for the *PRJ* lessons, class time was frequently cut short by announcements, assemblies, time spent walking students from one class to another, early release schedules, and/or student behavior issues. Regarding these interruptions to classroom time, classes scheduled in the first and last periods of the day were more prone to being curtailed (announcements and early releases) than those scheduled in the middle of the day.

Days allocated to instruction were another component under Context that varied across schools. Classes were cancelled due to parent-teacher conferences, field trips, testing, test preparation, snow days, or assemblies. Preparing students for the statewide assessments was probably the most frequent cause of cancellation of *PRJ* classes. As one interventionist commented, “*I am hoping that when they get through testing ... that I will see even better progress.*”

Technology glitches was the third element considered under Context that elicited numerous comments at beginning of the intervention, and negatively influenced time of instruction and the teachers’ ability to maintain the required pacing. During the first visit in October, some

interventionists still needed to receive the computers that had been ordered using grant funding, while others had to coordinate with their local technology support staff to obtain access to the online components. The interventionist in School 5, for example, reported not having access to the *SOLO* online passwords in late October 2010, almost two months after the start of the intervention. In addition, low bandwidth in some schools delayed the time for students to log onto *SOLO*. Computer “freezes” or other technology glitches that disrupted instruction were observed during the site visits and frequently reported during the check-ins. Interventionists also had difficulties with the DVDs provided with the *PRJ* and at times were not able to use them in the appropriate part of the lesson. As mentioned above, technology glitches per se were not the reason for disrupting instruction. In some classes, interventionists found a way to minimize the impact of technology malfunctioning. For instance, in one classroom, the students would log on to the computer as soon as they entered class to give time for the log on to be completed before the students needed to work on the computer. In other classes though, either because of the level of the malfunctioning or the teachers’ ability to deal with it, technology glitches were observed to raise the level of frustration of interventionists and students alike, and negatively impact the implementation.

Classroom management: Classroom management is defined as the interventionists’ ability to engage student into the learning process. Student behavior was an important factor affecting the ability of interventionists to deliver the lessons in the way that was intended by the *PRJ* developer. During the visits the evaluators observed numerous instances of students’ disruptive and off-task behavior. The interventionists, VIS, and VSR II Coordinator agreed that disruptive behavior had a considerable impact on the implementation of the intervention over the course of the school year. When students acted out the interventionists had to address the student behavior, thereby interrupting the delivery of the lessons. As one VIS commented, “[in some schools] the primary problem is behavior management; the teacher loses between 20-35 minutes each day to dealing with behavior problems. [It affects] everything from pacing to outcomes.” The interventionists cited two main reasons for what seemed unusually disruptive behavior. First, they commented about a large number of students with emotional and behavioral disorders in their classrooms (six in one case) without access to paraprofessionals. Another reason also cited was the structure of the intervention. The interventionists reported that students got bored with the repetitive nature of the lessons and their attention waned, often resulting in misbehavior. One interventionist commented that, “*Students are getting tired of the lessons; they know what to expect and are getting tired of the repetitiveness of the [Expeditions].*” Yet, interviews and observations suggested that “boredom” differently influenced the classrooms. While one interventionist saw repetition as a hindrance, another saw it as a positive feature of the program, commenting “*The students moan and groan about the repetition of activities but also seem to fall into activities by habit most of the time.*”

Ramifications of implementation results for impact analyses

Findings from the first implementation year suggest that the interventionists received the planned professional development and supports, with the exception of one school, where the interventionist left the school before the end of the school year. Classroom instruction was similar across interventionists, from the perspective of delivery of instruction, with two schools attaining high fidelity while the remaining seven schools attained adequate or medium fidelity.

Interviews and observations found no differences in the implementation of the intervention for students in seventh and eighth grade. However, intensity of instruction (dosage) varied across schools, with interventionists completing from 30 to 80 percent of the curriculum by the end of the school year. It must be noted that none of the assessments used for the impact study were conducted at the end of the school year (June 2011). The SOL English/Reading is traditionally conducted in mid-May, while GMRT was conducted in April. It is not clear that another month of classes would influence assessment results, but studies where the curriculum is allowed to be completed before the post-assessment is implemented may further the understanding of the impact of reading programs on adolescent struggling readers.

PART III: IMPACT STUDY

Study Design

The supplemental literacy intervention in the VSR II was a one-year intervention for seventh and eighth grade students who were two years below grade level in reading achievement. Due to the termination of funding for the Striving Readers program, the intervention was provided for only one year. The evaluation of the one-year impact of this intervention is based on an experimental design, with random assignment, to address the following research question:

- What is the impact of participating in the *PRJ* supplemental literacy intervention for one school year on the achievement of striving readers in grades 7 and 8?

The intervention's impact at the end of the 2010-2011 school year was estimated by calculating the difference, adjusted for student level covariates, between the average reading achievement of eligible students randomly assigned to the intervention (the treatment group) and the rest of the eligible students who participated in other activities, not to include any supplemental literacy instruction (the control group). The Gates-MacGinitie Reading Tests (GMRT) 4th Edition and the Virginia Standards of Learning (SOL) English/Reading assessment were used to measure the reading achievement of treatment and control students.

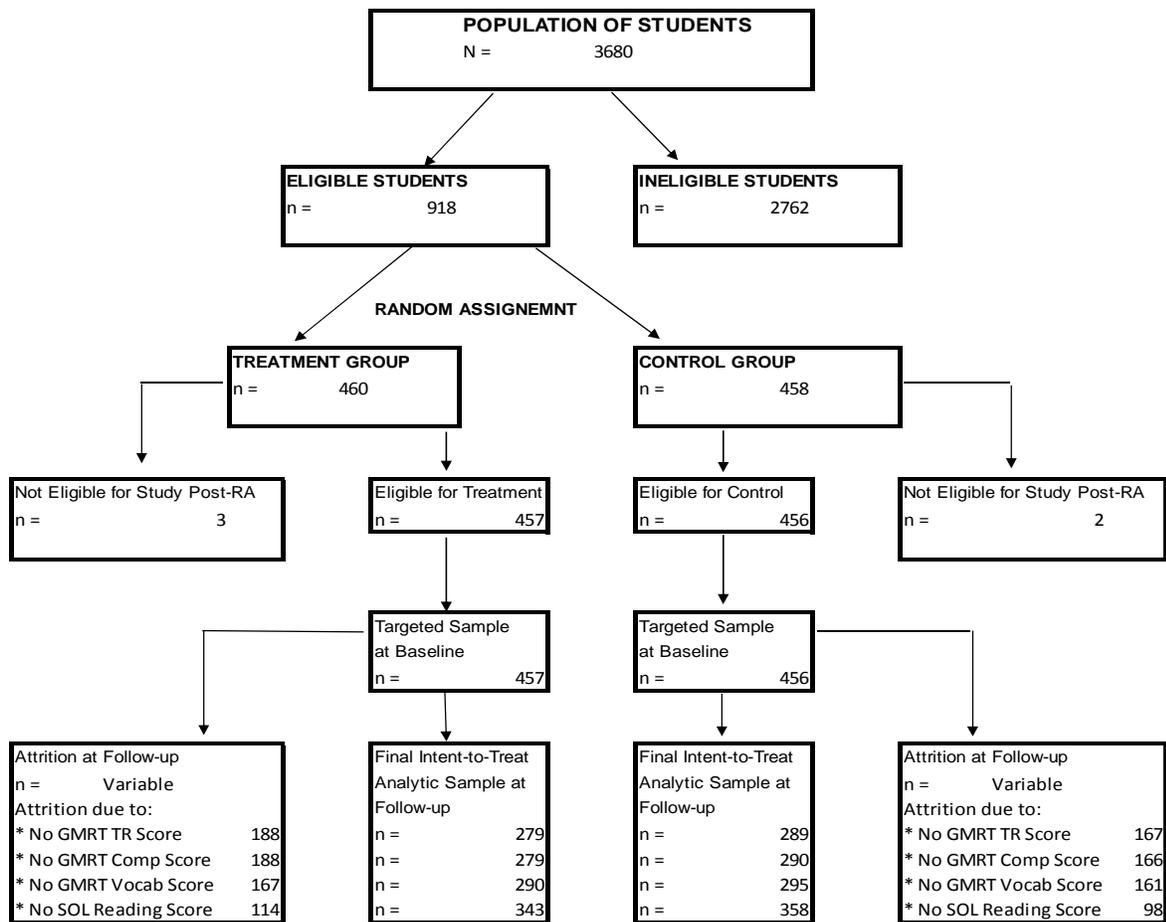
Sample selection

As described in the *Introduction*, nine middle schools serving students in grades 6 through 8 from three school districts participated in the study. In the spring of 2010, the schools administered the GMRT 4th Edition to all students in grades 6 and 7. Students whose test results were equivalent to two or more grades below their grade level were eligible for the VSR II intervention. Additionally, students in sixth and seventh grades who did not pass the 2010 SOL English/Reading assessment were also eligible for the intervention regardless of their GMRT scores. Two types of students were excluded from the eligible pool before random assignment to the treatment and control groups: students with an Individual Education Plan (IEP) that precluded their participation in the study, and students whose parents requested their children be exempt from the study.

In the spring of 2010, the total sixth and seventh grade enrollment for these nine schools was 3,680. Over the summer, the school districts provided lists of students who were at least two years below grade level on the GMRT and/or failed to pass the SOL, after the exclusion criteria described above were applied. The lists contained 918 students. For each grade within each school, these students were randomly assigned to the treatment and control groups. The total number of students assigned to each group was 460 and 458, respectively. After random assignment, it was discovered that five students (3 treatment and 2 control) were missing evidence that they were eligible on either measure. These five students were designated ineligible after random assignment and were removed from the Intent to Treat (ITT) sample.

Of the remaining 913 students (457 treatment and 456 control), 514 were at least two years below grade level on the GMRT although they did not fail the SOL (or were missing baseline SOL results), 117 failed to pass the SOL but they were not two years below grade level on the GMRT (or were missing baseline GMRT results), and 282 were eligible on both measures. These three eligibility groups were relatively well-balanced between the treatment and control groups. The percentage of treatment students in each group was 51.2 percent, 44.4 percent, and 48.9 percent, respectively. There were 481 students in grade 7 (49.7 percent in the treatment group) and 432 in grade 8 (50.5 percent in the treatment group).

Figure 5. Consort diagram of eligibility, random assignment, and attrition



As described in Figure 5, of the 913 students in the ITT sample, just fewer than 40 percent did not have GMRT scores in Spring 2011 and, thus, were not included in the impact analyses of GMRT scores; over 20 percent were missing Spring 2011 SOL scores. The attrition rate for treatment students was slightly higher than for controls. Two reasons were presented by school personnel for the high percentage of students without a Spring 2011 GMRT scores. First, GMRT is not a state mandatory test and students who are absent from school the day when the test is administered are not required to take the test another time. Secondly, GMRT was administered in April, after the announcement of the end of the grant, and the school administrators and interventionists were already moving beyond the study and looking for

replacement programs and jobs. It became difficult for the LEA liaisons and evaluators to demand make-up days for GMRT.

With this amount of attrition, it was imperative that an analysis of differential attrition effects on these test scores be carried out. A 2x2 factorial ANOVA was conducted to compare the Spring 2010 baseline scores on each measure—GMRT Extended Scale Scores for Total Reading, Comprehension, and Vocabulary, and SOL Scale Scores for English/Reading—for students with and without Spring 2011 scores in the treatment and control groups. In each of these four analyses, the interaction between having a Spring 2011 score and experimental group was statistically insignificant ($p > 0.05$), supporting a conclusion that the missing students from the treatment and control groups had similar levels of reading achievement at baseline.

Data collection

Two assessments were used to determine eligibility to the study and to assess outcomes: GMRT, 4th Edition, and the SOL English/Reading for students in grades 6 and 7. The psychometric qualities of these assessments are discussed in *Part I, Assessments* (p. 20).

Study eligibility was assessed with results from the spring of 2010 administration of the GMRT and SOL for students in grades 6 and 7. Eligibility was determined by examining Total Reading grade equivalents for the GMRT and English/Reading performance levels for the SOL. Student reading achievement outcomes were measured with GMRT Extended Scale Scores in Total Reading, Comprehension, and Vocabulary and SOL scale scores in English/Reading obtained in spring of 2011 for students in grades 7 and 8.

Student demographic data were also collected from each of the three participating school districts with varying success. Gender was available for all students; ethnicity was available for students in all schools except one; special education status was available for students in six schools; and poverty (free or reduced lunch) and English proficiency (LEP) were available for students in five schools. This lack of uniform availability, which reflects different data-privacy regulations across the school districts, had implications for the use of this information as covariates in the analysis models.

Data analysis

Impact analyses of ITT student achievement in reading on the two assessments, GMRT and SOL, were conducted to assess the effects of participation in *PRJ* for the SY 2010-2011. These analyses are based on the 913 eligible struggling readers in grades 7 and 8. GMRT Expanded Scale Scores for Total Reading, Comprehension, and Vocabulary and SOL scale scores for English/Reading were analyzed for the two grades combined and for each grade separately.

Multi-level regression analysis models were used to estimate and test the statistical significance of the difference between the reading achievement of students receiving the intervention and the control group. Two-level models were employed that express the Spring

2011 GMRT and SOL scores as a function of student and school variables.⁶ The student's grade was treated as a student-level covariate in analyses that included students from both grades since the GMRT Extended Scale Scores are related to grade level. The treatment variable was included at the student level of these models.

The Spring 2011 GMRT and SOL scores were the dependent variables in these analyses. Originally, the 2010 GMRT and SOL scores—representing the same test as the dependent variable—were to be included as the principal student-level covariate. Student demographic variables were also to be included as covariates in these analyses. However, there were several significant missing data problems. First, no Spring 2010 SOL data were obtained for almost one-third (299) of the ITT sample. Second, no Spring 2010 GMRT scores for Comprehension and Vocabulary were obtained for over half (551) of the ITT sample, as the school division did not compute these scores separately. Third, 61 students were missing all scores on the Spring 2010 GMRT. The number of students missing these scores who also had valid scores for the outcome variables was smaller than this (13 or 14 for the 2011 GMRT scores and 39 for the 2011 SOL scores). Finally, as mentioned above, demographic data for large numbers of students were not obtained due to school districts' restrictions on demographic data.

The first two types of missing data were addressed by employing the Spring 2010 GMRT Total Reading scale score as the student-level covariate for the analyses of 2011 GMRT Comprehension and Vocabulary scale scores and the 2011 SOL scale score.⁷ The missing baseline 2010 GMRT Total Reading scores were handled by employing a dummy variable adjustment—setting missing cases to a constant and setting a zero-one dummy variable equal to one for the missing cases and including the recoded baseline score and the dummy variable as covariates in the impact analysis model.

In addition to the recoded 2010 GMRT Total Reading scale score and the dummy variable that flagged missing cases on the recoded scale score, only two other covariates were employed in the impact analysis model: A zero-one dummy variable indicating student membership in the treatment group and a zero-one dummy variable indicating student grade level.⁸ Student demographic variables were not included due to the large and variable amounts of missing data.

To estimate the impact of the intervention on student reading achievement, the following model was tested:

At the student level,

$$Y_{ij} = \beta_0 + \beta_1 X_{1ij} + \beta_2 X_{2ij} + \beta_3 X_{3ij} + \beta_4 X_{4ij} + r_{ij}, \text{ where}$$

Y_{ij} is the Spring 2011 test score (GMRT/SOL) for student i in school j ;

⁶ Three-level models, employing student, school, and district variables were possible. However, there were only three districts and one district had only one school. Consequently, the three-level models were not used.

⁷ The correlations between the Spring 2010 GMRT Total Reading scale score and the outcome variables ranged between 0.295 for the 2011 SOL scale score and 0.406 for the 2011 GMRT Total Reading scale score.

⁸ The grade level variable was only employed in analyses based on students from both grades. Scale scores on the GMRT are vertically scaled. Thus, some of the variance in GMRT scores could be due to variation in grade level. This variable was omitted from the final analysis model if its significance level was greater than 0.20.

X_{1ij} is an uncentered dummy variable coded 0 for control and 1 for treatment students in school j ;

X_{2ij} is the grand mean centered Spring 2010 “recoded” GMRT Total Reading score for student i in school j ;

X_{3ij} is a grand mean centered dummy variable coded 1 for students missing the Spring 2010 GMRT Total Reading score and 0 otherwise;

X_{4ij} is a grand mean centered dummy variable coded 1 for students in 8th grade and 0 otherwise;

β_{0j} is the adjusted mean Spring 2011 test score for the control students in school j , controlling for the Spring 2010 GMRT Total Reading score and other covariates;

β_1 is the adjusted difference between treatment and control group mean Spring 2011 test scores (the *PRJ* treatment effect, controlling for the Spring 2010 GMRT Total Reading score and other covariates);

β_2 is the slope of the regression of Spring 2011 test scores on Spring 2010 GMRT Total Reading scores;

β_3 is the adjusted difference between the mean Spring 2011 test scores of students missing the Spring 2010 GMRT Total Reading score and those not;

β_4 is the adjusted difference between the mean 7th and 8th grade Spring 2011 test scores; and

r_{ij} is a unique effect for student i in school j and is $\sim N(0, \sigma^2)$;

All of the above coefficients at the student level, except β_{0j} , are assumed fixed across schools. The adjusted mean Spring 2011 test score for the control students in school j is modeled as a function of the student’s school:

$$\beta_{0j} = \gamma_{00} + u_{0j}, \text{ where}$$

γ_{00} is the adjusted mean Spring 2011 test score for all control students; and

u_{0j} is the unique effect of school j and is $\sim N(0, \tau)$.

The null hypothesis of no *PRJ* treatment effect on 2011 test scores is $H_0: \beta_1 = 0$ and is tested with a *t*-statistic.

To estimate the impact of *PRJ* at the end of year one for students in each grade separately, the model was identical to the above except for the omission of $\beta_4 X_{4ij}$, which represents the student’s grade.

Description of the Year One Sample

Student demographic characteristics

As mentioned earlier, some of the participating schools did not supply all of the requested student demographic data. The data that were received are summarized in Table 20, on the next page. There were slightly more eligible students in grade 7, and there were more males than one might expect. The important comparison, however, is between the treatment and control groups. None of the percentages displayed were significantly ($p \leq 0.05$) different

between the two groups. Furthermore, numbers of students with missing data did not disproportionately represent one group over the other. Also, the missing data were always for an entire school. Given that the random assignment was implemented within each school (and grade), it is very unlikely that there may have been any differences in the distribution of missing data between the treatment and control groups.

Table 20. Demographic characteristics of the ITT sample

Student Characteristic	Control*	Treatment*	Total*
Enrolled in Grade 7	242 (53.1%)	239 (52.3%)	481 (52.7%)
Enrolled in Grade 8	214 (46.9%)	218 (47.7%)	432 (47.3%)
Total	456	457	913
Female	207 (45.4%)	199 (43.5%)	406 (44.5%)
Male	249 (54.6%)	258 (56.5%)	507 (55.5%)
Total	456	457	913
African-American	279 (67.6%)	290 (69.0%)	569 (68.3%)
Total	413	420	833
Students with Disabilities	63 (21.1%)	82 (27.4%)	145 (24.3%)
Total	298	299	597
Free or Reduced Lunch	236 (89.4%)	233 (86.3%)	469 (87.8%)
Total	264	270	534
English Language Learner	20 (7.6%)	24 (8.9%)	44 (8.2%)
Total	264	270	534

*Percentages are based on the total number of students with valid data for each characteristic in the control, treatment, or total group.

Table 21. Comparison of treatment and control groups on Spring 2010 scores on the GMRT and SOL

Test Score	Means		Significance Level
	Control	Treatment	
GMRT Total Reading Extended Scale Score	474.5 (451)*	476.5 (453)	0.460
GMRT Comprehension Extended Scale Score	483.5 (179)	480.6 (179)	0.291
GMRT Vocabulary Extended Scale Score	485.0 (179)	486.7 (179)	0.540
SOL English/Reading Scale Score	372.6 (268)	374.2 (261)	0.685

* Numbers in parentheses are the numbers of students in each group having a valid test score.

Student baseline achievement

The reading achievement scores of the two design groups were compared using a t-test for two independent samples. Table 21, above, shows that the two groups were similar. The average SOL English/Reading Scale Score is well below the state's passing score of 400. As mentioned earlier, baseline scores for some of the measures were missing for students in some schools. Again, the number of students missing data was the same for the two groups. Also,

the missing data were always for an entire school. Given that the random assignment was implemented within each school (and grade), it is very unlikely that there may have been any differences in the distributional characteristics of missing data between the treatment and control groups.

Impact of *PRJ* Participation on Student Reading Achievement

Impact on all students

The estimated impact of participation in *PRJ* on the reading achievement of all students in grades 7 and 8 is described in Table 22. Clearly, the null hypothesis of no effect cannot be rejected. Students in the treatment and control groups performed equally well on both the GMRT and the SOL at the end of the year. After adjusting for the student level covariates that were retained in the final analysis model, the difference between the two groups on all four test scores was less than two scale score points. Similarly, the effect sizes were virtually zero. (The final analysis models, including the intra class correlations that represent the level of between-school variation, are presented in *Appendix A*.)

Table 22. Impact of *PRJ* participation on Spring 2011 scores on the GMRT and SOL for all students

Test Score	Unadjusted Means		Adjusted Means		Est. Impact	Effect Size ^{***}	Sig. Level
	Control	Treatment	Control	Treatment			
GMRT Total Reading Extended Scale Score	502.7 (289)* [23.9]**	504.2 (279) [22.3]	502.1	503.6	1.5	0.06	0.390
GMRT Comprehension Extended Scale Score	498.2 (290) [31.1]	499.7 (279) [27.6]	498.0	499.5	1.5	0.05	0.508
GMRT Vocabulary Extended Scale Score	501.0 (295) [26.9]	503.0 (290) [27.4]	500.7	502.5	1.8	0.07	0.382
SOL English/Reading Scale Score	398.2 (358) [50.0]	401.5 (343) [49.3]	397.0	400.1	3.1	0.06	0.376

* Numbers in parentheses are the numbers of students in each group having valid test scores for both the 2010 and 2011 spring administrations of each test.

** Standard deviation

*** The method used to calculate effect size was Glass's Δ , the difference between treatment and control groups' adjusted mean test scores divided by the control group's test score standard deviation.

Impact on students in each grade

Although differential effects of the intervention were not expected in the two different grades, analyses were carried out to determine whether the results may have been different for students in grades 7 and 8. There was more variation in the estimates of impact and effect sizes, but,

with one exception, the pattern of non-significant results was repeated. The exception was that Grade 7 students in the treatment group did significantly better ($p \leq 0.05$) than control students on the GMRT Comprehension subtest. The effect size of 0.21 was, however, relatively small. Also, after making 12 tests, one would expect almost one of them to be significant at $p \leq 0.05$ by chance. Table 23 displays the results.

Table 23. Impact of PRJ participation on Spring 2011 scores on the GMRT and SOL

Test Score	Unadjusted Means		Adjusted Means		Est. Impact	Effect Size***	Sig. Level
	Control	Treatment	Control	Treatment			
Grade 7							
GMRT Total Reading Extended Scale Score	497.0 (152)** [25.3]	500.6 (147) [22.9]	495.8	500.2	4.4	0.17	0.084
GMRT Comprehension Extended Scale Score	491.8 (153) [31.5]	497.6 (148) [27.7]	490.6	497.2	6.6	0.21	0.038
GMRT Vocabulary Extended Scale Score	495.7 (155) [28.5]	497.8 (153) [28.3]	494.7	497.6	2.9	0.10	0.322
SOL English/Reading Scale Score	402.4 (186) [49.1]	401.1 (179) [48.4]	399.8	399.2	-0.6	-0.01	0.892
Grade 8							
GMRT Total Reading Extended Scale Score	509.0 (137)* [20.6]**	508.3 (132) [21.0]	508.8	507.8	-1.0	-0.05	0.696
GMRT Comprehension Extended Scale Score	505.3 (137) [29.2]	502.0 (131) [27.4]	505.8	502.1	-3.7	-0.13	0.246
GMRT Vocabulary Extended Scale Score	507.0 (140) [23.7]	508.8 (137) [25.2]	506.6	507.8	1.2	0.05	0.677
SOL English/Reading Scale Score	393.7 (172) [50.6]	402.0 (164) [50.3]	394.2	401.6	7.4	0.15	0.154

*Numbers in parentheses are the numbers of students in each group having valid test scores for both the 2010 and 2011 spring administrations of each test.

** Standard deviation

*** The method used to calculate effect size was Glass's Δ , the difference between treatment and control groups' adjusted mean test scores divided by the control group's test score standard deviation.

CONCLUSION

Research has established a relationship between reading difficulties and poor behavior, although the nature of that relationship is unclear (Kos, 1991; McGee, Share, Moffitt, Williams & Silva, 1988). For struggling adolescent readers, behavior problems are intensified by the consequences of years of reading failure. This failure can be caused by weak phonics skills, dysfluency from poor word recognition, broad knowledge deficits, and lack of practice in applying comprehension strategies over time. As a result, struggling adolescent readers have little confidence in their ability to succeed in reading and little sense of themselves as readers (Collins, 1996; Guthrie, Alao, & Rinehart, 1997). Not only are they aware of their reading problems but they are likely to have anxiety, low motivation for learning, and lack of self-efficacy (Wigfield & Eccles, 1994). For these reasons, striving readers are more comfortable “acting out” than publicizing their lack of reading proficiency.

To address the deficits in the earlier years, Torgensen (2005) suggests that adolescent struggling readers need “powerful instruction;” that is, instruction that has the following qualities: explicit, systematic, intensive and supportive, scaffolded and attentive to time on task, and includes flexible grouping structures, ongoing progress monitoring, and motivational techniques (Torgensen, 2005). *PRJI* and *II* incorporates each of these features in varying degrees, as they use a number of strategies to engage struggling readers, including explicit instruction, engaging reading activities, peer-to-peer collaboration and student-centered technology. The two-week Expedition is designed with cumulative review to help scaffold student learning over time. However, looking at the study findings, *PRJ* appears to have no impact on students’ academic performance, as measured by standardized assessments.

Reasons for such results are difficult to determine, particularly in a one-year study. Unfortunately the abrupt ending of funding for the study cut short the evaluators’ ability to pursue the lines of inquiry that appeared as the implementation data started to be analyzed. For instance, an unexpected finding in the study was that the interventionists in schools with 90-minute lessons covered less material than those in schools with 50-minute lessons. The extent to which longer classroom time impacts highly structured interventions is not clear, but the question merits exploration, as more schools move into block time. Another question that merits further investigation is the relationship between student behavior and highly structured interventions. Does a prescriptive and repetitive intervention hinder student behavior? If so, what can be done to balance the need for explicit and systematic instruction with the need to keep students connected to task?

A factor to be considered for both the implementation and the impact analysis is that one year may not be enough time to learn and apply an intervention. The interventionists learned the intervention in August and started work in September. They were experimenting with this new knowledge while applying it. The developer and VDOE provided supports to ensure that the intervention was implemented as faithfully to the model as possible, but the reality of school life intervened in the plans. A number of classes were cancelled, many classes were curtailed for other activities, and student behavior may have been an unexpected factor that required extra training and support. The site visits from the evaluators showed that the interventionists

were being faithful to *PRJ*'s structure and format, while struggling to better understand all its implication, particularly how to balance students' needs with the need to keep a brisk pacing. Looking at Table 14 (p. 39), only one interventionist was able to finish the lessons within the allotted time, as recommended by the publisher. However, these lessons appeared to have been finished to the detriment of some essential features, such as correction procedures (Table 17, p.43). Additionally, as Table 15 (p. 41) indicates, no interventionist was able to finish the curriculum by the end of the school year, much less before the assessments used for the impact study were conducted.

It is common sense to suppose that even the strongest program cannot teach itself, as it is dependent on a knowledgeable and skillful interventionist who can deliver the program with both fidelity and sound judgment. For example, a main classroom management strategy in *PRJ* is to anticipate student behavior problems by keeping a brisk pace of delivery. "Time on task" means providing opportunities for students to read, increasing time spent on meaningful activities, minimizing time spent on transitions, and managing behavior. These "time on task" indicators seem to rely more heavily on teacher judgment than many of the other instructional features included in the intervention. In the interviews, the interventionists commented that it was difficult to simply forge ahead with a lesson if they felt their students were not grasping the content. As one interventionist noted, "*I am behind on pacing because of testing and student behaviors, but mostly I refuse to move at such a quick pace if the students do not understand the materials.*" One wonders if teachers were able to make informed decisions as needs arose, while maintaining a "brisk" pace throughout it all, particularly as they were learning and implementing the intervention at the same time. As the interventionists matured in their own learning processes about the intervention and the students, the second implementation year would certainly differ. How much this maturation process would influence test results is a question that cannot be answered, as the study came to an abrupt end.

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APPENDIX A: Final Model Results for Impact Analyses

Table A1. Final Model Results and Intra Class Correlation for Analysis of Impact of <i>Journeys</i> on Spring 2011 GMRT Total Reading Extended Scale Scores for All Students						
Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	502.06	1.27	8	394.42	0.000
Student	<i>Journeys</i>	1.52	1.77	563	0.86	0.390
	Grade 8	6.17	1.81	563	3.40	0.001
	2010 GMRT Total Reading *	0.42	0.04	563	8.93	0.000
	Missing Data Dummy Variable *	197.24	22.09	563	9.45	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	0.22	0.027			
Student	Level-1	442.99				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A2. Final Model Results and Intra Class Correlation for Analysis of Impact of <i>Journeys</i> on Spring 2011 GMRT Comprehension Extended Scale Scores for All Students						
Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	498.00	2.12	8	235.19	0.000
Student	<i>Journeys</i>	1.54	2.33	563	0.66	0.508
	Grade 8	5.01	2.41	563	2.50	0.013
	Gender	3.94	2.34	563	1.68	0.093
	2010 GMRT Total Reading *	0.38	0.06	563	6.47	0.000
	Missing Data Dummy Variable *	182.93	29.76	563	6.15	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	14.86	0.046			
Student	Level-1	768.78				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A3. Final Model Results and Intra Class Correlation for Analysis of Impact of *Journeys* on Spring 2011 GMRT Vocabulary Extended Scale Scores for All Students

Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	500.66	1.56	8	321.65	0.000
Student	<i>Journeys</i>	1.80	2.06	579	0.88	0.382
	Grade 8	6.57	2.13	579	3.09	0.003
	Gender	-2.82	2.07	579	-1.36	0.174
	2010 GMRT Total Reading *	0.46	0.05	579	9.00	0.000
	Missing Data Dummy Variable *	223.75	25.66	579	8.72	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	1.97	0.010			
Student	Level-1	619.00				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A4. Final Model Results and Intra Class Correlation for Analysis of Impact of *Journeys* on Spring 2011 SOL English/Reading Scale Scores for All Students

Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	396.96	3.98	8	99.82	0.000
Student	<i>Journeys</i>	3.13	3.53	696	0.89	0.376
	Grade 8	-11.60	3.65	696	3.18	0.002
	2010 GMRT Total Reading *	0.75	0.09	696	8.47	0.000
	Missing Data Dummy Variable *	358.81	43.75	696	8.20	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	85.76	0.028			
Student	Level-1	2176.20				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A5. Final Model Results and Intra Class Correlation for Analysis of Impact of <i>Journeys</i> on Spring 2011 GMRT Total Reading Extended Scale Scores for Grade 7 Students						
Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	495.81	1.79	8	276.46	0.000
Student	<i>Journeys</i>	4.38	2.53	295	1.73	0.084
	2010 GMRT Total Reading *	0.55	0.07	295	8.28	0.000
	Missing Data Dummy Variable *	266.15	32.95	295	8.08	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	0.002	0.015			
Student	Level-1	476.25				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A6. Final Model Results and Intra Class Correlation for Analysis of Impact of <i>Journeys</i> on Spring 2011 GMRT Comprehension Extended Scale Scores for Grade 7 Students						
Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	490.59	2.44	8	201.40	0.000
Student	<i>Journeys</i>	6.67	3.20	297	2.08	0.038
	2010 GMRT Total Reading *	0.56	0.09	297	6.62	0.000
	Missing Data Dummy Variable *	269.35	42.26	297	6.37	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	6.84	0.066			
Student	Level-1	764.26				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A7. Final Model Results and Intra Class Correlation for Analysis of Impact of *Journeys* on Spring 2011 GMRT Vocabulary Extended Scale Scores for Grade 7 Students

Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	494.68	2.28	8	217.04	0.000
Student	<i>Journeys</i>	3.00	3.02	304	0.99	0.322
	2010 GMRT Total Reading *	0.55	0.08	304	6.89	0.000
	Missing Data Dummy Variable *	274.14	39.74	304	6.90	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	4.99	0.009			
Student	Level-1	695.95				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A8. Final Model Results and Intra Class Correlation for Analysis of Impact of *Journeys* on Spring 2011 SOL English/Reading Scale Scores for Grade 7 Students

Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	399.81	6.63	8	60.29	0.000
Student	<i>Journeys</i>	-0.64	4.66	361	-0.14	0.892
	2010 GMRT Total Reading *	0.79	0.12	361	6.34	0.000
	Missing Data Dummy Variable *	391.34	60.92	361	6.42	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	296.32	0.089			
Student	Level-1	1963.52				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A9. Final Model Results and Intra Class Correlation for Analysis of Impact of <i>Journeys</i> on Spring 2011 GMRT Total Reading Extended Scale Scores for Grade 8 Students						
Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	508.75	1.86	8	271.20	0.000
Student	<i>Journeys</i>	-0.94	2.42	265	-0.39	0.696
	2010 GMRT Total Reading *	0.29	0.06	265	5.08	0.000
	Missing Data Dummy Variable *	132.67	29.07	265	4.56	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	4.08	0.053			
Student	Level-1	389.71				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A10. Final Model Results and Intra Class Correlation for Analysis of Impact of <i>Journeys</i> on Spring 2011 GMRT Comprehension Extended Scale Scores for Grade 8 Students						
Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	505.76	2.78	8	182.03	0.000
Student	<i>Journeys</i>	-3.61	3.38	264	-1.07	0.287
	2010 GMRT Total Reading *	0.26	0.08	264	3.26	0.000
	Missing Data Dummy Variable *	126.78	40.97	264	3.10	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	14.86	0.051			
Student	Level-1	759.93				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A11. Final Model Results and Intra Class Correlation for Analysis of Impact of *Journeys* on Spring 2011 GMRT Vocabulary Extended Scale Scores for Grade 8 Students

Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	506.61	2.02	8	250.27	0.000
Student	<i>Journeys</i>	1.16	2.78	273	0.42	0.677
	2010 GMRT Total Reading *	0.38	0.06	273	5.88	0.000
	Missing Data Dummy Variable *	177.76	32.86	273	5.41	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	0.35	0.28			
Student	Level-1	531.61				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

Table A12. Final Model Results and Intra Class Correlation for Analysis of Impact of *Journeys* on Spring 2011 SOL English/Reading Scale Scores for Grade 8 Students

Fixed Effects						
Level	Effect	Estimate	Std Error	df	t-value	Pr > t
School	Intercept	394.18	3.94	8	99.96	0.000
Student	<i>Journeys</i>	7.47	5.23	332	1.43	0.154
	2010 GMRT Total Reading *	0.72	0.13	332	5.73	0.000
	Missing Data Dummy Variable *	331.13	62.54	332	5.29	0.000
Random Effects						
Level	Variance Components	Estimate	ICC			
School	Intercept	18.77	0.014			
Student	Level-1	2282.98				

* Missing data for the baseline covariate were coded with a zero and a zero-one dummy variable was set to one for each case missing the baseline covariate. Because of missing data issues in certain schools, the 2010 GMRT Total Reading score was used as the baseline covariate for all analyses.

APPENDIX B: Implementation Study Protocols

A. Interventionists Check-In Protocol

School

(Check the school where the interventionist you are calling works)

Roanoke	Norfolk	Richmond
<input type="checkbox"/> Lucy Addison	<input type="checkbox"/> Azalea Gardens	<input type="checkbox"/> Lucille M. Brown
<input type="checkbox"/> James Breckinridge	<input type="checkbox"/> Blair	
<input type="checkbox"/> James Madison	<input type="checkbox"/> Norview	
<input type="checkbox"/> Stonewall Jackson		
<input type="checkbox"/> Woodrow Wilson		

Date of Call

(Please write the day in the corresponding month of the call)

2010		2011	
<input type="checkbox"/>	September	<input type="checkbox"/>	January
<input type="checkbox"/>	October	<input type="checkbox"/>	February
<input type="checkbox"/>	November	<input type="checkbox"/>	March
<input type="checkbox"/>	December	<input type="checkbox"/>	April
		<input type="checkbox"/>	May

Note: Long interview with interventionists in June

Caller: _____

Professional Development

1. What Voyager-related professional development (PD) have you attended this month?

- None
- Online training: _____ (number of hours)
- Adolescent literacy training: _____ (number of hours)
- Other (specify) _____

2. If the answer to question 1 is no, why?

- No PD was offered this month
- Lack of time
- Lack of interest
- Other reasons (specify) _____

Coaching Support

3. Did you meet with the Voyager Implementation Specialist this month?
Yes ____ (go to question 4) No ____ (go to question 6)

4. If yes, how many hours of coaching support did you receive this month? _____

5. What was the focus of the meeting?

6. Did you meet with the Project Director this month?
Yes ____ (go to question 7) No ____ (go to question 10)

7. If yes, how many hours of coaching support did you receive this month? _____

8. What was the focus of the meeting?

9. How would you rate the coaching or mentoring support you received this month?

Not relevant					Very relevant
1	2	3	4	5	
Insufficient			Sufficient		
1	2	3	4	5	

10. How aligned is the training and support you received from the coach, the project director, the liaison, and any other Voyager staff?

Conflicting					Very aligned
1	2	3	4	5	

11. If you did not meet with the coach, why not?

- a. I am meeting the coach on _____
- b. The coach did not come this month _____
- c. I was too busy to spend time with the coach ____
- d. I have been absent from school _____
- e. Other reasons (Specify) _____

12. Did you receive a visit this month from

- a. The School Division Liaison?
- b. Other _____

13. What was the focus of the meeting?

7th grade instruction (the next four questions are related to your 7th grade classes)

14. How was attendance in your classes this month?

<input type="checkbox"/>	Almost all students attended
<input type="checkbox"/>	____ Number of students chronically absent (more than once a week)

	___ Students were suspended (OSS) for ___ days
	___ Students were suspended (ISS) for ___ days
	The school was closed for _____ days
	I had _____ class days cancelled due to _____

15. What Expedition and Lesson are you in in each of your 7th grade classes?

	Expedition _____ lesson _____
--	-------------------------------

16. Did you use the 11th day for the Expedition this month?

Yes _____ (go to 12)

No _____ (go to 13)

17. If yes, what activities did you chose for the 11th day?

- a. Re-teaching _____
- b. Independent work _____
- c. Other (specify) _____

18. How did you make the choice about the 11th day?

8th grade instruction (the next four questions are related to your 8th grade classes)

19. How was attendance in your classes this month?

	Almost all students attended
	___ Number of students chronically absent (more than once a week)
	___ Students were suspended (OSS) for _____ days
	___ Students were suspended (ISS) for _____ days
	The school was closed for _____ days
	I had _____ class days cancelled due to _____

20. What Expedition and Lesson are you in in each of your 8th grade classes?

Expedition _____ lesson _____

21. Did you use the 11th day for the Expedition this month?

Yes _____ (go to 17)

No _____ (go to 18)

22. If yes, what activities did you chose for the 11th day?

d. Re-teaching _____

e. Independent work _____

f. Other (specify) _____

23. How did you make the choice about the 11th day?

Use of time

24. Can you say that at least 80% of your time this month has been dedicated to teaching Voyager?

Yes _____

No _____

25. If not, what other duties have you been asked to do? _____

26. Do you have scheduled time to plan your classes during the school day?

Yes _____

No _____

Conclusion

27. Is there anything you would like to share with us at this time about the implementation of the program?

2. Coaches Interview Protocol

Interview with
Date
Site

1. How frequently do you meet with the teachers?
2. What is the main focus of her work with the teachers?
3. What issues the teachers are encountering?
4. How much support are they receiving from principals?
5. What factors do you feel influence the implementation of the intervention?
6. Other comments?

3. Classroom Observation Rubric

Instructions to observer

1. Observers should stay for the whole class; if you need to leave the room before the end of the class, please check here and explain the reason in the back of this page _____
2. Before starting the observation,
 - a. Ask the teacher the number of the Expedition you will observe.
 - b. Within the Expedition, ask the teacher the number of the lesson she is teaching that day (from 1 to 10 in the Expeditions sequence).
 - c. If the lesson you are observing is lesson 2, 4, and 7 in the Expeditions sequence, then you need to ask the teacher the lesson number for the word study she will be teaching that day.
3. If you answer partially or no to any item in your observation forms, please use the back of the page to explain your answer.
4. In the classroom behavior/management table, if the behavior is not applicable during part of the observation time, write n/a and deduce that period from the score (e.g. instead of dividing by 5, divide by 4 or what is applicable).
5. Use back of the observation page to enter comments. You don't need to comment in every aspect of your observation but make short comments about behaviors or events that catch your attention and can be relevant to a better understanding of why the lesson occurred the way it did.

Note

VSR II has 11-day Expeditions with two day 10

OVERVIEW

School: _____

Grade _____

Teacher Name: _____

Observer: _____

Observation Date: _____

Observation _____

Time: _____

Lesson Number: _____

Expedition Number: _____ No. of students: _____

Was the entire lesson completed in the class period? Yes _____ No _____

In addition to the teacher, is there another adult in the room? Yes _____ No _____

Who? (circle) Special education teacher Special education aide Voyager coach

School administrator School district staff Virginia Project Director

Other _____

A. Classroom Environment (complete at beginning of lesson)	Yes	Partially	No
1. Teachers have sufficient space to conduct individual and/or group work			
2. Instructional areas are clearly identified (i.e. whole group, independent small group, word study)			
3. Teacher resources for the daily lesson are readily available			
4. All students have readily available materials, as needed			

B. Lesson Planning and Delivery – overview (complete at the end of lesson)	Yes	Partially	No	Not observed
5. Teacher closely follows the curriculum guide during instruction				
6. Pace is brisk and business-like, yet personal				
7. Skills are modeled correctly				
8. The steps of the correction procedures are followed as needed				
9. Teacher puts students into groups as indicated by the lesson				
10. Teacher uses built-in differentiated instruction strategies as needed : <input type="checkbox"/> re-teach lesson <input type="checkbox"/> word study lesson <input type="checkbox"/> English Language Learner strategies <input type="checkbox"/> challenge questions <input type="checkbox"/> Paired reading				

Lesson 1/Lesson 6

<p align="center"><i>C. Lesson Planning and Delivery- Lesson Specific</i> (Check the box next to each activity you observe)</p>	<p align="center">Components delivered in order? (Y/N)</p>	<p align="center">Steps Delivered in order? (Y/N)</p>	<p align="center">Components delivered within allotted time? (Y/N)</p>
<p><i>WHOLE GROUP</i> Component 1: Advanced Word Study (10 min.)</p> <p><input type="checkbox"/> Affixes</p> <p><input type="checkbox"/> Sight Words</p> <p><input type="checkbox"/> Multisyllabic Words</p> <p><input type="checkbox"/> Spelling</p> <p><input type="checkbox"/> Fluency</p>			
<p>Component 2: Before Reading (15 min.)</p> <p><input type="checkbox"/> Expedition Introduction (lesson 1 only)</p> <p><input type="checkbox"/> Review content with DVD (lesson 6 only)</p> <p><input type="checkbox"/> Vocabulary</p> <p><input type="checkbox"/> Comprehension Strategies</p>			
<p>Component 3: Reading (20 min.)</p> <p><input type="checkbox"/> Read Lesson Passage</p> <p><input type="checkbox"/> Model Vocabulary and Comprehension Strategies</p>			
<p>Component 4: After Reading (5 min.)</p> <p><input type="checkbox"/> Review Vocabulary and Comprehension Strategies</p>			

<p><i>D. Classroom Behavior/Management</i></p>	<p align="center">Minutes</p>					<p align="center">Total</p>
	<p align="center">10</p>	<p align="center">10</p>	<p align="center">10</p>	<p align="center">10</p>	<p align="center">10</p>	
<p>1. Half or more of the students are paying attention to teacher or following teacher instructions</p>						
<p>2. Half or more of the students are responding to teacher questions or prompts</p>						
<p>3. Half or more of the students are actively participating in the activities assigned by the teacher (group or individually)</p>						
<p>4. Teacher addresses student behavior promptly to minimize disruption in the classroom</p>						
<p>5. Teacher makes an effort to involve students who appear disengaged</p>						
<p>6. Students follow expectations for working in groups</p>						

D. Classroom Behavior/Management Scale: 0 Not At All 1 Occasionally 2 Frequently

Lesson 2/Lesson 4/Lesson 7

C. Lesson Planning and Delivery- Lesson Specific (Check the box next to each activity you observe in the lesson)	Components delivered in order? (Y/N)	Steps delivered in order? (Y/N)	Components delivered within allotted time? (Y/N)
WHOLE GROUP Component 1: Before Reading (10 min.) <input type="checkbox"/> Vocabulary Review <input type="checkbox"/> Applied Vocabulary			
Component 2: Reading (15 min.) <input type="checkbox"/> Reread Lesson 1, 3, or 6 Passage <input type="checkbox"/> Practice Comprehension Strategies			
INDEPENDENT SMALL GROUP* Component 3: After Reading (10 min.) <input type="checkbox"/> Writing in Response to Reading			
Component 4: Paired Fluency Practice (15 min.) Component 5: Passports Reading Journeys Library <input type="checkbox"/> Building Fluency ↓ <input type="checkbox"/> Self-selected Texts			
*During this 25-minute period, a small group of students may be involved in teacher-directed Word Study while the other students work independently. Use the Word study form to observe the small group. If no small group happened, check here and use the back of the form to explain why.			

D. Classroom Behavior/Management	Minutes					Total
	10	10	10	10	10	
1. Half or more of the students are paying attention to teacher or following teacher instructions						
2. Half or more of the students are responding to teacher questions or prompts						
3. Half or more of the students are actively participating in the activities assigned by the teacher (group or individually)						
4. Teacher addresses student behavior promptly to minimize disruption in the classroom						
5. Teacher makes an effort to involve students who appear disengaged						
6. Students follow expectations for working in groups						

D. Classroom Behavior/Management Scale: 0 Not At All 1 Occasionally 2 Frequently

Lesson 3/ Lesson 8

<i>C. Lesson Planning and Delivery- Lesson Specific</i> (Check the box next to each activity you observe in the lesson)	Components delivered in order? (Y/N)	Steps delivered in order? (Y/N)	Components delivered within allotted time? (Y/N)
<i>WHOLE GROUP</i> Component 1: Advanced Word Study (10 min.) <input type="checkbox"/> Affixes <input type="checkbox"/> Sight Words <input type="checkbox"/> Multisyllabic Words <input type="checkbox"/> Spelling <input type="checkbox"/> Fluency			
Component 2: Before Reading (15 min.) <input type="checkbox"/> Vocabulary <input type="checkbox"/> Comprehension Strategies			
Component 3: Reading (15 min.) <input type="checkbox"/> Read Lesson 3 or 8 Passage <input type="checkbox"/> Model Vocabulary and Comprehension Strategies			
Component 4: After Reading (5 min.) <input type="checkbox"/> Review Vocabulary and Comprehension Strategies			

<i>D. Classroom Behavior/Management</i>	Minutes					Total
	10	10	10	10	10	
1. Half or more of the students are paying attention to teacher or following teacher instructions						
2. Half or more of the students are responding to teacher questions or prompts						
3. Half or more of the students are actively participating in the activities assigned by the teacher (group or individually)						
4. Teacher addresses student behavior promptly to minimize disruption in the classroom						
5. Teacher makes an effort to involve students who appear disengaged						
6. Students follow expectations for working in groups						

D. Classroom Behavior/Management Scale: 0 Not At All 1 Occasionally 2 Frequently

Lesson 9

<i>C. Lesson Planning and Delivery- Lesson Specific</i> (Check the box next to each activity you observe in the lesson)	Components delivered in order? (Y/N)	Steps delivered in order? (Y/N)	Components delivered within allotted time? (Y/N)
<i>WHOLE GROUP</i>			
Component 1: Before Reading (10 min.) <input type="checkbox"/> Vocabulary Review <input type="checkbox"/> Applied Vocabulary			
Component 2: Reading (10 min.) <input type="checkbox"/> Reread Lesson 8 Passage			
Component 3: After Reading (10 min.) <input type="checkbox"/> Expedition Review			
Component 4: Assessment (15 min.) <input type="checkbox"/> Tips for Success <input type="checkbox"/> Comprehension and Vocabulary Assessment (New Reading Passage/High-Stakes Practice)			
Component 5: Expedition Wrap-Up (5 min.) <input type="checkbox"/> DVD Closing Segment <input type="checkbox"/> Discuss Probing Questions			

<i>D. Classroom Behavior/Management</i>	Minutes					Total
	10	10	10	10	10	
1. Half or more of the students are paying attention to teacher or following teacher instructions						
2. Half or more of the students are responding to teacher questions or prompts						
3. Half or more of the students are actively participating in the activities assigned by the teacher (group or individually)						
4. Teacher addresses student behavior promptly to minimize disruption in the classroom						
5. Teacher makes an effort to involve students who appear disengaged						
6. Students follow expectations for working in groups						

D. Classroom Behavior/Management Scale: 0 Not At All 1 Occasionally 2 Frequently

Word Study Sequence Lesson 1-4, 6-9 Form

<i>E. Lesson Planning and Delivery – Word Study</i> (Check the box next to each activity you observe in the lesson)	Components delivered in order? (Y/N)	Steps delivered in order? (Y/N)	Components delivered within allotted time? (Y/N)
<i>SMALL GROUP</i> (25 min.) <input type="checkbox"/> Fluency			
<input type="checkbox"/> Phonics			
<input type="checkbox"/> Sight Words			
<input type="checkbox"/> Spelling			
<input type="checkbox"/> Passage Reading and Comprehension			
<input type="checkbox"/> Vocabulary ↓			