



A Study of the Effectiveness of
The Reading Web



Submitted by:
Ben Brady, Consultant
Rourke Classroom Resources

1/18/2011

Table of Contents

Introduction	2
Program Description	2
• Program Components	3
• Reading Web Titles	3
• Using Lexile Levels with the Reading Web	5
• Using Fountas and Pinnell Levels	6
• Placing Students at the Appropriate Reading Level	8
• Web-Based Student Activities	9
• Teacher-Supported Instruction	9
• Steps Followed in the Reading Web Implementation	10
Research-Base for the Reading Web	11
• Computer-Assisted Instruction (CAI)	11
• Standards-Based Instruction	12
• Building Background Knowledge	13
• Use of Visual Aids	13
• Phonemic Awareness and Phonics Instruction	13
• Word Pronunciation	14
• Vocabulary Development	14
• Reading Comprehension	15
• Reading Fluency	16
• Assessment	16
Effectiveness of the Reading Web	17
• Methodology	17
Preliminary Findings	18
• Chicago Schools	19
• The Armstrong School District	24
• New York City Schools	28
Conclusion	30
Bibliography	31

Appendix 1: Florida Science Standards and the Reading Web Titles

Appendix 2: Florida Language Arts Standards and the Reading Web Titles



Introduction

Every child has the capacity to succeed in school and in life. However, a great number of children fail to meet their full potential. Many students, especially those from poor families and with limited English proficiency, are placed at risk. Rourke Publishing's mission is to reach out to assist students who are at risk by providing reading programs for these students including English Language Learners (ELLs), focusing both on bilingual and English reading intervention kits proven to be effective in the classroom.

Rourke Publishing, L.L.C. is a private company located in Vero Beach, Florida. It publishes print and electronic books for children in the United States. The company provides science, social studies, bilingual, and adventure books in print and electronic versions, as well as reference and board books in print version. It offers science books on animals, earth/nature, health/human body, math, science, physical science, and transportation and technology, as well as social studies books on biographies, communities/world culture, geography, history, life skills, and Native Americans. The company offers its books to schools and libraries. Rourke Publishing, L.L.C. was incorporated in the 1980's. The *Reading Web* program was launched in 2009. The program is being implemented successfully in several school districts throughout the United States. At the present time, there are more than 700 students actively participating in the program.

Program Description

Rourke's *Reading Web* is a research-based reading intervention program that uses computer software and twenty-nine nonfiction books and one fiction book for students at grades 4 through 10. In the case of English language learners (ELLs) these books may be used at higher-grade levels. The software features a portion of the text found in the books and provides students with the opportunity to practice their reading skills prior to reading the books. Since the program is web-based, there is no software to install or data to

maintain. The student information is stored on the company's server. Because Rourke's *Reading Web* was designed to engage struggling readers to help them develop their reading skills, the program can be used in a number of instructional situations. These situations include classroom computer centers, resource rooms or libraries where computers are available, computer labs, as well as media center rooms. The software, available from Rourke's secure website, can be accessed by any student from any computer in the school or home. Since the two most significant characteristics of the *Reading Web* are engaging students in reading and improving reading skills, the *Reading Web* can become a valuable supplement to a range of instructional situations. These situations include "pull out" or "push in" interventions, Response to Intervention (RTI), Special Education, ESOL, After School and Summer School Programs.

- **Program Components**

- Rourke Reading Web Software hosted on a secure web site: <www.RourkeReadingWeb.com>
- Reading Web Teacher's Resource Online
- Six-packs of Nonfiction Books associated with web-based reading passages
- Headsets with microphones

- ***Reading Web Titles***

The books selected for *the Reading Web* are high interest-low and intermediate reading level books that have proven to be effective helping at risk and English language learners (ELLs) succeed. These high interest, low and intermediate reading level books are written with content that is appealing to students of various ages. High interest, low reading level books are one of many ways to encourage reluctant readers to read. These books include nonfiction texts (many of them related to Science) and one fiction book that are appropriate for the student's developmental reading level (grades 4-10). This enables ELLs to read the same type of content their peers read while acquiring key subject-area vocabulary (See Table 1 for Lexile Level, Words per Minute (WPM), Fountas and Pinnell, and type of questions used).

Title	Lexile Level	WPM	F & P Level	Literal	Inferential	Structural
Creeping Crawlers	200-249	60-70	G 1	••	•	••
Earth	200-249	60-70	G 1	•••	•	•
Space	200-249	60-70	G 1	••	•	••
Paintball	350-399	80-90	K 2	••	•	••
Trees Don't Freeze	350-399	80-90	K 2	••	••	•
How Muscles and Bones Hold You Up	400-499	80-90	L 2	•	•••	•
Allosaurus	600-699	80-90	M 2	••	•	••
Wild Horses	550-599	90-100	N 3	•••		••
Hurricanes	900-949	90-100	O 3	••	••	•
Volcanoes	850-899	90-100	O 3	••	••	•
Bloodsuckers	600-699	90-100	P 3	•••		••
Desert Dinners	600-699	90-100	P 3	••	•	••
Freaky Faces	600-699	90-100	P 3	••	•	••
Freshwater Feeders	600-699	90-100	P 3	•	•	•••
Speed Demons	600-699	90-100	P 3	••		•••
Goalies	600-749	90-100	P 3/4	•	•	•••
Quarterbacks	600-749	90-100	P 3/4	••	•	••
Strikers	600-749	90-100	P 3/4	••	•	••
Cell Phones	750-799	100-110	R 4	••		•••
MP3 Players	750-799	100-110	R 4	••	••	•
Continents	750-849	100-110	R 4/5	•••	•	•
Oceans	750-849	100-110	R 4/5	••	••	•
Pedro and the Coyote	800-849	110-120	S 5	••	••	•
Video Games	800-849	110-120	S 5	••	•	••
Going Green	800-849	110-120	T 5	•••	•	•
The Internet and Email	800-849	110-120	T 5	•••	•	•
The Cheerleader	800-899	110-120	T 5	•	•	•••
Biofuel	800-899	110-120	U 5	••	•	••
Gymnastics	900-949	110-120	W 6	•	•••	•

Karate	900-949	110-120	X 6
--------	---------	---------	-----	-----	---	---

• **Using Lexile Levels with *The Reading Web***

As it can be observed in the above table, the second column includes a Lexile level. Lexile score is a quantitative measure of readability that can be applied to texts and also a metric for describing reading achievement through the use of standardized reading comprehension measures. A Lexile measure (a simple number followed by an "L") is a valuable piece of information about either an individual's reading ability or the difficulty of a text, like a book or magazine article. Lexile measures are the most widely adopted reading measures in use today. Tens of thousands of books from over 450 publishers have Lexile measures.

A student gets his or her **Lexile reader measure** from a reading test or program. For example, if a student receives an 880L on her end-of-grade reading test, she is an 880 Lexile reader. Higher Lexile measures represent a higher level of reading ability. A Lexile reader measure can range from below 200L for beginning readers to above 1700L for advanced readers. Readers who score at or below 0L receive a BR for Beginning Reader. A book, article or piece of text gets a **Lexile text measure** when it is analyzed by MetaMetrics. For example, the first "Harry Potter" book measures 880L, so it is called an 880 Lexile book. A Lexile text measure is based on two strong predictors of how difficult a text is to comprehend: word frequency and sentence length.

Many other factors affect the relationship between a reader and a book, including its content, the age and interests of the reader, and the design of the actual book. The Lexile text measure is a good starting point in the book selection process, with these other factors then being considered. The idea behind The Lexile Framework for Reading is simple: if we know how well a student can read and how hard a specific book is to comprehend, we can predict how well that student will likely understand the book. When a Lexile text measure matches a Lexile reader measure, this is called a "targeted" reading experience. The reader will likely encounter some level of difficulty with the text, but not enough to get frustrated. This is the best way to grow as a reader—with text that's not too hard but not too easy.

Rourke’s *Reading Web* uses Lexile levels in order to determine if students are considered at risk, basic, proficient, or advanced (See Table 2).

Table 2: Reading Level Based on Lexile Score

Grade	At-Risk	Basic	Proficient	Advanced
1	---	99 & below	100-400	401 & above
2	99 & below	100-199	200-500	501 & above
3	249 & below	250-499	500-800	801 & above
4	349 & below	350-599	600-900	901 & above
5	449 & below	450-699	700-1000	1001 & above
6	499 & below	500-799	800-1050	1051 & above
7	549 & below	550-849	850-1100	1101 & above
8	599 & below	600-899	900-1150	1151 & above
9	649 & below	650-1049	1050-1300	1301 & above
10	699 & below	700-1099	1100-1350	1351 & above
11/12	799 & below	800-1149	1150-1400	1401 & above

Each one of these categories represents at what level students are in comparison to grade level expectations:

At Risk	Student does not exhibit minimally competent performance when reading grade level appropriate text. Students in this category are reading “Significantly Below Grade Level.”
Basic	Student exhibits minimally competent performance when reading grade level appropriate text. Students in this category are reading “Below Grade Level.”
Proficient	Student exhibits competent performance when reading grade level appropriate text. Students in this category are reading “At Grade Level.”
Advanced	Student exhibits superior performance when reading grade level appropriate text. Students in this category are reading significantly “Above Grade Level.”

- **Using the Fountas & Pinnell Leveled Reading**

Leveled reading uses small-group instruction and developmentally appropriate books called leveled books. This approach recognizes that a wide range of reading ability exists within any grade level or age group, and that reading at the appropriate levels ensures success. All books included in the *Reading Web* also include the Fountas & Pinnell levels. The following diagram provides the equivalent of the Fountas & Pinnell Text

Level with Grade Level Goals:

A.L.L. CHART

GRADE LEVEL	DRA LEVEL	F&P LEVEL	EIL/ R.R.	LEXILE	READING INITIATIVE LEVEL (BALANCED LITERACY)	
KINDERGARTEN	1 2	A B	1 2	N/A N/A	EMERGENT (A, B, C)	
GRADE ONE	3-4 4-6 6-8 10 12 14 16	C D E F G H I	3-4 4-6 6-8 9-10 11-12 13-14 15-16	N/A N/A N/A N/A N/A 200-249 250-299	EARLY (C,D,E,F,G,H,I)	
GRADE TWO	18 20 24 28	J K L M	17-18 19-20 N/A N/A	300-349 350-399 400-449 450-499	EARLY FLUENT (I,J,K,L,M)	
GRADE THREE	30 34 38	N O P	N/A N/A N/A	500-549 550-599 600-699	FLUENT (M,N,O,P,Q,R,S, T,U,V,W,X,Y,Z)	
GRADE FOUR	40 40	Q R	N/A N/A	700-749 750-799		
GRADE FIVE	44 44 N/A N/A N/A	S T U V W	N/A N/A N/A N/A N/A	800-849 800-849 850-899 850-899 900-949		
GRADE SIX	N/A N/A N/A N/A	X Y Z N/A	N/A N/A N/A N/A	900-949 950-999 950-999 1000-1100		
GRADE SEVEN & EIGHT	N/A	N/A	N/A	1000-1100		N/A

DRA= Developmentally Reading Assessment: Developmental Reading Assessment Resources Guide. Joetta Beaver, Celebration, 1997

F&P = Fountas and Pinnell: Matching Books to Readers, Using Leveled Books in Guided Reading K-3. Irene C. Fountas and Gay Su Pinnell. Heinemann, 1999. Guiding Readers and Writers 3-6. Irene C.Fountas and Gay Su Pinnell, 2001

Reading Recovery is a registered service mark of the Ohio State University. Reading levels may change due to periodic testing and reevaluation.

Lexile = Lexile is a leveling system created by Metamatrix. The Lexile levels shown and their correlation's are given as an example to show how some experts believe these levels correlate with each other. Automated Literacy Labels Inc. suggests that books be researched with the other leveling authors shown above to determine the best correlation for a specific book title.

EIL = Early Intervention Levels: Levels are intended to help implement intervention programs through the use of leveled text. Levels are subject to change.

The Automated Labels "**A.L.L. Chart**" shows the approximate relationships between the levels and the connections to the grade levels.

Levels are subjective, teachers are encouraged to freely adjust designated levels according to their personal evaluation.

Automated Literacy Labels is not endorsed by or affiliated with any of the leveling systems shown above. Automated Literacy Labels Inc. TM, ©2001

Typically, students go through specific stages of development as they progress from non-readers to fluent readers. In leveled reading, as in the case of the books included in *the Reading Web*, books are written to various levels of difficulty, gradually introducing developing readers to new challenges. The stages of reading development are commonly separated as follows:

- Early Emergent Readers (Reading levels A-C)
- Emergent Readers (Reading levels D-J)

- Early Fluent Readers (Reading levels K-P)
- Fluent Readers (Reading levels Q-Z)
- **Placing Students at the Appropriate Reading Level**

Starting students at the “just right” place in the *Reading Web* offers them the experience of immediate success while simultaneously providing teachers with demonstrations of students’ reading level performance, which is automatically captured in individual student folders. There are **six entry points** for students at which they can enter *the Reading Web*. On the list of 29 leveled, nonfiction and one-fiction titles, **the six entry points are marked by a star**. If a student’s reading level is known, it is recommended that the student enter *the Reading Web* at the title marked by a star that most closely corresponds to that student’s reading level. For example, if a fifth-grade student is known to be reading at a third-grade level, the student should start with the passage from the high interest title, *Hurricanes* (level O, Grade 3). In this case, after the student completes the reading activities for the passage from *Hurricanes*, the teacher can review the automatically saved performance scores in the student folder. Based on that data, the teacher may assign the next passage, either more challenging, less challenging or at the same level, for additional practice at the same level. (In the *Teacher’s Resource*, see Viewing Data pages 62, 63 and 64). However, if a student is classified as an English Language Learner (ELL) and the reading level is unknown, one way to determine English proficiency level is by administering the Rourke’s Pre-Post Test. Based on pre-test results, if the student scores less than 11 points, the starting point for that student should be one of the two least challenging passages identified by a star following the high interest title, such as *Space* (level G/H, Grade 1) or the slightly more challenging, high interest title, *Trees Don’t Freeze* (level K, Grade 2). Then, after the student has worked through the reading activities for that title, the teacher can review the student data and either assigns a less challenging title or a more challenging title, based on the student’s performance. (In the *Teacher’s Resource*, see Viewing Data pages 62-64).

After the students have mastered the passages in the *Reading Web*, they are prepared to successfully read and comprehend the books from which the passages were taken. It is recommended that after students work through the research-based computer activities in the *Reading Web*, they should read that particular book from which the passage was

taken. This will provide practice in developing their skills in word meaning and the comprehension of nonfiction text.

- **Web-Based Student Activities**

Students work through the computer activities before reading the books. For each title, the computer presents a Brainstorming Pre-Reading activity. The software engages students through the visually narrated presentation of background information (supported with visuals) and the suggestion of questions that lend themselves to a purpose for reading the text. Comprehension questions are posed for students to think about during the reading of the text. After the computer exercises, those same questions are presented for students to respond to. Their responses are scored and kept in their Student Folders. As shown in Table 1, the categories of questions include:

- **LITERAL** - details supporting the main ideas
- **INFERENTIAL** -combining facts from the text with background knowledge
- **STRUCTURAL** - cause/effect, comparison/contrast, sequence, classification

Students interact with the text, its correct pronunciations, word meanings and use of the words in sentences. Students also record and listen to their own voices reading the passages from the books. Then, students are assessed for reading rate, vocabulary meaning and comprehension.

- **Teacher-Supported Instruction**

After a student has completed the web-based passage, the teacher or the assigned paraprofessional meets with the students. She may meet one-on-one with individual students and conduct a reading conference or meet with a group of students who have all read the same passage for a guided reading session. After the students have met with the teacher, she will assign a reading response journal prompt, vocabulary activity, or a comprehension activity for students to complete after independent reading of the book (See activities included in the Teacher’s Resource Guide, pages 20-52).

The Activities on *the Reading Web* include:

- Building background knowledge
- Listening to the correct pronunciation
- Developing vocabulary skills
- Recording echo reading of short phrases
- Reading highlighted text with a professional narrator
- Practicing fluency through timed and recorded passages
- Demonstrating word meaning, fluency, and comprehension

- **Steps Followed in the Reading Web Implementation**

- Students engage in research-based reading practice activities.
- Students interact with these passages in preparation for reading the books.
- When working on one of the 30 leveled web-passages, students engage in BEFORE READING activities that front-load vocabulary, DURING READING activities that scaffold repeated readings, and AFTER READING activities that assess fluency rate, vocabulary and comprehension.
- By listening to stored recordings, teachers can evaluate a student's performance over time and share progress with parents and administrators.
- Students and teachers are given immediate feedback through interactive vocabulary and reading comprehension assessments.
- After reading a book, students demonstrate comprehension through reproducibles that reinforce content reading strategies and demonstrate students' content knowledge.
- After completing all activities from a passage, students are shown their performance on a score card. Students can print their score card to share at a reading conference with their teacher.
- Student progress is automatically saved and continuously monitored. All student performance data in vocabulary development, reading rate, and comprehension is automatically summarized and saved in the student's folder for 12 months.
- Teachers and school administrators can view, sort, and print data by individual student, student groups, classroom, or school.

Research Base for the *Reading Web*

The research and recommendations from the Report from the National Reading Panel (2000) served as the basis for the development of **the Reading Web**. The five essential reading elements are incorporated throughout the instructional sections of **the Reading Web**. In addition, **the Reading Web** engages students in the best practices of reading instruction identified as the most effective by researchers such as: Timothy Rasinski, Isabel Beck, Margaret McKeown, Robert Marzano, J. Samuels, Dr. Robin Scarcella, Fountas and Pinnell, Patricia Cunningham, Timothy Shanahan and Ann Goudvis.

- **Computer-Assisted Instruction (CAI)**

Until recently, computers were not considered capable of delivering reading instruction effectively. The National Reading Panel recognized the importance of using computer technology for reading instruction. “Computer-assisted instruction” (CAI) refers to instruction or remediation presented on a computer. Research has shown that CAI has produced significant gains in reading over what would be expected from classroom instruction alone. Several scholars have confirmed the effectiveness of CAI as a supplement to regular instruction. As a predictive measure of reading achievement, Atkinson found students’ CAI performance correlated positively with post-test reading achievement on a variety of standardized reading instruments.

Computer-assisted instruction has been shown in a range of studies to facilitate learning in a variety of ways. Computers can be used to aide in teaching English Language Learners in core academic subjects, such as reading and science. Computer-assisted instruction such as **the Reading Web** improves instruction for students with English difficulties because students receive immediate feedback and do not continue to practice the wrong skills. Computers capture the students’ attention because the programs are interactive and engage the students’ spirit of competitiveness to increase their scores. Also, this type of program moves at the students’ pace and usually does not move ahead until students have mastered the skill. The National Reading Panel also recognized the use of hypertext (highlighted text that links to underlying definitions or supporting or related text) as an instructional advantage. **This is a technique used in the Reading Web.** The following section summarizes the essential elements utilized in **the Reading Web** and identifies the location within **the Reading Web** where students are engaged in

research-based activities correlated to researchers whose study has recommended these practices. These research-based activities underpin all the student activities, which are part of the instructional sections included in **the *Reading Web***.

Programs provide differentiated lessons to challenge students who are at risk. In addition, the use of programs such as **the *Reading Web*** increases the interest level for older students while keeping the text simple and easy to read. Another benefit of using computers for reading instruction is that students also can be provided with added practice when necessary. According to Case and Truscott (1999), students have been able to improve their sight word vocabulary, fluency, and comprehension. Computer-based reading instruction also allows for "increased interaction with texts, attention to individual needs, and increased independence through an ability to read texts they would not otherwise be able to read" (Case & Truscott, 1999).

Study of the reading achievement of non-native speakers of English enrolled in a basic skills college reading course indicated that those students receiving computer-assisted instruction (CAI) made higher reading achievement gains than students not receiving CAI.

- **Standards-Based Instruction**

Standards-based instruction allows teachers and students to be on the same page by specifying how teachers and students will meet their educational goals, including specific concepts, order, or instructional materials (Krueger & Sutton, 2001). Because the national science standards are voluntary and do not prescribe a single approach to teaching science, it is up to the individual local educational entities to determine the science content organization, focus, and delivery (Krueger & Sutton, 2001). All books included in **the *Reading Web*** are aligned to the Next Generation Science Standards and benchmarks (See Appendix 1) as well as to the Reading/Language Arts Standards and Benchmarks (See Appendix 2).

- **Building Background Knowledge**

Researcher Robert Marzano clearly identified the importance of background knowledge and urges its use in pre-reading activities. Numerous individuals report the importance of using visual, auditory, and tactile aids to make content more understandable to ELLs (Carey, 2007; Herrell & Jordan, 2008; Samway & Taylor, 2008). **In Section One of *the Reading Web*, students preview an audio narration of pictures depicting the concepts and facts from the passage they will be mastering.**

- **Use of Visual Aids**

Visual Aids are essential to provide support to the reading text, especially with Science texts, which are introducing new terms students are not familiar with. Numerous individuals report the importance of using visual, auditory, and tactile aids to make content more understandable to ELLs (Carey, 2007; Herrell & Jordan, 2008; Samway & Taylor, 2008). Visuals can create a support for ELLs and increase reading comprehension. English Language Learners (ELLs) also often struggle with the language of science. The use of a variety of visual aids, including pictures, diagrams, and charts, helps all students—and especially ELL students—easily recognize essential information and its relationship to supporting ideas. Visuals make both the language and the content more accessible to students. All *Reading Web* books are highly supported by visuals to assist ELLs to understand the text since they provide the kind of visual support students need to understand the text such as: pictures, graphic organizers, charts, and figures to convey meaning.

- **Phonemic Awareness and Phonics Instruction**

Phonemic awareness instruction helps children learn to read. Once the children understand a larger collection of easily recognizable words, they are able to read better and faster. As they know and comprehend more vocabulary, they will read better. Systematic phonics instruction is designed to increase accuracy in decoding and word recognition skills, which in turn facilitate comprehension. **In *Reading Web*, phonics is demonstrated in the Spoken Glossary section where the narrator carefully pronounces and sounds out key vocabulary words from the passage, which follows in subsequent sections.**

- **Word Pronunciation**

Recent research on the teaching and learning of pronunciation has focused on the importance of accent, stress, intonation, and rhythm in the comprehensibility of the speech of non-native speakers. Researchers Timothy Rasinski and Patricia Cunningham have published numerous studies demonstrating that accurate word pronunciation enhances word meaning and language development. **In Section Two of *the Reading Web*, students click on specific words, which are then pronounced by a professional narrator. In this manner, students review the sounds of the words from the passage they will be mastering.**

- **Vocabulary Development**

One of the most important aspects to teach English Language Learners (ELLs) to read with comprehension is to develop their oral and written vocabulary. A student's maximum level of reading comprehension is determined by his or her knowledge of words. This word knowledge allows students to comprehend text.

The importance of vocabulary knowledge has long been recognized in the development of reading skills. Vocabulary is critically important in oral reading instruction. Vocabulary instruction is essential to the content areas because the academic language differs across content areas. ELLs must be provided instructional support to know how to use content vocabulary correctly (Scarcella, 2003; Geertz, 1988).

One of the important features in ***the Reading Web*** is the inclusion of key words that are found in Science content. These words are introduced and defined to help students understand their meaning in context. Teaching content vocabulary using a systematic approach appears to be a powerful tool for student success (Marzano & Pickering, 2005). Researcher Isabel Beck's studies have led to the identification of best practices for vocabulary development including students' work with definitions, pronunciation, word matching and using words in new contexts. **In Section Three of *the Reading Web*, students interact with key words, by identifying their definitions and by making comparisons to similar words in isolation and seeing those words in other contexts.**

In addition, students work with worksheets provided in the Teacher’s Resource Guide (see pages 20 to 52). The worksheets are not book specific: any worksheet can be used with any book. Many teachers find that in the beginning, it is helpful to demonstrate one or two of the vocabulary worksheet formats with the entire class. Once students are comfortable with these formats, the teacher then introduces a couple more of the vocabulary worksheets.

Having students complete vocabulary worksheets after the independent reading of a book is an essential component for students to deepen their understanding of Tier II and Tier III vocabulary words. In addition to enhancing their vocabulary, students will apply essential dictionary skills in an authentic way. Many teachers find this especially helpful for ELL students who may have access to a dictionary when taking state tests.

The *Reading Web* Dictionary and vocabulary activities support English Language Learners’ (ELLs’) academic needs. Students develop vocabulary and comprehension through a spoken glossary and repeated reading practice. Therefore, **vocabulary knowledge is developed while word identification is practiced in the Spoken Glossary section.**

- **Reading Comprehension**

Comprehension is critically important to the development of children’s reading skills and therefore to the ability to obtain an education. Indeed, reading comprehension has come to be the “essence of reading” (Durkin, 1993), essential not only to academic learning in all subject areas but to lifelong learning as well. Reading comprehension is an active process that requires an intentional and thoughtful interaction between the reader and the text. **In *Reading Web*, comprehension questions are previewed in the Background Knowledge section, and Vocabulary is developed while word identification is practiced in the Spoken Glossary section.**

Researcher Timothy Shanahan in the National Report on Reading identifies echo reading as a powerful activity in reading development. **In Section Five of *the Reading Web*, students echo read and record their voices, which are played back for self-assessment and when necessary, can be repeatedly re-recorded for improvement.**

Researcher J. Samuels' often replicated study on repeated reading demonstrates the transfer of reading proficiency from a passage students have mastered to other texts at the same level. **In Section Six of *the Reading Web*, students practice reading an entire passage, and then record their voices to improve reading rate and the prosodic aspects of their oral reading.**

- **Reading Fluency**

Fluent readers are able to read orally with speed, accuracy, and proper expression. Fluency is one of several critical factors necessary for reading comprehension. Reading practice is generally recognized as an important contributor to fluency. Guided repeated oral reading encourages students to read passages orally with systematic and explicit guidance and feedback from the teacher. Researchers Fountas and Pinnell, in an exhaustive study for NAEP, clearly demonstrated the correlation between reading fluency and comprehension. **In Section Four of *the Reading Web*, students practice fluency by engaging in partner reading with a professional narrator while viewing highlighted text, a focus leading to increased comprehension.**

- **Assessment**

Assessment is a necessary component to instruction. Assessment tools are used to determine what is working and what should be taught. Assessment of vocabulary is critical for identifying children at risk for reading problems and for designing appropriate instruction. Instructors often use comprehension questions to test whether students have understood what they have read. In order to test comprehension appropriately, these questions need to be coordinated with the purpose for reading.

The Lexile Framework for Reading is a scientific approach to reading measurement, providing a common scale for matching reader's ability and text difficulty. This allows educators and parents quickly to estimate expected reading comprehension levels and monitor progress. The idea behind The Lexile Framework for Reading is simple: if we know how well a student can read and how hard a specific book is to comprehend, we can predict how well that student will likely understand the book.

Sections Seven, Eight and Nine of *the Reading Web* facilitate assessment. In those

sections, students are assessed in Reading Rate (WPM), vocabulary through matching words to definitions and comprehension through five multiple-choice questions.

The information derived from assessments is a powerful tool to monitor the development of student understanding, to revise instruction, and to provide reflection for learners. It is noted that effective teachers utilize assessment tasks as quality learning experiences (NRC, 1996). Assessment feedback supplies the learner with self-assessment information, but it also enhances motivation, which is crucial to achievement. Learning improves with consistent feedback (Linnenbrink & Pintrich, 2002; Pintrich & Schunk, 2002; Heath & Glen, 2005).

Section Ten of *the Reading Web* provides students with their Score Card. In this section, students are presented with their performance scores, which are also automatically saved along with their voice recording in their individual Student Folder.

The Effectiveness of the Reading Web

During FY 2009-2010, several districts and schools across the United States implemented *the Reading Web* with struggling elementary and middle school students in an effort to accelerate students' reading skills toward grade level. In order to achieve these goals, schools emphasized:

- A strategy to provide an intensive reading intervention to struggling students
- Built-in progress monitoring and assessment
- Comprehensive launch training with all teachers
- Integrated, ongoing professional development
- Ongoing implementation support including site visits, and web site support

• Methodology

During FY 2009-2010, Rourke Publishing conducted a study to determine program effectiveness. The study involved a total of 100 students from public schools (grades 3 - 7). These included: Chicago Public Schools, Armstrong Schools, and New York City Schools. The majority of these students were considered "at risk when they entered the program. These students were reading significantly below level. Students participating in *the Reading Web* were measured using scores attained in vocabulary development,

reading comprehension, and reading fluency. The Lexile growth was obtained by comparing Lexile scores at initial placement in the program to Lexile scores after using *the Reading Web* for more than nine consecutive weeks. The Words Per Minute (WPM) growth was calculated using the established average for grade level fluency. The words-per-minute reading rate of a student with average grade level fluency is between 100 and 160 WPM. Recommended reading rates, or words read per minute, for grades one through seven were examined from three separate research studies. The findings of these studies were used to establish an average early and end reading rate per grade level. The following table provides Oral Reading Rates per grade level:

Fluency Standards Table

Research Study Recommendations			
Words Per Minute (WPM)			
Grade	Rasinski	Manzo	Harris & Sipay
1	80	(1.8) 30-54	60-90
2	90	(2.8) 66-104	85-120
3	110	(3.8) 86-124	115-140
4	140	(4.8) 95-130	140-170
5	150	(5.8) 108-140	170-195
6-8	180	(6.8) 112-145	195-220

Preliminary Findings

Students participating in *the Reading Web* for at least nine consecutive weeks benefited from intervention focused on word meaning, word pronunciation, and use of words in context. In each one of the schools where data was analyzed, students who participated in the program made significant gains in reading achievement. Students at each grade level (grades 4 - 7) improved their academic vocabulary, reading comprehension, and reading fluency. Since *the Reading Web* is standards-based, participating students became better prepared to succeed in both their science classes and on high-stake assessment.

Chicago Schools

In Chicago, the Dr. Jorge Prieto Math and Science Academy and Washington Irving School are implementing *the Reading Web*, as a reading intervention program for students that were not reading at grade level.

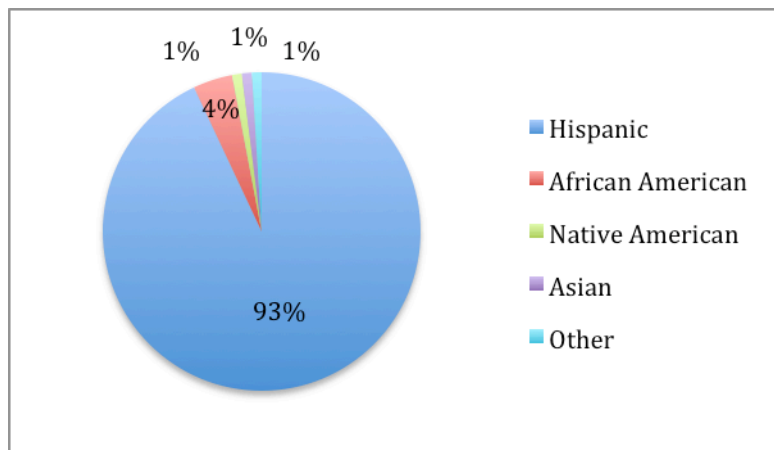
- **Dr. Jorge Prieto Math and Science Academy**

The program at Dr. Jorge Prieto Math and Science Academy is being used with struggling readers in an ESL Intervention class. The mission of the Academy is to graduate young scholars who actively inquire and participate in a changing global society. Based on its mission, Prieto Scholars will develop a greater appreciation and understanding of their community and environment. Lifelong learning skills will be enhanced by way of a concentrated Math and Science Curriculum combined with best practices in Literacy.

As of 2009-2010, there were 799 students enrolled at Prieto Math & Science Academy. Out of this, 95% were classified as low-income students. Out of the total student body, 13% were classified as Special Education students, and 30% as English Language Learners.

During this academic year, the largest demographic at Prieto Math and Science was Hispanic. As of that time, this demographic made up 93% of the student population. The second greatest demographic was African American at 4% (See Figure 1).

Figure 1: Demographic Information



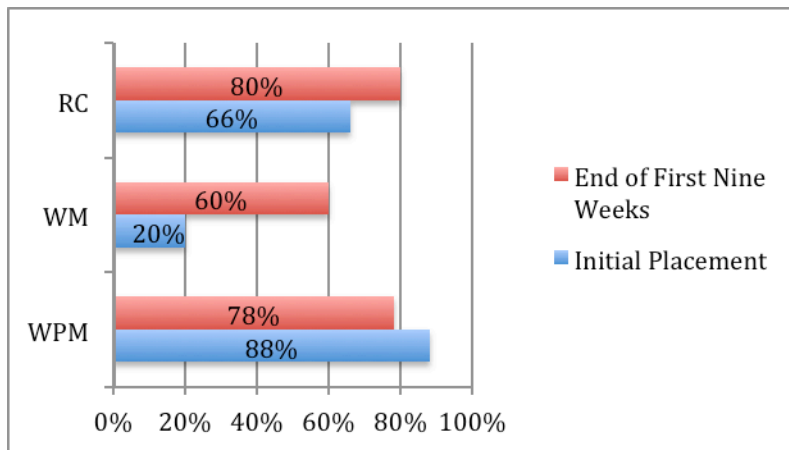
Most students participating in *the Reading Web* were from fourth grade and identified as readers at least one year below grade level. Most of the eighteen students in this intervention class made at least one year's growth, and one-third of the students made two or more years growth.

The following charts provide a snapshot of the performance of five students (selected at random) from Dr. Prieto Math and Science Academy School in Chicago in the following areas: **Words per Minute (WPM)**, **Word Meaning (WM)**, and **Reading Comprehension (RC)**. These students used *the Reading Web* for at least nine consecutive weeks.

As can be observed in Figure 2, participating students increased their knowledge of academic words from 20% to 60%. Based on their response to multiple choice questions, their reading comprehension of the text read also increased from 66% to 80%.

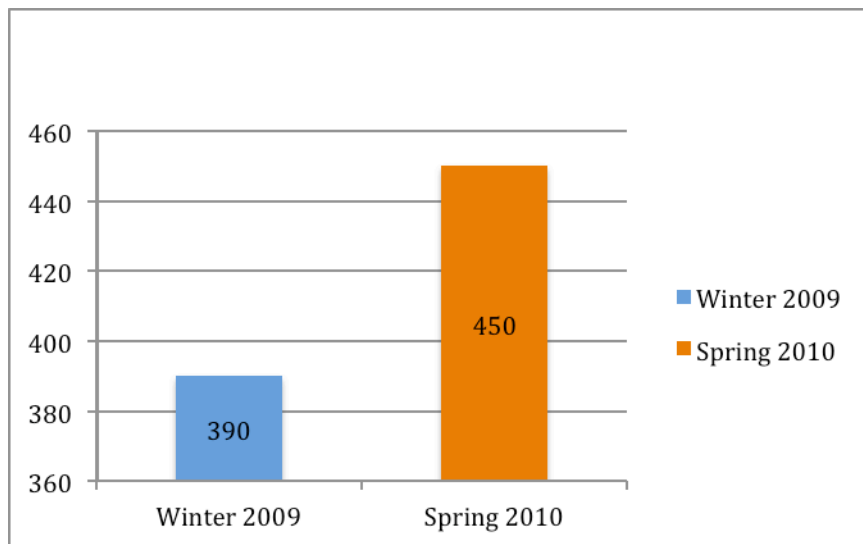
Overall, these students improved in word meaning and reading comprehension, but as they moved up to a much higher reading level (based on Fountas & Pinnell Text Gradient) from Level J (Mid 2nd.) to Level N (Mid 3rd.), they experienced some difficulty in their reading rate as measured by the number of words per minute (WPM) they were able to read. Although the WPM did not increase to the grade level average as established for fourth graders, all students surpassed the goal established for each book. The percentage attained on WPM read was calculated using the average of 100 WPM.

Figure 2: Student Results: Dr. Jorge Prieto School in Chicago



The Lexile measure represents a student's level on a developmental scale of reading ability. Student Lexile growth was measured by comparing Lexile scores from initial placement in November 2009 to February 2010. These students increased from 390L to 450L (See Figure 3).

Figure 3: Student Results: Dr. Jorge Prieto School in Chicago



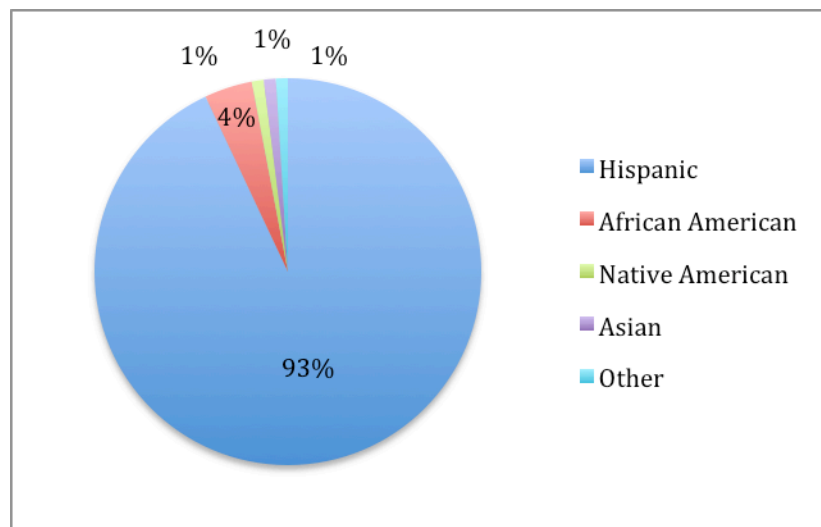
According to Metametrics' Lexile Framework, students in grades four through eight reading below the 50th percentile are expected to gain two Lexiles per week with typical reading instruction. After sixteen weeks in *the Reading Web*, Chicago students far exceeded growth expectations. Students in *the Reading Web* gained 60 Lexiles, nearly twice the expected gains.

- **Washington Irving School**

Irving School is located on Chicago's near west side. As of 2008-2009, there were 502 students enrolled at Irving. A total of 79% of students were classified as low income. Out of the total of student population, 15% were classified as Special Education students and 5% were classified as English Language Learners.

As of 2009-2010, the largest demographic at Irving School was African American. As of that time, this demographic made up 65% of the student population. The second greatest demographic was Hispanic at 32% (See Figure 4).

Figure 4: Demographic Information



A full-time ESL (English as a Second Language) teacher worked with ELL students using the pull-out approach. ESL teachers worked with such students in separate classrooms, whether for one period a day or a much longer time. This program helped students become proficient in English within three years.

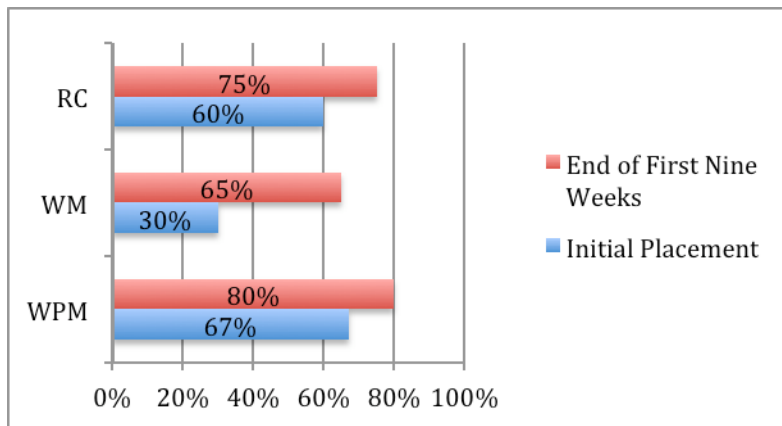
The students included on this study used **the Reading Web** for at least nine consecutive weeks. Out of these students, forty ELLs from third and fourth grades attended an after-school program last fall (2009). All were engaged in **the Reading Web**, and many were able to demonstrate a significant increase in reading performance during a two-month period. One of the students started reading at a very slow rate and was inaccurate with

vocabulary. After practicing on the same title, he moved up to a more challenging text, which he needed to repeat after reviewing the glossary terms. Another student started well below her challenge level, and quickly moved up and slowed her reading to an appropriate rate and is performing at only one level below her grade. A student, who was reading two years below grade level at the beginning of the program, is improving in word meaning but still reads too rapidly.

On average, these students showed significant improvement in word meaning and reading comprehension. Overall, after participating in the program for over nine weeks, students demonstrated higher levels of fluency as measured by the number of words per minute (WPM) they were able to read (based on Fountas & Pinnell Text Gradient) moving from Level N to Level Q (from Mid 3rd. to Mid 4th.). Although the average rate of WPM read by all students met the expected goals for the books they read, based on the oral reading rate established for their grade level, on average, students attained 80% of this goal.

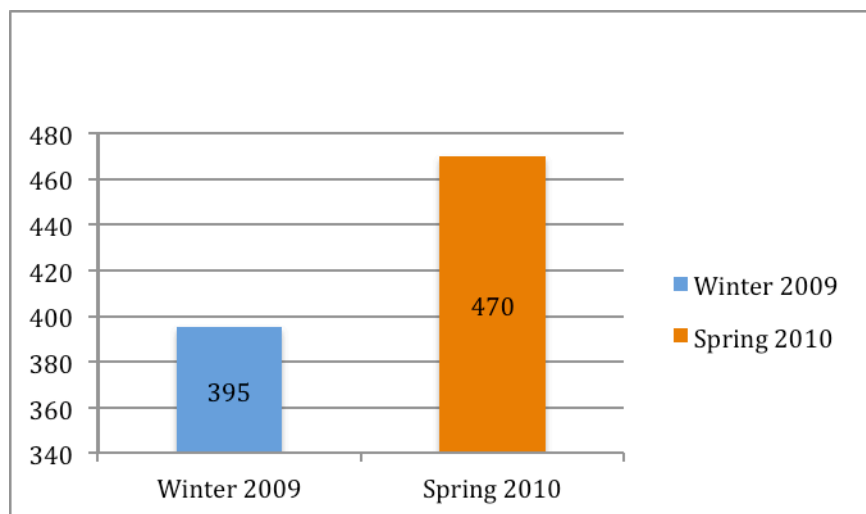
The following charts provide a snapshot of the performance of five students (selected at random) from Washington Irving School in Chicago. Progress was measured in the following areas: **Words per Minute (WPM)**, **Word Meaning (WM)**, and **Reading Comprehension (RC)** (See Figure 5).

Figure 5: Student Results: Washington Irving School



After nine weeks using *the Reading Web*, participating students gained 75 Lexiles, which represents more than twice the expected gain during this learning period (See Figure 6).

Figure 6: Student Results: Washington Irving School



The Armstrong School District

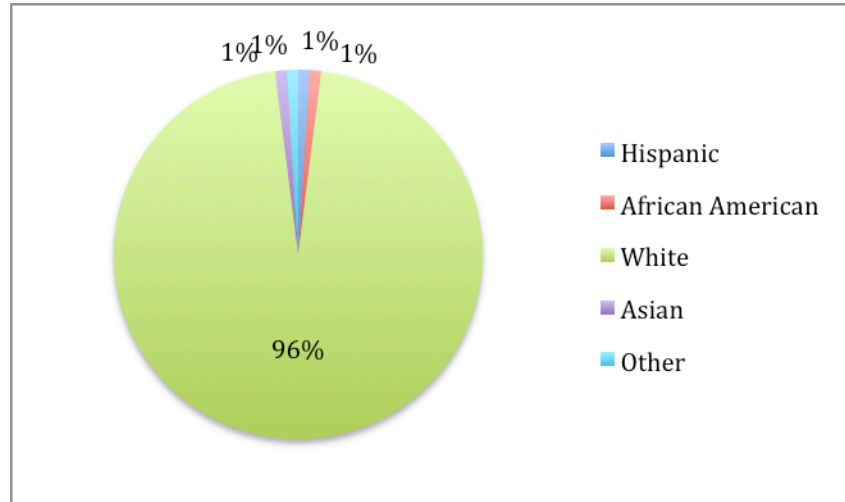
The Armstrong School District is located in southwestern Pennsylvania in central Armstrong County, with a small portion located in western Indiana County. Students learn in five secondary schools and seven elementary schools. Armstrong School District's goal has always been to increase student achievement and create high-performing schools. The district has consistently moved forward with educational programs and services that are aligned with local and state academic standards.

The school district is organized into four attendance areas, each with its own high school: Elderton, Ford City, Kittanning and West Shamokin. The district serves about 5,700 students. As of 2009-2010, there were 5,700 students enrolled. Out of these, 41.5% were classified as low-income students. According to the Pennsylvania Department of Education, 2,366 students received free or reduced lunches due to low family income in the 2009-2010 school year. Out of the total school population, 10% of the students were placed in Special Education programs, and 8% were classified as English Language Learners.

The racial makeup of the district was 97% White, close to 1% African American, 0.09% Native American, 0.12% Asian, 0.02% Pacific Islander, 0.13% from other races, and

0.50% from two or more races. Close to 1% of the population was Hispanic or Latino of any race (See Figure 7).

Figure 7: Demographic Information



The Armstrong School District acquired *the Rourke Reading Web* at the beginning of 2010. After an in-service session in January, *the Reading Web* was installed in six schools for use with students identified for reading intervention.

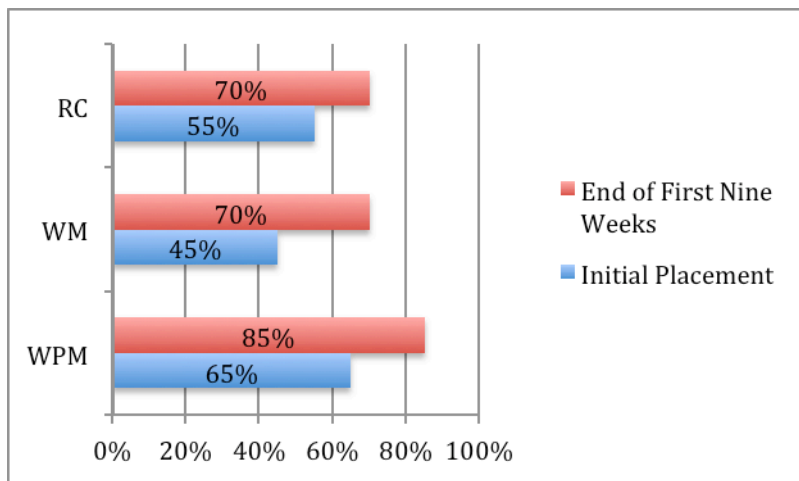
Approximately forty-two students were selected to become the first to use *the Reading Web* computer program and accompanying nonfiction books. Of the forty-two students selected, approximately twenty-four have experienced the computer activities working with the passages in *the Reading Web*. More students will start participating in the program during FY 2010-2011.

Overall results to date show students are making significant progress in reading. Out of the twenty-four students engaged in *the Reading Web*, eight have made significant gains, seven are beginning to show progress, and the remaining nine have made improvements in some skill areas but remain at or near their entry reading levels.

The following charts provide an analysis of student performance taken from ten randomly selected individual folders showing how students have performed up to the end of FY 2009-2010 in the following areas: **Words per Minute (WPM), Word Meaning (WM), and Reading Comprehension (RC)**. These students used *the Reading Web* for at least nine consecutive weeks.

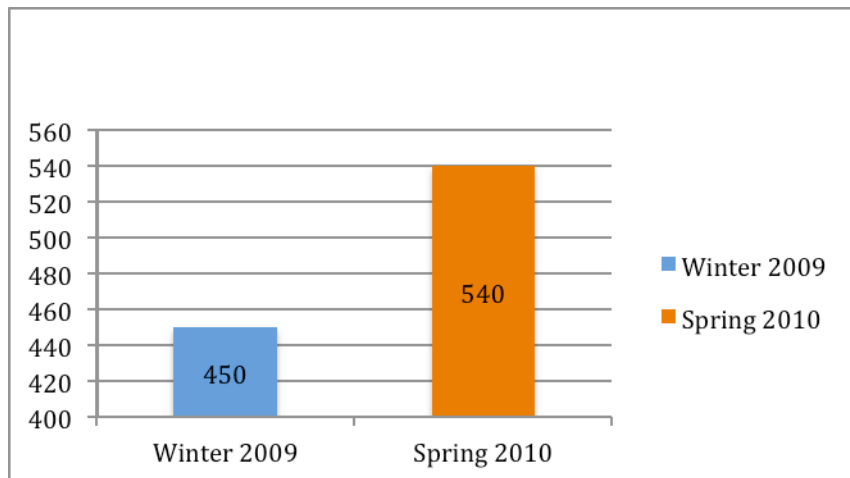
Participating students demonstrated significant improvement in word meaning and reading comprehension. They also showed higher levels of fluency as measured by the number of words per minute (WPM) they were able to read. Based on Fountas & Pinnell book levels, these sixth-graders started reading at Level O (End of 3rd/Beginning 4th grade) and ended reading books at level S (End of 4th/Beginning 5th grade). Using 180 as the word-per-minute (WPM) average for sixth graders, by the end of the nine-week period, these students were able to reach 85% of the expected level (See Figure 8).

Figure 8: Student Results: Armstrong Schools



After approximately 15 weeks in the program, participating students exceeded growth expectations. These students went from a 450L to 550L (See Figure 9).

Figure 9: Student Results: Armstrong Schools



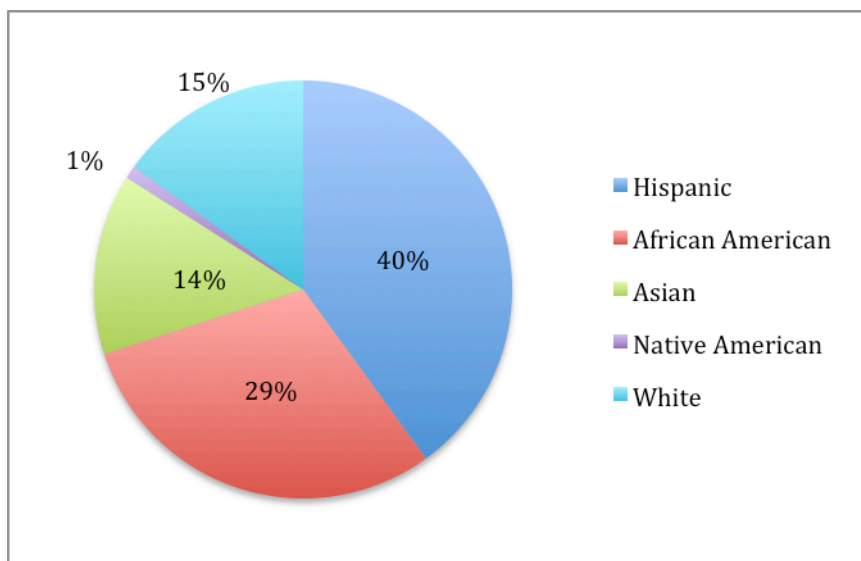
New York City Schools

The New York City Department of Education is the largest school system of public schools in the United States, serving about 1.1 million students in over 1,600 schools.

Dr. Sun Yat Sen at Middle School 131 is dedicated to establishing a school community, all of whose members learn and teach in a spirit of collaboration and cooperation. The school celebrates the richness of the school's diverse population, and strives to nurture self-respect and respect for others. The school seeks to involve all students, parents, and staff in active and productive learning to ensure that all members develop the capacity for clear and creative thought. The percentage of students classified as low income was 78%. Out of the total student body, 23% of students were in Special Education, and 15% were classified as English Language Learners.

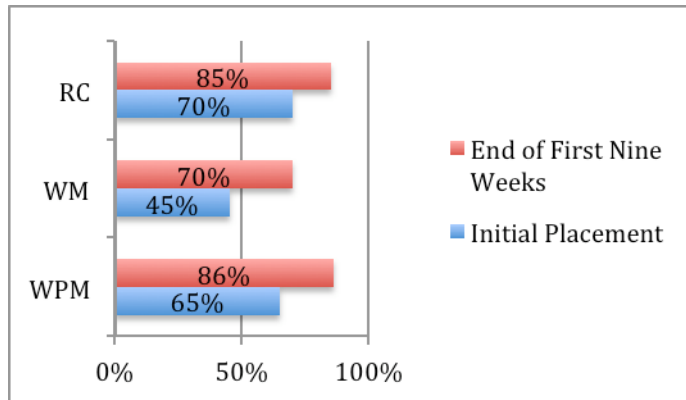
The racial ethnic background is as follows: 40% Hispanic, 29% African American, 15% White, 15% Asian, and 1% Native American. This school selected *the Reading Web* Program to be used with seventh graders in need of reading intervention. Students started in the program January, 2009 and continued to October, 2009 (See Figure 10).

Figure 10: New York Middle School 131 Demographics



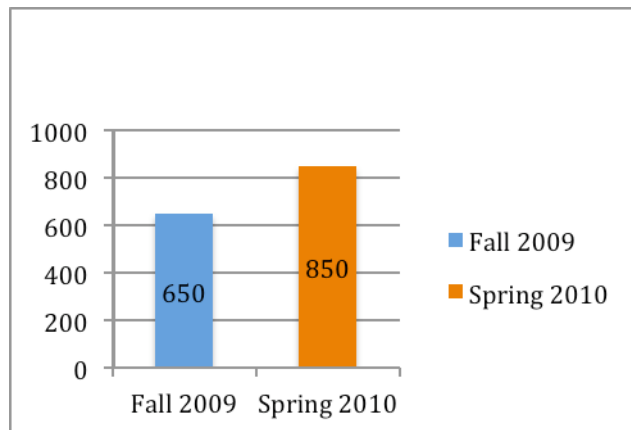
An overall evaluation of randomly selected students shows that by the end of FY 2009-2010, the reading level of participating students had significantly increased, especially among ELLs. These students were able to improve their academic vocabulary and better understand science concepts. Results indicate that *the Reading Web* program has proven to be effective with this population. Students also showed higher levels of fluency as measured by the number of words per minute (WPM) they were able to read. Based on Fountas & Pinnell book levels, these seventh-graders started reading at Level Q (Mid 4th) and ended reading books at level U (Mid 5th). Using 180 as the word-per-minute (WPM) average for seventh graders, by the end of the nine-week period, these students were able to reach 86% of the expected level (See Figure 11).

Figure 11: Student Results: MS131



After 15 weeks in *the Reading Web*, participating students gained 100 Lexiles, which represents more than twice the expected gain during this learning period (See Figure 12).

Figure 12: Student Results: MS131



Conclusion

The findings of this preliminary study demonstrate that struggling readers and English Language Learners (ELL) who participated in the *Reading Web* for at least nine consecutive weeks made considerable gains in vocabulary, reading comprehension and reading fluency. As students developed more advanced reading skills, they reached higher fluency levels. In addition, participating students, especially ELLs, were able to better understand science concept by being exposed to academic vocabulary in context. By having students exposed to academic vocabulary, in this case Science, they were able to become more proficient in the subject area. Overall, participating students greatly benefited from this reading intervention program, which focused on key academic skills through the use of computer-assisted instruction and high interest reading materials.

Following is a list of prominent educational researchers and references to their work, which served as the basis for *the Reading Web* and its engaging student activities.

Bibliography: Research-Base for Rourke Reading Web

The Rourke Reading Web is built on the following evidence-based research and best practices:

Computer-Assisted Instruction:

- Case, C. & Truscott, D. (1999). The lure of bells and whistles: Choosing the best software to support reading instruction. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 15 (4), 361-369.
- Cordova, D. & Lepper, M. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology*, 88 (4), 715-730.
- Kang, S.H. & Dennis, J.R. (1995). The effects of computer-enhanced vocabulary lessons on achievement of ESL grade school children. *Computers in the Schools*, 11 (3), 25-35.
- Landerholm, E.; Karr, J. & Mushi, S. (2000). A Collaborative Approach to Family Literacy Evaluation Strategies. *Early Child Development and Care*, 162, 65-79.
- Lewis, P. (1997). Using productivity software for beginning language learning Part 1. The word processor. *Learning and Leading with Technology*, 24 (8), 14-17.
- Liaw, M.L. (1997). An analysis of ESL children's verbal interaction during computer book reading. *Computers in the Schools*, 13 (3/4), 55-73.
- Trenchs, M. (1996). Writing strategies in a second language: Three case studies of learners using electronic mail. *The Canadian Modern Language Review*, 52 (3), 464-497.

Standards-Based Instruction

- National Council on Education Standards and Testing. (1992). *Raising standards for American education*. Washington: U.S. Government Printing Office.
- National Education Goals Panel. (1991). *The national education goals report: Building a nation of learners, 1991*. Washington, DC: U.S. Government Printing Office.

- National Education Goals Panel. (1999). *The national education goals report: Building a nation of learners, 1999*. Washington, DC: U.S. Government Printing Office.
- National Research Council. (1996). *National science education standards*. Washington, DC: National Academy Press.
- Resnick, L., & Nolan, K. (1995). Where in the world are world-class standards? *Educational Leadership*, 52(6), 6-10.
- Stanovich, P. J., & Stanovich, K. E. (2003). *Using research and reason in education: How teachers can use scientifically based research to make curricular instructional decisions*. Jessup, MD: National Institute for Literacy.

Fluency:

- National Reading Panel. (2000). *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*. Washington, DC: National Reading Panel.
- Rasinski, T. V. (2003). *The Fluent Reader*. New York: Scholastic.
- Rasinski, T. V., & Padak, N. D. (2001). *From Phonics to Fluency: Effective Teaching of Decoding and Reading Fluency in the Elementary School*. New York: Addison Wesley Longman.

Vocabulary Development:

- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing Words to Life: Robust Vocabulary Instruction*. New York: The Guilford Press.
- Beck, I. L., McKeown, M. G., & Kucan, L. (2008). *Creating Robust Vocabulary: Frequently Asked Questions and Extended Examples (Solving Problems in the Teaching of Literacy)*. New York: The Guilford Press.
- Marzano, R. J. (2004). *Building Background Knowledge for Academic Achievement*. Alexandria, VA: Association of Supervision and Curriculum Development.

Repeated Readings: Transfer of skills between similarly leveled texts

- Farstrup, A. E., & Samuels, S. J. (2002). *What Research Has to Say About Reading Instruction*. Newark, DE: International Reading Association.

Fluency and Comprehension

- Foutas, I. C., & Pinnell, G. S. (2001). *Guiding Readers and Writers Grades 3-6*. Portsmouth, NH: Heinemann.
- Pinnell, G. S. (1995). *Listening to Children Read Aloud: Data from NAEP's Integrated Reading Performance Record at Grade 4*. Princeton: National Assessment of Educational Progress.
- Snow, C.E (2002). *Reading for understanding: Towards a research and development program in reading comprehension*. Santa Monica, CA: Rand.

Evidence Based Practices for Literacy

- Allen, J. (2004). *Tools for Teaching Content Literacy*. Portland, Maine: Stehhouse Publishers.
- Cunningham, P. M., & Allington, R. L. (1999). *Classrooms that Work: They Can All Read and Write*. New York: Longman.
- Gambrell, L. B., Morrow, L. M., & Pressley, M. (2007). *Best Practices in Literacy Instruction*. New York: The Guilford Press.
- Harvey, S., & Goudvis, A. (2000). *Strategies that Work: Teach Comprehension to Enhance Understanding*. York, Maine: Stenhouse Publishers.
- Hill, J. D., & Flynn, K. M. (2006). *Classroom Instruction that Works with English Language Learners*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom Instruction that Works*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Miller, D. (2002). *Reading With Meaning*. Portland, Maine: Stenhouse Publishers.
- National Reading Panel. (2000). *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*. Washington, DC: National Reading Panel.
- Sibberson, F., & Szymusiak, K. (2003). *Still Learning to Read: Teaching Students in Grades 3-6*. Portland, Maine: Stenhouse Publishers.



APPENDIX 1

ROURKE READING WEB TITLES

**CORRELATED
TO**

FLORIDA SCIENCE STANDARDS

Florida Science Standards and Benchmarks (Grades 5-12)
A Correlation with Rourke Reading Web Books

Standard: Earth and Space Science: Earth in Space and Time		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.E.5.1 Recognize that a galaxy consists of gas, dust, and many stars, including any objects orbiting the stars. Identify our home galaxy as the Milky Way.	<i>Space (Skywatch)</i>	200-249
SC.5.E.5.2 Recognize the major common characteristics of all planets and compare/contrast the properties of inner and outer planets.	<i>Earth (Skywatch)</i>	200-249
SC.5.E.5.3 Distinguish among the following objects of the Solar System -- Sun, planets, moons, asteroids, comets -- and identify Earth's position in it.	<i>Space (Skywatch)</i>	
Standard: Earth and Space Science: Earth Systems and Patterns		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.E.7.2 Recognize that the ocean is an integral part of the water cycle and is connected to all of Earth's water reservoirs via evaporation and precipitation processes.	<i>Oceans (Landforms)</i>	750-849
SC.5.E.7.3 Recognize how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time.	<i>Hurricanes (Earth's Power)</i>	900-949
SC.5.E.7.4 Distinguish among the various forms of precipitation (rain, snow, sleet, and hail), making connections to the weather in a particular place and time.		
SC.5.E.7.5 Recognize that some of the weather-related differences, such as temperature and humidity, are found among different environments, such as swamps, deserts, and mountains.	<i>Desert Dinners: Studying Food Webs in the Desert (Studying Food Webs)</i> <i>Freshwater Feeders: Studying Food Webs in Freshwater (Studying Food Webs)</i>	600-699

Standard: Earth and Space Science: Earth Systems and Patterns		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.E.7.6 Describe characteristics (temperature and precipitation) of different climate zones as they relate to latitude, elevation, and proximity to bodies of water.	<i>Continents (Landforms)</i>	750-849
SC.5.E.7.7 Design a family preparedness plan for natural disasters and identify the reasons for having such a plan.	<i>Hurricanes (Earth's Power)</i>	900-949

Standard: Life Science: Organization and Development of Living Organisms		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.L.14.1 Identify the organs in the human body and describe their functions, including the skin, brain, heart, lungs, stomach, liver, intestines, pancreas, muscles and skeleton, reproductive organs, kidneys, bladder, and sensory organs.	<i>How Muscles and Bones Hold You Up: A Book About Models (Big Ideas for Young Scientists)</i>	400-499
SC.5.L.14.2 Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support – some with internal skeletons others with exoskeletons – while some plants have stems for support.	<i>How Muscles and Bones Hold You Up: A Book About Models (Big Ideas for Young Scientists)</i>	400-499
	<i>Creeping Crawlers (My First Science Discovery Library)</i>	200-249
	<i>Freaky Faces(Weird and Wonderful Animals)</i>	600-699
	<i>Speed Demons(Weird and Wonderful Animals)</i>	600-699
	<i>Blood Suckers(Weird and Wonderful Animals)</i>	600-699
	<i>Wild Horses (Eye to Eye with Horses)</i>	550-599

Standard: Life Science: Diversity and Evolution of Living Organisms		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.L.15.1 Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i> <i>Volcanoes (Earth's Power)</i>	350-399 850-899
Standard: Life Science: Interdependence		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.L.17.1 Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i>	350-399
Standard: Nature of Science: The Practice of Science		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.N.1.1 Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	<i>Going Green (Let's Explore Science)</i>	800-849

Standard: Physical Science: Changes in Matter		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.P.9.1 Investigate and describe that many physical and chemical changes are affected by temperature.	<i>Volcanoes (Earth's Power)</i>	850-899
Standard: Physical Science: Forms of Energy		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.5.P.10.1 Investigate and describe some basic forms of energy, including light, heat, sound, electrical, chemical, and mechanical.	<i>Biofuels (Let's Explore Science)</i>	850-899
	<i>Going Green (Let's Explore Science)</i>	800-849
SC.5.P.10.4 Investigate and explain that electrical energy can be transformed into heat, light, and sound energy, as well as the energy of motion.	<i>Biofuels (Let's Explore Science)</i>	850-899

Standard: Earth and Space Science: Earth Structures

Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.E.6.1 Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition.	<i>Earth (Skywatch)</i>	200-249
	<i>Hurricanes (Earth's Power)</i>	900-949
	<i>Continents (Landforms)</i>	750-849
SC.6.E.6.2 Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.	<i>Earth (Skywatch)</i>	200-249
	<i>Volcanoes (Earth's Power)</i>	850-899
	<i>Hurricanes (Earth's Power)</i>	900-949

Standard: Earth and Space Science: Earth Systems and Patterns

Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.E.7.1 Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system.	<i>Volcanoes (Earth's Power)</i>	850-899
SC.6.E.7.2 Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate.	<i>Hurricanes (Earth's Power)</i>	900-949
SC.6.E.7.3 Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.		
SC.6.E.7.4 Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere.		
SC.6.E.7.5 Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land.		
SC.6.E.7.6 Differentiate between weather and climate.		
SC.6.E.7.7 Investigate how natural disasters have affected human life in Florida.		

Standard: Life Science: Diversity and Evolution of Living Organisms

Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.L.15.1 Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.	<i>Freaky Faces (Weird and Wonderful Animals)</i>	600-699
	<i>Speed Demons (Weird and Wonderful Animals)</i>	600-699
	<i>Blood Suckers (Weird and Wonderful Animals)</i>	600-699
	<i>Creeping Crawlers (My First Science Discovery Library)</i>	200-249

Standard: Nature of Science: The Practice of Science

Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.N.1.1 Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.6.N.1.5 Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	<i>Going Green (Let's Explore Science)</i>	800-849
	<i>Biofuels (Let's Explore Science)</i>	850-899

Standard: Nature of Science: The Characteristics of Scientific Knowledge

Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.N.2.2 Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered.	<i>Going Green (Let's Explore Science)</i>	800-849

Standard: Nature of Science: The Role of Theories, Laws, Hypotheses, and Models		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.N.3.2 Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws.	<i>Going Green (Let's Explore Science)</i>	800-849
Standard: Physical Science: Energy Transfer and Transformations		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.P.11.1 Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa.	<i>Volcanoes (Earth's Power)</i>	850-899
	<i>Hurricanes (Earth's Power)</i>	900-949
Standard: Physical Science: Forces and Changes in Motion		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.6.P.13.2 Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are.	<i>Space (Skywatch)</i>	200-249
SC.6.P.13.3 Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both.	<i>Hurricanes (Earth's Power)</i>	900-949

Standard: Earth and Space Science: Earth Structures

Benchmark	Rourke Reading Web Title	Lexile Level
SC.7.E.6.1 Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores.	<i>Volcanoes (Earth's Power)</i>	850-899
SC.7.E.6.2 Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building).	<i>Earth (Skywatch)</i>	200-249
SC.7.E.6.3 Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating.	<i>Earth (Skywatch)</i>	200-249
SC.7.E.6.4 Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes.	<i>Earth (Skywatch)</i>	200-249
	<i>Continents (Landforms)</i>	750-849
SC.7.E.6.5 Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building.	<i>Volcanoes (Earth's Power)</i>	850-899
	<i>Earth (Skywatch)</i>	200-249
	<i>Continents (Landforms)</i>	750-849
SC.7.E.6.6 Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	<i>Going Green (Let's Explore Science)</i>	800-849
	<i>Biofuels (Let's Explore Science)</i>	850-899
SC.7.E.6.7 Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins.	<i>Volcanoes (Earth's Power)</i>	850-899
	<i>Earth (Skywatch)</i>	200-249
	<i>Continents (Landforms)</i>	750-849

Standard: Life Science: Diversity and Evolution of Living Organisms

Benchmark	Rourke Reading Web Title	Lexile Level
SC.7.L.15.1 Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species.	<i>Allossaurus (North American Dinosaurs)</i>	600-699
	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i>	350-399
SC.7.L.15.2 Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms.	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i>	350-399
SC.7.L.15.3 Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species.	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i>	350-399
	<i>Allossaurus (North American Dinosaurs)</i>	600-699

Standard: Life Science: Heredity and Reproduction

Benchmark	Rourke Reading Web Title	Lexile Level
SC.7.L.16.4 Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society and the environment.	<i>Biofuels (Let's Explore Science)</i>	850-899

Standard: Life Science: Interdependence		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.7.L.17.1 Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.	<i>Desert Dinners: Studying Food Webs in the Desert (Studying Food Webs)</i>	600-699
SC.7.L.17.2 Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism.	<i>Freshwater Feeders: Studying Food Webs in Freshwater (Studying Food Webs)</i>	600-699
	<i>Freaky Faces (Weird and Wonderful Animals)</i>	600-699
SC.7.L.17.3 Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.	<i>Speed Demons (Weird and Wonderful Animals)</i>	600-699
	<i>Blood Suckers (Weird and Wonderful Animals)</i>	600-699
	<i>Creeping Crawlers (My First Science Discovery Library)</i>	200-249

Standard: Nature of Science: The Practice of Science

Benchmark	Rourke Reading Web Title	Lexile Level
SC.7.N.1.1 Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.7.N.1.3 Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	<i>Biofuels (Let's Explore Science)</i>	850-899
SC.7.N.1.4 Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.		
SC.7.N.1.5 Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics.	<i>Biofuels (Let's Explore Science)</i>	850-899
	<i>Going Green (Let's Explore Science)</i>	800-849
SC.7.N.1.6 Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.7.N.1.7 Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community.		

Standard: Nature of Science: The Characteristics of Scientific Knowledge

Benchmark	Rourke Reading Web Title	Lexile Level
SC.7.N.2.1 Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered.	<i>Going Green (Let's Explore Science)</i>	800-849

Standard: Physical Science: Energy Transfer and Transformations

Benchmark	Rourke Reading Web Title	Lexile Level
SC.7.P.11.2 Investigate and describe the transformation of energy from one form to another.	<i>Biofuels (Let's Explore Science)</i>	align="center">850-899
SC.7.P.11.3 Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another.		
SC.7.P.11.4 Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature.	<i>Volcanoes (Earth's Power)</i>	850-899

Standard: Earth and Space Science: Earth in Space and Time

Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.E.5.1 Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance.	<i>Space (Skywatch)</i>	200-249
SC.8.E.5.2 Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars.		
SC.8.E.5.3 Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition.		
SC.8.E.5.4 Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions.		
SC.8.E.5.5 Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness).		
SC.8.E.5.6 Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.		
SC.8.E.5.7 Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions.	<i>Space (Skywatch)</i> <i>Earth (Skywatch)</i>	200-249
SC.8.E.5.8 Compare various historical models of the Solar System, including geocentric and heliocentric.	<i>Space (Skywatch)</i>	200-249
SC.8.E.5.9 Explain the impact of objects in space on each other including: 1.the Sun on the Earth including seasons and gravitational attraction 2.the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body.	<i>Space (Skywatch)</i> <i>Earth (Skywatch)</i>	200-249

Standard: Earth and Space Science: Earth in Space and Time (Cont.)

Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.E.5.10 Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.	<i>Space (Skywatch)</i>	200-249
SC.8.E.5.11 Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs.		
SC.8.E.5.12 Summarize the effects of space exploration on the economy and culture of Florida.		

Standard: Life Science: Matter and Energy Transformations

Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.L.18.2 Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide.	<i>Desert Dinners: Studying Food Webs in the Desert (Studying Food Webs)</i> <i>Freshwater Feeders: Studying Food Webs in Freshwater (Studying Food Webs)</i>	600-699
SC.8.L.18.3 Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.		
SC.8.L.18.4 Cite evidence that living systems follow the Laws of Conservation of Mass and Energy.		

Standard: Nature of Science: The Practice of Science

Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.N.1.1 Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.8.N.1.4 Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.	<i>Going Green (Let's Explore Science)</i>	800-849
	<i>Biofuels (Let's Explore Science)</i>	850-899
SC.8.N.1.5 Analyze the methods used to develop a scientific explanation as seen in different fields of science.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.8.N.1.6 Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.		

Standard: Nature of Science: The Characteristics of Scientific Knowledge

Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.N.2.1 Distinguish between scientific and pseudoscientific ideas.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.8.N.2.2 Discuss what characterizes science and its methods.	<i>Biofuels (Let's Explore Science)</i>	850-899

Standard: Nature of Science: The Role of Theories, Laws, Hypotheses, and Models		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.N.3.2 Explain why theories may be modified but are rarely discarded.	<i>Biofuels (Let's Explore Science)</i>	850-899
Standard: Nature of Science: Science and Society		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.N.4.1 Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.	<i>Going Green (Let's Explore Science)</i>	800-850
SC.8.N.4.2 Explain how political, social, and economic concerns can affect science, and vice versa.	<i>Biofuels (Let's Explore Science)</i>	850-899
Standard: Physical Science: Properties of Matter		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.P.8.4 Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.	<i>Biofuels (Let's Explore Science)</i>	850-899

Standard: Physical Science: Changes in Matter		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.8.P.9.1 Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes.	<i>Biofuels (Let's Explore Science)</i>	850-899
SC.8.P.9.2 Differentiate between physical changes and chemical changes.		
SC.8.P.9.3 Investigate and describe how temperature influences chemical changes.		

Standard: Earth and Space Science: Earth in Space and Time

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.E.5.1 Cite evidence used to develop and verify the scientific theory of the Big Bang (also known as the Big Bang Theory) of the origin of the universe.	<i>Space (Skywatch)</i>	200-249
SC.912.E.5.2 Identify patterns in the organization and distribution of matter in the universe and the forces that determine them.		
SC.912.E.5.3 Describe and predict how the initial mass of a star determines its evolution.		
SC.912.E.5.4 Explain the physical properties of the Sun and its dynamic nature and connect them to conditions and events on Earth.	<i>Space (Skywatch)</i> <i>Earth (Skywatch)</i>	200-249
SC.912.E.5.5 Explain the formation of planetary systems based on our knowledge of our Solar System and apply this knowledge to newly discovered planetary systems.	<i>Space (Skywatch)</i>	200-249
SC.912.E.5.6 Develop logical connections through physical principles, including Kepler's and Newton's Laws about the relationships and the effects of Earth, Moon, and Sun on each other.		
SC.912.E.5.7 Relate the history of and explain the justification for future space exploration and continuing technology development.		

Standard: Earth and Space Science: Earth Structures

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.E.6.1 Describe and differentiate the layers of Earth and the interactions among them.	<i>Earth (Skywatch)</i>	200-249
	<i>Volcanoes (Earth's Power)</i>	850-899
SC.912.E.6.2 Connect surface features to surface processes that are responsible for their formation.	<i>Earth (Skywatch)</i>	200-249
	<i>Volcanoes (Earth's Power)</i>	850-899
	<i>Continents (Landforms)</i>	750-849
SC.912.E.6.3 Analyze the scientific theory of plate tectonics and identify related major processes and features as a result of moving plates.	<i>Earth (Skywatch)</i>	200-249
	<i>Volcanoes (Earth's Power)</i>	850-899
SC.912.E.6.4 Analyze how specific geologic processes and features are expressed in Florida and elsewhere.	<i>Earth (Skywatch)</i>	200-249
	<i>Volcanoes (Earth's Power)</i>	850-899
	<i>Continents (Landforms)</i>	750-849
SC.912.E.6.5 Describe the geologic development of the present day oceans and identify commonly found features.	<i>Earth (Skywatch)</i>	200-249
	<i>Oceans (Landforms)</i>	750-849
SC.912.E.6.6 Analyze past, present, and potential future consequences to the environment resulting from various energy production technologies.	<i>Biofuels (Let's Explore Science)</i>	850-899
	<i>Going Green (Let's Explore Science)</i>	800-849

Standard: Earth and Space Science: Earth Systems and Patterns

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.E.7.1 Analyze the movement of matter and energy through the different biogeochemical cycles, including water and carbon.	<i>Hurricanes (Earth's Power)</i>	900-949
	<i>Volcanoes (Earth's Power)</i>	850-899
SC.912.E.7.2 Analyze the causes of the various kinds of surface and deep water motion within the oceans and their impacts on the transfer of energy between the poles and the equator.	<i>Oceans (Landforms)</i>	750-849
	<i>Hurricanes (Earth's Power)</i>	900-949
	<i>Volcanoes (Earth's Power)</i>	850-899
SC.912.E.7.3 Differentiate and describe the various interactions among Earth systems, including: atmosphere, hydrosphere, cryosphere, geosphere, and biosphere.	<i>Hurricanes (Earth's Power)</i>	900-949
	<i>Volcanoes (Earth's Power)</i>	850-899
SC.912.E.7.4 Summarize the conditions that contribute to the climate of a geographic area, including the relationships to lakes and oceans.	<i>Oceans (Landforms)</i>	750-849
	<i>Continents (Landforms)</i>	
SC.912.E.7.5 Predict future weather conditions based on present observations and conceptual models and recognize limitations and uncertainties of such predictions.	<i>Hurricanes (Earth's Power)</i>	900-949
SC.912.E.7.6 Relate the formation of severe weather to the various physical factors.		
SC.912.E.7.7 Identify, analyze, and relate the internal (Earth system) and external (astronomical) conditions that contribute to global climate change.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.912.E.7.8 Explain how various atmospheric, oceanic, and hydrologic conditions in Florida have influenced and can influence human behavior, both individually and collectively.		
SC.912.E.7.9 Cite evidence that the ocean has had a significant influence on climate change by absorbing, storing, and moving heat, carbon, and water.	<i>Hurricanes (Earth's Power)</i>	900-949

Standard: Life Science: Organization and Development of Living Organisms

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.L.14.8 Explain alternation of generations in plants.	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i>	350-399
SC.912.L.14.10 Discuss the relationship between the evolution of land plants and their anatomy.		
SC.912.L.14.13 Distinguish between bones of the axial skeleton and the appendicular skeleton.	<i>How Muscles and Bones Hold You Up: A Book About Models (Big Ideas for Young Scientists)</i>	400-499
SC.912.L.14.14 Identify the major bones of the axial and appendicular skeleton.		
SC.912.L.14.15 Identify major markings (such as foramina, fossae, tubercles, etc.) on a skeleton. Explain why these markings are important.		
SC.912.L.14.16 Describe the anatomy and histology, including ultra structure, of muscle tissue.		
SC.912.L.14.19 Explain the physiology of skeletal muscle.		
SC.912.L.14.20 Identify the major muscles of the human on a model or diagram.		

Standard: Life Science: Diversity and Evolution of Living Organisms

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.L.15.3 Describe how biological diversity is increased by the origin of new species and how it is decreased by the natural process of extinction.	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i>	350-399
SC.912.L.15.6 Discuss distinguishing characteristics of the domains and kingdoms of living organisms.		

Standard: Life Science: Interdependence

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.L.17.3 Discuss how various oceanic and freshwater processes, such as currents, tides, and waves, affect the abundance of aquatic organisms.	<i>Oceans (Landforms)</i>	750-849
SC.912.L.17.4 Describe changes in ecosystems resulting from seasonal variations, climate change and succession.	<i>Trees Don't Freeze: A Book About Adaptations (Big Ideas for Young Scientists)</i>	350-399
SC.912.L.17.6 Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism.	<i>Blood Suckers (Weird and Wonderful Animals)</i>	600-699
SC.912.L.17.7 Characterize the biotic and abiotic components that define freshwater systems, marine systems and terrestrial systems.	<i>Freshwater Feeders: Studying Food Webs in Freshwater (Studying Food Webs)</i>	600-699
SC.912.L.17.8 Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.	<i>Going Green (Let's Explore Science)</i>	800-849

Standard: Life Science: Interdependence (Cont.)

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.L.17.9 Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.	<i>Desert Dinners: Studying Food Webs in the Desert (Studying Food Webs)</i> <i>Freshwater Feeders: Studying Food Webs in Freshwater (Studying Food Webs)</i>	600-699
SC.912.L.17.11 Evaluate the costs and benefits of renewable and nonrenewable resources, such as water, energy, fossil fuels, wildlife, and forests.	<i>Going Green (Let's Explore Science)</i> <i>Biofuels (Let's Explore Science)</i>	800-849
SC.912.L.17.12 Discuss the political, social, and environmental consequences of sustainable use of land.		850-899
SC.912.L.17.13 Discuss the need for adequate monitoring of environmental parameters when making policy decisions.		
SC.912.L.17.14 Assess the need for adequate waste management strategies.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.912.L.17.15 Discuss the effects of technology on environmental quality.	<i>Going Green (Let's Explore Science)</i> <i>Biofuels (Let's Explore Science)</i>	800-849
SC.912.L.17.16 Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.		850-899
SC.912.L.17.17 Assess the effectiveness of innovative methods of protecting the environment.		
SC.912.L.17.19 Describe how different natural resources are produced and how their rates of use and renewal limit availability.		
SC.912.L.17.20 Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability.		

Standard: Nature of Science: The Practice of Science

Benchmark	Rourke Reading Web Title	Lexile Level
<p>SC.912.N.1.1 Define a problem based on a specific body of knowledge, for example: biology, chemistry, physics, and earth/space science, and do the following:</p> <ol style="list-style-type: none"> 1. pose questions about the natural world, 2. conduct systematic observations, 3. examine books and other sources of information to see what is already known, 4. review what is known in light of empirical evidence, 5. plan investigations, 6. use tools to gather, analyze, and interpret data (this includes the use of measurement in metric and other systems, and also the generation and interpretation of graphical representations of data, including data tables and graphs), 7. pose answers, explanations, or descriptions of events, 8. generate explanations that explicate or describe natural phenomena (inferences), 9. use appropriate evidence and reasoning to justify these explanations to others, 10. communicate results of scientific investigations, and 11. evaluate the merits of the explanations produced by others. 	<p><i>Going Green (Let's Explore Science)</i></p> <p><i>Biofuels (Let's Explore Science)</i></p>	<p>800-849</p> <p>850-899</p>
<p>SC.912.N.1.5 Describe and provide examples of how similar investigations conducted in many parts of the world result in the same outcome.</p>	<p><i>Going Green (Let's Explore Science)</i></p>	<p>800-849</p>
<p>SC.912.N.1.6 Describe how scientific inferences are drawn from scientific observations and provide examples from the content being studied.</p>		
<p>SC.912.N.1.7 Recognize the role of creativity in constructing scientific questions, methods and explanations.</p>		

Standard: Nature of Science: The Characteristics of Scientific Knowledge

Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.N.2.2 Identify which questions can be answered through science and which questions are outside the boundaries of scientific investigation, such as questions addressed by other ways of knowing, such as art, philosophy, and religion.	<i>Biofuels (Let's Explore Science)</i>	850-899
	<i>Going Green (Let's Explore Science)</i>	800-849
SC.912.N.2.4 Explain that scientific knowledge is both durable and robust and open to change. Scientific knowledge can change because it is often examined and re-examined by new investigations and scientific argumentation. Because of these frequent examinations, scientific knowledge becomes stronger, leading to its durability.	<i>Biofuels (Let's Explore Science)</i>	850-899
	<i>Going Green (Let's Explore Science)</i>	800-849
	<i>Space (Skywatch)</i>	200-249
SC.912.N.2.5 Describe instances in which scientists' varied backgrounds, talents, interests, and goals influence the inferences and thus the explanations that they make about observations of natural phenomena and describe that competing interpretations (explanations) of scientists are a strength of science as they are a source of new, testable ideas that have the potential to add new evidence to support one or another of the explanations.	<i>Going Green (Let's Explore Science)</i>	800-849

Standard: Nature of Science: The Role of Theories, Laws, Hypotheses, and Models		
Benchmark	Rourke Reading Web Title	Lexile Level
12.N.3.1 Explain that a scientific theory is the culmination of many scientific investigations bringing together all the current evidence concerning a substantial range of phenomena; a scientific theory represents the most useful explanation scientists have to offer.	<i>Going Green (Let's Explore Science)</i>	800-849
Standard: Nature of Science: Science and Society		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.N.4.1 Explain how scientific knowledge and reasoning provide an empirically-based perspective to inform society's decision making.	<i>Going Green (Let's Explore Science)</i>	800-849
SC.912.N.4.2 Weigh the merits of alternative strategies for solving a specific societal problem by comparing a number of different costs and benefits, such as human, economic, and environmental.	<i>Biofuels (Let's Explore Science)</i>	850-899
Standard: Physical Science: Energy		
Benchmark	Rourke Reading Web Title	Lexile Level
SC.912.P.10.1 Differentiate among the various forms of energy and recognize that they can be transformed from one form to others.	<i>Biofuels (Let's Explore Science)</i>	850-899
SC.912.P.10.4 Describe heat as the energy transferred by convection, conduction, and radiation, and explain the connection of heat to change in temperature or states of matter.	<i>Volcanoes (Earth's Power)</i>	850-899
SC.912.P.10.6 Create and interpret potential energy diagrams, for example: chemical reactions, orbits around a central body, motion of a pendulum.	<i>Space (Skywatch)</i>	200-249



APPENDIX 2

ROURKE READING WEB TITLES

**CORRELATED
TO**

FLORIDA LANGUAGE ARTS STANDARDS

Florida Language Arts Standards and Benchmarks Grades 5-12
A Correlation with Rourke Reading Web Books

Standard: Reading Process: Fluency		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.5.1.5.1 The student will demonstrate the ability to read grade level text.	<i>Paintball</i>	350-399
	<i>Goalies</i>	600-749
	<i>Quarterbacks</i>	600-749
	<i>Strikers</i>	600-749
LA.5.1.5.2 The student will adjust reading rate based on purpose, text difficulty, form, and style.	<i>Pedro and the Coyote</i>	800-849
	<i>The Cheerleaders</i>	800-899
	<i>Karate</i>	900-949
	<i>Gymnastics</i>	900-949
Standard: Reading Process: Vocabulary Development		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.5.1.6.1 The student will use new vocabulary that is introduced and taught directly.	<i>Paintball</i>	350-399
	<i>Goalies</i>	600-749
LA.5.1.6.2 The student will listen to, read, and discuss familiar and conceptually challenging text.	<i>Quarterbacks</i>	600-749
	<i>Strikers</i>	600-749
LA.5.1.6.3 The student will use context clues to determine meanings of unfamiliar words.	<i>Pedro and the Coyote</i>	800-849
	<i>The Cheerleaders</i>	800-899
LA.5.1.6.4 the student will categorize key vocabulary and identify salient features.	<i>Karate</i>	900-949
	<i>Gymnastics</i>	900-949
LA.5.1.6.5 The student will relate new vocabulary to familiar words.		
LA.5.1.6.6 The student will identify shades of meaning in related words (e.g., blaring, loud).		
LA.5.1.6.7 The student will use meaning of familiar base words and affixes to determine meanings of unfamiliar complex words.		
LA.5.1.6.8 The student will use knowledge of antonyms, synonyms, homophones, and homographs to determine meanings of words.		
LA.5.1.6.9 The student will determine the correct meaning of words with multiple meanings in context.		
LA.5.1.6.10 The student will determine meanings of words, pronunciation, parts of speech, etymologies, and alternate word choices by using a dictionary, thesaurus, and digital tools.		
LA.5.1.6.11 The student will use meaning of familiar roots and affixes derived from Greek and Latin to determine meanings of unfamiliar complex words.		

Standard: Reading Process: Reading Comprehension

Benchmark	Rourke Reading Web Title	Lexile Level
LA.5.1.7.1 The student will explain the purpose of text features (e.g., format, graphics, diagrams, illustrations, charts, maps), use prior knowledge to make and confirm predictions, and establish a purpose for reading.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.5.1.7.2 The student will identify the author’s purpose (e.g., to persuade, inform, entertain, explain) and how an author’s perspective influences text.		600-749
LA.5.1.7.3 The student will determine the main idea or essential message in grade-level text through inferring, paraphrasing, summarizing, and identifying relevant details.		600-749
LA.5.1.7.4 The student will identify cause-and-effect relationships in text.	<i>Pedro and the Coyote (Latin American Tales and Myths)</i>	800-849
LA.5.1.7.5 The student will identify the text structure an author uses (e.g., comparison/contrast, cause/effect, sequence of events) and explain how it impacts meaning in text.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.5.1.7.6 The student will identify themes or topics across a variety of fiction and nonfiction selections.		600-749
LA.5.1.7.7 The student will compare and contrast elements in multiple texts.		600-749
LA.5.1.7.8 The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.		800-849

Standard: Information and Media Literacy: Technology

Benchmark	Rourke Reading Web Title	Lexile Level
LA.5.6.4.1 The student will select and use appropriate available technologies to enhance communication and achieve a purpose (e.g., video, presentations).	<i>The Internet and Email (Let's Explore Science)</i>	800-849
LA.5.6.4.2 The student will determine and use the appropriate digital tools (e.g., word processing, multimedia authoring, web tools, graphic organizers) for publishing and presenting a topic.	<i>The Internet and Email (Let's Explore Science)</i>	800-849

Standard: Reading Process: Fluency		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.6.1.5.1 The student will adjust reading rate based on purpose, text difficulty, form, and style.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399 600-749 600-749 600-749 800-849 800-899 900-949 900-949
Standard: Reading Process: Vocabulary Development		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.6.1.6.1 The student will use new vocabulary that is introduced and taught directly.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.6.1.6.2 The student will listen to, read, and discuss familiar and conceptually challenging text.		600-749
LA.6.1.6.3 The student will use context clues to determine meanings of unfamiliar words.		600-749
LA.6.1.6.4 The student will categorize key vocabulary and identify salient features.		600-749
LA.6.1.6.5 The student will relate new vocabulary to familiar words.		800-849
LA.6.1.6.6 The student will distinguish denotative and connotative meanings of words.		800-899
LA.6.1.6.7 The student will identify and understand the meaning of conceptually advanced prefixes, suffixes, and root words.		900-949
LA.6.1.6.8 The student will identify advanced word/phrase relationships and their meanings.		900-949
LA.6.1.6.9 The student will determine the correct meaning of words with multiple meanings in context.		
LA.6.1.6.10 The student will determine meanings of words, pronunciation, parts of speech, etymologies, and alternate word choices by using a dictionary, thesaurus, and digital tools.		
LA.6.1.6.11 The student will identify the meaning of words and phrases derived from Greek and Latin mythology (e.g., mercurial, Achilles' heel) and identify frequently used words from other languages (e.g., laissez faire, croissant).		

Standard: Reading Process: Reading Comprehension

Benchmark	Rourke Reading Web Title	Lexile Level
LA.6.1.7.1 The student will use background knowledge of subject and related content areas, prereading strategies, graphic representations, and knowledge of text structure to make and confirm complex predictions of content, purpose, and organization of a reading selection.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.6.1.7.2 The student will analyze the author’s purpose (e.g., to persuade, inform, entertain, or explain) and perspective in a variety of texts and understand how they affect meaning.		600-749
LA.6.1.7.3 The student will determine the main idea or essential message in grade-level text through inferring, paraphrasing, summarizing, and identifying relevant details.		600-749
LA.6.1.7.4 The student will identify cause-and-effect relationships in text.	<i>Pedro and the Coyote (Latin American Tales and Myths)</i>	800-849
LA.6.1.7.5 The student will analyze a variety of text structures (e.g., comparison/contrast, cause/effect, chronological order, argument/support, lists) and text features (main headings with subheadings) and explain their impact on meaning in text.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.6.1.7.6 The student will analyze and evaluate similar themes or topics by different authors across a variety of fiction and nonfiction selections.		600-749
LA.6.1.7.7 The student will compare and contrast elements in multiple texts.		600-749
LA.6.1.7.8 The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.		800-849

Standard: Information and Media Literacy: Technology

Benchmark	Rourke Reading Web Title	Lexile Level
LA.6.6.4.1 The student will use appropriate available technologies to enhance communication and achieve a purpose (e.g., video, online).	<i>The Internet and Email (Let's Explore Science)</i>	800-849
LA.6.6.4.2 The student will determine and apply digital tools (e.g., word processing, multimedia authoring, web tools, graphic organizers) to publications and presentations.	<i>The Internet and Email (Let's Explore Science)</i>	800-849

Standard: Reading Process: Fluency		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.7.1.5.1 The student will adjust reading rate based on purpose, text difficulty, form, and style.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399 600-749 600-749 600-749 800-849 800-899 900-949 900-949
Standard: Reading Process: Vocabulary Development		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.7.1.6.1 The student will use new vocabulary that is introduced and taught directly.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.7.1.6.2 The student will listen to, read, and discuss familiar and conceptually challenging text.		600-749
LA.7.1.6.3 The student will use context clues to determine meanings of unfamiliar words.		600-749
LA.7.1.6.4 The student will categorize key vocabulary and identify salient features.		600-749
LA.7.1.6.5 The student will relate new vocabulary to familiar words.		800-849
LA.7.1.6.6 The student will distinguish denotative and connotative meanings of words.		800-899
LA.7.1.6.7 The student will identify and understand the meaning of conceptually advanced prefixes, suffixes, and root words.		900-949
LA.7.1.6.8 The student will identify advanced word/phrase relationships and their meanings.		900-949
LA.7.1.6.9 The student will determine the correct meaning of words with multiple meanings in context.		
LA.7.1.6.10 The student will determine meanings of words, pronunciation, parts of speech, etymologies, and alternate word choices by using a dictionary, thesaurus, and digital tools.		

Standard: Reading Process: Reading Comprehension		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.7.1.7.1 The student will use background knowledge of subject and related content areas, pre-reading strategies, graphic representations, and knowledge of text structure to make and confirm complex predictions of content, purpose, and organization of a reading selection.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.7.1.7.2 The student will analyze the author’s purpose (e.g., to persuade, inform, entertain, explain) and perspective in a variety of texts and understand how they affect meaning.		600-749
LA.7.1.7.3 The student will determine the main idea or essential message in grade-level or higher texts through inferring, paraphrasing, summarizing, and identifying relevant details.		600-749
LA.7.1.7.4 The student will identify cause-and-effect relationships in text.	<i>Pedro and the Coyote (Latin American Tales and Myths)</i>	800-849
LA.7.1.7.5 The student will analyze a variety of text structures (e.g., comparison/contrast, cause/effect, chronological order, argument/support, lists) and text features (main headings with subheadings) and explain their impact on meaning in text.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.7.1.7.7 The student will compare and contrast elements in multiple texts.		600-749
LA.7.1.7.8 The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.		600-749
Standard: Information and Media Literacy: Technology		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.7.6.4.1 The student will select and use appropriate available technologies (e.g., computer, digital camera) to enhance communication and achieve a purpose (e.g., video, presentations).	<i>The Internet and Email (Let's Explore Science)</i>	800-849
LA.7.6.4.2 The student will evaluate and apply digital tools (e.g., word processing, multimedia authoring, web tools, graphic organizers) to publications and presentations.	<i>The Internet and Email (Let's Explore Science)</i>	800-849

Standard: Reading Process: Fluency		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.8.1.5.1 The student will adjust reading rate based on purpose, text difficulty, form, and style.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399 600-749 600-749 600-749 800-849 800-899 900-949 900-949
Standard: Reading Process: Vocabulary Development		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.8.1.6.2 The student will listen to, read, and discuss familiar and conceptually challenging text.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.8.1.6.3 The student will use context clues to determine meanings of unfamiliar words.		600-749
LA.8.1.6.4 The student will categorize key vocabulary and identify salient features.		600-749
LA.8.1.6.5 The student will relate new vocabulary to familiar words.		600-749
LA.8.1.6.6 The student will distinguish denotative and connotative meanings of words.		800-849
LA.8.1.6.7 The student will identify and understand the meaning of conceptually advanced prefixes, suffixes, and root words.		800-899
LA.8.1.6.8 The student will identify advanced word/phrase relationships and their meanings.		900-949
LA.8.1.6.9 The student will determine the correct meaning of words with multiple meanings in context.		900-949
LA.8.1.6.10 The student will determine meanings of words, pronunciation, parts of speech, etymologies, and alternate word choices by using a dictionary, thesaurus, and digital tools.		

Standard: Reading Process: Reading Comprehension

Benchmark	Rourke Reading Web Title	Lexile Level
LA.8.1.7.1 The student will use background knowledge of subject and related content areas, pre-reading strategies, graphic representations, and knowledge of text structure to make and confirm complex predictions of content, purpose, and organization of a reading selection.	<i>Paintball</i>	350-399
	<i>Goalies</i>	600-749
	<i>Quarterbacks</i>	600-749
	<i>Strikers</i>	600-749
	<i>Pedro and the Coyote</i>	800-849
LA.8.1.7.2 The student will analyze the author's purpose and/or perspective in a variety of texts and understand how they affect meaning.	<i>The Cheerleaders</i>	800-899
	<i>Karate</i>	900-949
	<i>Gymnastics</i>	900-949
LA.8.1.7.3 The student will determine the main idea or essential message in grade-level or higher texts through inferring, paraphrasing, summarizing, and identifying relevant details.		
LA.8.1.7.4 The student will identify cause-and-effect relationships in text.	<i>Pedro and the Coyote (Latin American Tales and Myths)</i>	800-849
LA.8.1.7.5 The student will analyze a variety of text structures (e.g., comparison/contrast, cause/effect, chronological order, argument/support, lists) and text features (main headings with subheadings) and explain their impact on meaning in text.	<i>Paintball</i>	350-399
	<i>Goalies</i>	600-749
	<i>Quarterbacks</i>	600-749
	<i>Strikers</i>	600-749
LA.8.1.7.7 The student will compare and contrast elements in multiple texts (e.g., setting, characters, problems).	<i>Pedro and the Coyote</i>	800-849
	<i>The Cheerleaders</i>	800-899
	<i>Karate</i>	900-949
LA.8.1.7.8 The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.	<i>Gymnastics</i>	900-949

Standard: Information and Media Literacy: Technology

Benchmark	Rourke Reading Web Title	Lexile Level
LA.8.6.4.1 The student will use appropriate available technologies to enhance communication and achieve a purpose (e.g., video, digital technology).	<i>The Internet and Email (Let's Explore Science)</i>	800-849
LA.8.6.4.2 The student will evaluate and apply digital tools (e.g., word, processing, multimedia authoring, web tools, graphic organizers) to publications and presentations.	<i>The Internet and Email (Let's Explore Science)</i>	800-849

Standard: Reading Process: Fluency		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.910.1.5.1 The student will adjust reading rate based on purpose, text difficulty, form, and style.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399 600-749 600-749 600-749 800-849 800-899 900-949 900-949
Standard: Reading Process: Vocabulary Development		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.910.1.6.1 The student will use new vocabulary that is introduced and taught directly;	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.910.1.6.2 The student will listen to, read, and discuss familiar and conceptually challenging text;		600-749
LA.910.1.6.3 The student will use context clues to determine meanings of unfamiliar words;		600-749
LA.910.1.6.4 The student will categorize key vocabulary and identify salient features;		600-749
LA.910.1.6.5 The student will relate new vocabulary to familiar words;		800-849
LA.910.1.6.6 The student will distinguish denotative and connotative meanings of words;		800-899
LA.910.1.6.7 The student will identify and understand the meaning of conceptually advanced prefixes, suffixes, and root words;		900-949
LA.910.1.6.8 The student will identify advanced word/phrase relationships and their meanings;		900-949
LA.910.1.6.9 The student will determine the correct meaning of words with multiple meanings in context;		
LA.910.1.6.10 The student will determine meanings of words, pronunciation, parts of speech, etymologies, and alternate word choices by using a dictionary, thesaurus, and digital tools; and		

Standard: Reading Process: Reading Comprehension		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.910.1.7.1 The student will use background knowledge of subject and related content areas, pre-reading strategies (e.g., previewing, discussing, generating questions), text features, and text structure to make and confirm complex predictions of content, purpose, and organization of a reading selection;	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.910.1.7.2 The student will analyze the authors purpose and/or perspective in a variety of text and understand how they affect meaning;		600-749
LA.910.1.7.3 The student will determine the main idea or essential message in grade-level or higher texts through inferring, paraphrasing, summarizing, and identifying relevant details;		600-749
LA.910.1.7.4 The student will identify cause-and-effect relationships in text;	<i>Pedro and the Coyote (Latin American Tales and Myths)</i>	800-849
LA.910.1.7.5 The student will analyze a variety of text structures (e.g., comparison/contrast, cause/effect, chronological order, argument/support, lists) and text features (main headings with subheadings) and explain their impact on meaning in text;	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.910.1.7.7 The student will compare and contrast elements in multiple texts; and		600-749
LA.910.1.7.8 The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.		600-749
		800-849
		800-899
		900-949
		900-949
Standard: Information and Media Literacy: Technology		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.910.6.4.1 The student will use appropriate available technologies to enhance communication and achieve a purpose (e.g., video, digital technology); and	<i>The Internet and Email (Let's Explore Science)</i>	800-849
LA.910.6.4.2 The student will routinely use digital tools for publication, communication and productivity.	<i>The Internet and Email (Let's Explore Science)</i>	800-849

Standard: Reading Process: Fluency		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.1112.1.5.1 The student will adjust reading rate based on purpose, text difficulty, form, and style.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399 600-749 600-749 600-749 800-849 800-899 900-949 900-949
Standard: Reading Process: Vocabulary Development		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.1112.1.6.1 The student will use new vocabulary that is introduced and taught directly.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.1112.1.6.2 The student will listen to, read, and discuss familiar and conceptually challenging text.		600-749
LA.1112.1.6.3 The student will use context clues to determine meanings of unfamiliar words.		600-749
LA.1112.1.6.4 The student will categorize key vocabulary and identify salient features.		600-749
LA.1112.1.6.5 The student will relate new vocabulary to familiar words.		800-849
LA.1112.1.6.6 The student will distinguish denotative and connotative meanings of words.		800-899
LA.1112.1.6.7 The student will identify and understand the meaning of conceptually advanced prefixes, suffixes, and root words.		900-949
LA.1112.1.6.8 The student will identify advanced word/phrase relationships and their meanings.		900-949
LA.1112.1.6.9 The student will determine the correct meaning of words with multiple meanings in context.		
LA.1112.1.6.10 The student will determine meanings of words, pronunciation, parts of speech, etymologies, and alternate word choices by using a dictionary, thesaurus, and digital tools.		

Standard: Reading Process: Reading Comprehension		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.1112.1.7.1 The student will use background knowledge of subject and related content areas, pre-reading strategies (e.g., previewing, discussing, generating questions), text features, and text structure to make and confirm complex predictions of content, purpose, and organization of a reading selection.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.1112.1.7.2 The student will analyze the author's purpose and/or perspective in a variety of text and understand how they affect meaning.		600-749
LA.1112.1.7.3 The student will determine the main idea or essential message in grade-level or higher texts through inferring, paraphrasing, summarizing, and identifying relevant details and facts.		600-749
LA.1112.1.7.4 The student will identify cause-and-effect relationships in text.	<i>Pedro and the Coyote (Latin American Tales and Myths)</i>	800-849
LA.1112.1.7.5 The student will analyze a variety of text structures (e.g., comparison/contrast, cause/effect, chronological order, argument/support, lists) and text features (main headings with subheadings) and explain their impact on meaning in text.	<i>Paintball</i> <i>Goalies</i> <i>Quarterbacks</i> <i>Strikers</i> <i>Pedro and the Coyote</i> <i>The Cheerleaders</i> <i>Karate</i> <i>Gymnastics</i>	350-399
LA.1112.1.7.7 The student will compare and contrast elements in multiple texts.		600-749
LA.1112.1.7.8 The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.		600-749
Standard: Information and Media Literacy: Technology		
Benchmark	Rourke Reading Web Title	Lexile Level
LA.1112.6.4.1 The student will select and use appropriate available technologies (e.g., computer, digital camera) to enhance communication and achieve a purpose (e.g., video, presentations).	<i>The Internet and Email (Let's Explore Science)</i>	800-849