

READ 180:
Special Education

IMPACT STUDY



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Foreword

Six million students currently participate in special education programs across the United States. As this number grows, the President's Commission on Excellence in Special Education (2002) reports that approximately 40%, or 2.4 million, of these students are selected to attend special education programs simply because they have not learned to read. With *READ 180*, Scholastic is providing a meaningful solution, enabling special education students with a multitude of physical and emotional challenges to gain the skills and motivation needed to become successful readers. Imagine a classroom where students are actively engaged, learning, and applying skills in phonemic awareness, phonics, vocabulary, and comprehension. These characteristics are commonly found in *READ 180* classrooms.

READ 180 is currently in use in more than 2,000 classrooms nationwide and is one of the best researched and documented reading intervention programs ever developed. After ten years of scientific research in association with Vanderbilt University and six years in schools, *READ 180* is producing quantifiable gains in reading achievement among special education students. Featuring assistive technology, differentiated instruction, and educational materials that engage students, *READ 180* has emerged as America's premier reading intervention program.

This impact study examines the changing parameters of special education. It outlines how Scholastic *READ 180*, based on scientific research with roots in special education, provides distinctive features that address special needs. Also outlined here is an overview of the research history behind *READ 180* and a brief report of its effectiveness with special education students. Finally, a supplement illustrates how students with special needs directly benefit from *READ 180*.

The Need

The number of special education students in the U.S. has almost doubled over the past twenty-five years. These students represent a substantial and rising percentage of the total population in U.S. schools. Of the six million students enrolled in special education programs, half have been identified as having a specific learning disability, which the Federal Individuals with Disabilities Education Act (IDEA) defines as:

A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. (The President's Commission on Excellence in Special Education, 2002, and TeachingId.org, 2002)

“It has been estimated that over 80 percent of all referrals to Special Education involve reading difficulties.”

—Kavale and Reese, 1992

Statistics show that many of these students will never reach the academic achievements of their peers. In an effort to improve the performance of special education students nationwide, President George Bush created the President's Commission on Excellence in Special Education in 2001. After months of public hearings and evidence gathering, the Commission released its findings and recommendations in a report entitled “A New Era: Revitalizing Special Education for Children and Their Families.” The findings are sobering. The report states that students with disabilities are twice as likely to drop out of school as their peers. Even more troubling is the Commission's finding that 80% of students with specific learning disabilities are placed into special education programs

“...simply because they have not learned how to read. Thus, many children identified for special education — up to 40% — are there because they weren't taught to read. The reading difficulties may not be their only area of difficulty, but it's the area that resulted in special education placement. Sadly, few children placed in special education close the achievement gap to a point where they can read and learn like their peers.” (The President's Commission on Excellence in Special Education, 2002)

Thus, a staggering 2.4 million students are enrolled in special education programs because of an inability to read. Clearly, many children are not responding to the reading instruction they are receiving, whether in the general education classroom or the special education classroom.

In its major recommendations, the Commission set three overarching goals:

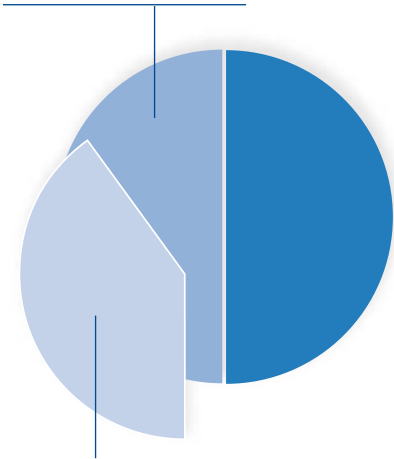
1. “Focus on results—not on process.”	2. “Embrace a model of prevention, not a model of failure.”	3. “Consider children with disabilities as general education children first.”
Thus, schools need to concentrate on results and not be consumed by process and procedures.	In other words, implementing changes to identify and prevent learning disabilities, rather than dealing with students once they have failed, should be the primary objective.	Thus, general education and special education should not be treated as separate systems. Instead, general education and special education should share the responsibilities in areas of cost, instruction, and identification. (The President’s Commission on Excellence in Special Education, 2002)

The Commission’s recommendations, particularly in the areas of accountability and results, were also affirmed in the 2002 Elementary and Secondary Education Act (ESEA), also known as the No Child Left Behind Act (NCLB). Going forward, educational standards and school accountability systems must also apply to students with disabilities (National Association of State Directors of Special Education, 2002).

As a result of the above policy changes and other federal legislation, many schools have adopted the practice of inclusion, in which students with disabilities participate in general education classrooms. Consequently, many teachers now need to provide appropriate instruction for an even wider range of student needs. The current environment of decreasing funds has made this task especially difficult. In order to meet these new demands, districts are seeking innovative, cost-effective, and proven programs that meet the needs of all students.

6 million students are enrolled in special education programs

50% of the students, or 3 million, have been identified as having a specific learning disability



80% of this group, or 2.4 million, are there simply because they have not learned to read

Thus, 2.4 million out of 6 million, or 40%, of all special education students are enrolled because they never learned to read.

READ 180's distinctive features accommodate special needs students right alongside their general education counterparts who may be struggling readers, too.

The Solution

READ 180 has a crucial role to play in special education and reaching today's educational goals. It enables success in the special education population because its research design and unique features support a wide range of learning abilities. Also, the program is uniquely positioned to meet the needs of both special and regular education teachers who face increasing numbers of special education students in their classrooms.

As validated research shows, students with reading difficulties do not need “qualitatively different reading instruction.” Rather, what they need is to be “carefully taught the same fundamental reading skills that all successful readers must learn” (California Special Education Reading Task Force, 1999). *READ 180's* program design meets this requirement by teaching students the essential reading skills of phonemic awareness, phonics, fluency, vocabulary, and comprehension. In addition, special education students benefit from:

1. Innovative technology that both accommodates specific physical challenges and offers differentiated instruction and multimodal and motivational support;
2. A flexible instructional model that allows the teacher to focus on specific problem areas and provide direct instruction in reading;
3. Comprehensive reporting which allows educators to customize instruction and facilitate IEP reporting and other types of record-keeping.

Perhaps most crucially, *READ 180's* distinctive features accommodate special needs students right alongside their general education counterparts who may be struggling readers, too.

INNOVATIVE TECHNOLOGY

Given the growing demands for better special education instruction within mainstream classrooms, it is important to recognize that studies show that technology can be very helpful in assisting instructors in inclusive classrooms. “Teachers have found that technological innovations can help level the playing field for special needs students and enable these students to succeed in the regular classroom” (Lewis and Harrison, 1988, cited by Hasselbring, 2001). The movement toward including technology in special education has been further strengthened by the last round of IDEA reform in 1997, which stated that districts “must consider assistive technology in the program planning for all students with disabilities” (Ashton, 2000).

READ 180 provides assistive technology to meet the variety of physical challenges of special needs students. In addition, the *READ 180* Software offers differentiated instruction and a variety of activities that hold student interest and motivate them to succeed.

Universal Design

Universal design is a fundamental *READ 180* feature for special education students since it addresses some of the most basic physical challenges such as hearing and vision impairment. Universal design is a movement that seeks to create structures and products that are designed to accommodate all potential users, including those with disabilities.

Scholastic has a strong history of collaboration with experts in the universal design field.

In 1984, Dr. David Rose, a professor at the Harvard Graduate School of Education, helped to establish the Center for Applied Special Technology (CAST) to expand opportunities for students with disabilities through the innovative development and application of computer technology. In 1993, Dr. Rose and Scholastic codeveloped and released Wiggleworks®, the first universally designed mainstream multimedia language arts curricula. In 1998, Scholastic enlisted Dr. Rose and his team to incorporate CAST design in READ 180.

As a result of Scholastic's partnership with Dr. Rose and his team, *READ 180* offers a multitude of universal access features. These include:

- Activating closed-captioning of video text to accommodate students with hearing impairment;
- Altering the color scheme and increasing text font size to accommodate students with vision impairment;
- Activating Spanish-language support features;
- Adjusting the speed of certain activities.

Universal access allows students and teachers to customize the Software to meet individual needs without implementing separate or complex adaptations. As a result, students with special needs are not singled out or inconvenienced because of their disabilities.

Differentiated Instruction

As research shows, struggling readers need intensive and individualized instruction to address their unique reading problems. Through continuous assessment by the Software, *READ 180* is able to provide this, offering

Perhaps the most powerful testimony to the Software's motivational effects is feedback from special education student educators stating that students "get hooked" on *READ 180*.

differentiated instruction at every level. As student progress changes, the content level changes accordingly. Additionally, students are able to work at their own pace. They no longer need to feel left behind their peers or feel ashamed for not mastering specific skills as quickly as their classmates.

Multimodal and Motivational Software

According to many special education teachers, one of the most compelling aspects of *READ 180* Software is its multisensory or multimodal approach, mixing video Software, Universal Access provisions, Audiobooks, and Paperbacks in one classroom session. This provides significant advantages for special needs students, providing them with opportunities to view, listen, and speak/record on a daily basis. *READ 180*'s multimodal features not only appeal to students, but they also allow students who might have a disability to learn and experience text through a broader range of senses and abilities compared to traditional classroom activities. Thus, the program ensures that all students, regardless of learning modality preference, are able to benefit.

The Software also provides motivational support. Special education teachers report that many of their students associate printed material with failure, but that once these students experience success with text, their attitudes quickly change. Much research has been devoted to this psychological element in reading intervention (Guthrie and Wigfield, 1997), and *READ 180*'s Software was specifically designed to address it. The Software begins with an engaging video for mental model development and presents age-appropriate instruction and practice at reading levels that allow students to experience a sense of accomplishment. Once these students experience success, they seek more.

Teachers consistently comment on the program's ability to transform student attitude and self-esteem. The Software's on-screen host, Ty, provides patient feedback and encouragement that is private, nonjudgmental, and respectful of students. As the smart Software tracks individual student progress, students are able to view their progress on on-screen charts and printed reports, making success a visible and measurable experience.

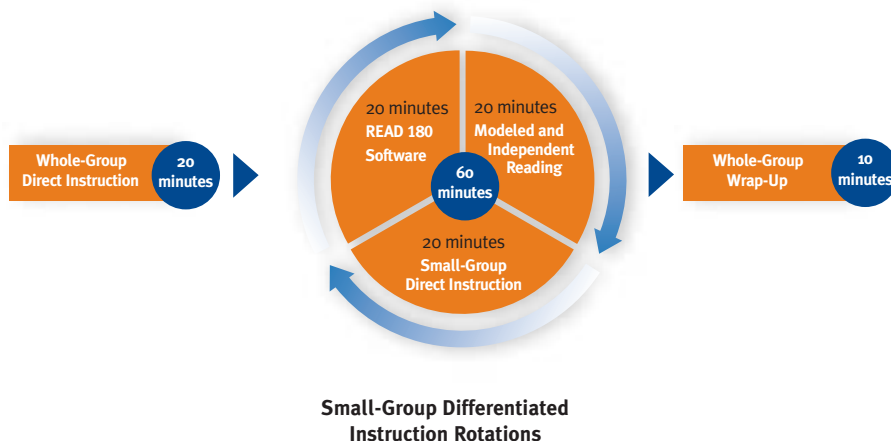
Perhaps the most powerful testimony to the Software's motivational effects is feedback from special education educators stating that students "get hooked" on *READ 180*. According to these instructors, students often ask for more time on the Software or ask to come after school hours to continue their work — behavior that these students never exhibited prior to their exposure to *READ 180*.

THE INSTRUCTIONAL MODEL

The *READ 180* instructional model consists of a 90-minute block during which teachers and students engage in a variety of activities and instructional modes:

- 1. Whole-Group Instruction:** The teacher begins the class with a 20-minute period of whole-class direct instruction.
- 2. Small-Group Rotations:** Students rotate among three different “stations,” at which they spend 20 minutes each receiving small-group instruction, working at computers on the Software, and reading or writing independently.
- 3. Whole-Group Wrap-Up:** The teacher ends class with ten more minutes of whole-group instruction.

The 90-Minute Instructional Model



The principal advantage of the *READ 180* instructional model for teachers in special education and inclusive classrooms is that it provides much-needed structure and organization while allowing — and even encouraging — differentiated and flexible instruction. Teachers may do a read aloud during whole-group instruction or they may teach a skill lesson. Daily small-group activities allow the teacher to better monitor and address each student’s needs. In small-group instruction, teachers may group students who are having difficulty with a particular skill and provide intensive support or they may conference with individual students.

Students also benefit from the structure. For many students with special needs, this organization and routine is crucial. Students know where they need to go and what they need to do. Yet the instructional model also allows for individualized pacing, a degree of choice, and mobility. Indeed, the latter is an extremely important aspect for students with attention problems. When questioned about his

For many of the learning disabled students I teach, when they enter my classroom they have never read a chapter book. In READ 180, they are so excited to be able to finally complete a chapter book. Also, the titles of the books my students are reading are not “baby” books. The books have similar titles to the ones that other students in the school are reading. That is one of the most positive aspects of READ 180. My school has a list of all books that the students in the school have read. My class is so excited to be on that list!

—Kathy Triana
READ 180 Teacher

“Curriculum-based measurement provides more precise guidance for instructional decision making and progress monitoring.”

—Shinn, 1998

favorite aspect of the program, one special education student responded, “We get to move around.” Special education teachers often comment that their students take ownership of the process and show high levels of on-task behavior.

COMPREHENSIVE REPORTING

READ 180 is the only program of its kind that provides continuous assessment and immediate feedback for both student and teacher. Students begin the program by taking the Scholastic Reading Inventory, a scientifically based and validated instrument that assesses student reading levels. Students are then matched to appropriate text and placed at the correct level in the Software activities.



Intervention Grouping Report



The Lincoln School
Teacher: Ms. Greene
Grade: 5

PERFORMANCE STANDARD	STUDENT	GRADE	LEXILE	DATE
Advanced & Proficient ON OR ABOVE GRADE LEVEL	Tiffany Robinson	5	1110	01/30/03
	Chequan Lewis	5	1080	02/22/03
	Jacquelyn Gainer	5	1030	02/14/03
	Charles Freeman	5	930	02/03/03
	Renee Saunders	5	890	02/14/03
	Henry Cho	5	820	02/03/03
	Hsin-Yi Huang	5	780	02/14/03
	Aliyah Mamdani	5	760	02/14/03
	Julie Kim	5	740	02/07/03
	Robert Molina	5	720	02/24/03
Basic BELOW GRADE LEVEL	Rebekah Morgan	5	690	03/03/03
	Nicholas Gilmore	5	680	02/14/03
	Maya Cooper	5	650	02/19/03
	Teri Camarillo	5	620	02/07/03
	Daniel Levin	5	570	03/06/03
	Jessica Ferguson	5	520	01/30/03
Below Basic FAR BELOW GRADE LEVEL	Margaret Richardson	5	410	02/07/03
	Michael Nelson	5	320	03/05/03
	Mark Stedman	5	250	01/30/03
Beginning Reader	Timothy Morris	5	BR	02/18/03

Using This Report

Purpose: Students are grouped according to their performance on their latest SRI tests. Use the information to identify students who require additional support and to plan instruction accordingly.

Follow-Up: Provide appropriate instructional support and intervention to students reading below grade level. Work with students in small groups to provide direct instructional support. Encourage students to read independently at their reading level and provide opportunities for practice and growth.



Reading Progress Report



The Lincoln School
Teacher: Ms. Schirmer
Time Period: 09/08/03–01/20/04
Printed: 01/20/04

STUDENT	LEVEL	LAST SRI SCORE (LEXILE)	CURRENT SEGMENT	CURRENT TOPIC	TOTAL SESSIONS	TOTAL TIME (MINUTES)	AVG SESSION LENGTH	SESSIONS PER SEGMENT	WORDS READ	TOTAL FLUENT WORDS	TOTAL SPELLING WORDS	COMPREHENSION SCORE	VOCAULARY SCORE
Bracco, Christine	2	660	B08.4 (B08) Extreme Sports		70	1050	12	8	13,586	484	216	100%	100%
Collins, Chris	2	604	B08.4 (B08) Extreme Sports		45	645	14	12	10,643	332	136	75%	65%
Chu, Amy	3	911	B05.4 (B05) Show Me the Money!		71	1065	12	9	28,044	859	823	80%	83%
Cooper, Tiffany	2	672	B04.3 (B04) Help Wanted		70	910	13	9	3722	397	397	91%	85%
Evans, Jamal	1	BR	B01.2 (B01) Art Attack		58	696	12	20	771	87	80	60%	14%
Felix, Tonya	2	500	B05.1 (B05) Show Me the Money!		76	1216	16	9	1488	420	386	100%	71%
Fernandes, Luis	2	564	B01.4 (B01) Art Attack		70	1050	15	5	14,072	662	834	60%	92%
Garcia, Matt	2	742	B02.3 (B02) Disaster!		69	1311	19	12	6041	200	195	92%	94%
Imran, Khaleel	2	655	B05.4 (B05) Show Me the Money!		76	1140	13	21	20,824	524	288	91%	92%
Kramer, Liz	2	775	B01.2 (B01) Art Attack		59	767	13	12	1424	274	225	71%	100%
Krynski, Theo	2	460	B01.2 (B01) Art Attack		78	1170	15	7	1922	131	130	71%	56%
Palermo, Justin	4	980	B09.3 (B09) The Whole World Watched		68	1088	14	4	24,791	900	887	77%	100%
Ramirez, Gabriela	1	BR	B01.4 (B01) Art Attack		74	1332	18	17	6029	124	120	54%	47%
Rupp, Jeremy	3	967	B01.4 (B01) Art Attack		68	1020	13	7	16,367	417	422	100%	100%
Sanchez, Rachel	4	1083	B03.3 (B03) Survive		69	1035	15	10	14,297	492	325	75%	81%

Using This Report

Purpose: This is an overview of students' overall progress in the READ 180 Software during the selected time period. Notice those students who demonstrate low skill performance. Also, notice consistency of program use.

Follow-Up: Find out more about low skill performance by reading the appropriate Student Diagnostic Report. Share this report with individual students to discuss results and set goals.

LEXILE RANGE / GRADE EQUIVALENCES

READ 180 Level	Grade Level Equivalent	Lexile® Range
1	1.5–2.5	200–400
2	2.5–4.0	400–700
3	4.0–6.0	600–900
4	6.0–8.0	800–1100

Once the student has begun working on the Software, it tracks, extracts, and translates the data into user-friendly reports for the teacher. *READ 180* reports provide a record of student achievement that can be used to identify needs, determine instructional grouping, and inform instruction. In addition, *READ 180* reports help special education teachers with the increased levels of administrative recordkeeping they must perform, such as the Individual Educational Plans (IEPs) mandated by many states.

Student Reading Report

PROGRESS MONITORING

STUDENT: COLLINS, CHRIS

Current READ 180 Level: 2
Current Topic CD: Extreme Sports (B08.4)
Last SRI Score (Lexile): 604

The Lincoln School
Teacher: Ms. Schirmer
Time Period: 09/08/03–01/20/04
Printed: 01/20/04

SEGMENT	DATE SEGMENT COMPLETED	NO. OF SESSIONS	Comprehension and Vocabulary			Words Mastered FLUENT SPELLING
			COMP SCORE	VOCAB. SCORE	CONTEXT PASSAGE SCORE	
(B08.1) Extreme Snowboarding	11/12/03	12	80%	40%	58%	
(B08.2) Extreme Biking	12/05/03	12	60%	60%	69%	
(B08.3) Extreme Kayaking	1/14/04	13	80%	60%	81%	
(B08.4) Extreme Surfing	In progress	8	80%	100%	N/A	
TOTAL SEGMENTS COMPLETED= 3	TOTAL	45	75%	65%	68%	

Using This Report

Purpose: This report reflects the student's progress on each segment in the READ 180 Software.

Follow-Up: Find out more about areas of concern by reading the appropriate *Student Diagnostic Report*. Share this report with the student to discuss results and set goals.

Student Segment Status

PROGRESS MONITORING

STUDENT: COLLINS, CHRIS

Current READ 180 Level: 2
Current Topic CD: (B08) Extreme Sports
Current Segment: (B08.4) Extreme Surfing

The Lincoln School
Teacher: Ms. Schirmer
Time Period: 09/08/03–01/20/04
Printed: 01/20/04

Reading Zone Status

Chris has completed all of the Reading Zone activities required to move to the next segment.

Zone Sessions: 5 sessions on segment, 7 minutes on segment

Comprehension Score: 4 of 5 correct 80%

Vocabulary Score: 5 of 5 correct 100%

Total Passage Reads: 2

Student Diagnostic Report

DIAGNOSTIC

STUDENT: COLLINS, CHRIS

Current READ 180 Level: 2
Current Topic: (B08) Extreme Sports
Current Segment: (B08.4) Extreme Surfing
Last SRI Score (Lexile): 604

The Lincoln School
Teacher: Ms. Schirmer
Time Period: 09/08/03–01/20/04
Printed: 01/20/04

Comprehension & Vocabulary

SKILL	CORRECT	% CORRECT	SKILL	CORRECT	% CORRECT
Summarizing	1 out of 2	50%	Finding the Main Idea	2 out of 2	100%
Sequencing	1 out of 2	50%	Cause and Effect	2 out of 2	100%
Problem/Solution	1 out of 2	50%	Compare and Contrast	2 out of 2	100%
Understanding Vocabulary	13 out of 20	65%	Making Inferences	2 out of 2	100%
Reading for Detail	2 out of 2	100%	Drawing Conclusions	2 out of 2	100%

BENCHMARK 70%

Recent Word Recognition Errors

WORDS WITH PHONOGRAMS	INFLECTIONAL ENDINGS	MULTI-SYLLABLE WORDS	NON-DECODABLE WORDS	R-CONTROLLED VOWELS
gives	parachutes	direction	would	surf
plane	landing	parachute	wear	surface
spots	surfing	skysurfer	what	whirling
parts	tackles	resistance	through	sharp
still	conditions		piece	part

Recent Spelling Errors

WORDS WITH PHONOGRAMS	INFLECTIONAL ENDINGS	NON-DECODABLE WORDS	HIGH FREQUENCY WORDS	R-CONTROLLED VOWELS
bare	rides	off	too	firm
same	roads	does	has	hurl
drops	bikers	once	use	surf
caught	riders	who	like	turn
thrown	muscles		look	surface

Reading Fluency

Discrepancy Passage Score 3 out of 3 correct on first attempt (100%)

Context Passage Score 38 of 56 correct (68%)

Context Response Rate 1 correct response per minute

Average Final Recording Score 2 on a scale of 1 to 6

Using This Report

Purpose: This report shows student progress and recent errors to help you identify and prioritize this student's needs in comprehension, word recognition, spelling, and fluency. Look for any error patterns in word lists.

Follow-Up: Target this student's needs using READ 180 instructional materials.

A Rich History of Research

READ 180 is a program that transforms the struggling reader into an individual that has the skills and tools to become a lifelong, successful reader. It offers the promise for below grade-level students to achieve several years of growth in only one year.

ORIGINS IN SPECIAL EDUCATION

READ 180's original research was based on addressing the needs of special education students. After observing the ways that technology had improved the quality of education for people with special needs, Dr. Ted Hasselbring and other members of the Cognition and Technology Group at Vanderbilt University investigated methods on how technology could be used to assist struggling students who had learning disabilities, or whose lack of basic skills prevented them from advancing to higher-level skills.

Dr. Hasselbring and his team synthesized the existing research on older struggling readers and identified the key problems these learners encountered. They found that these readers exhibited:

- A lack of decoding skills and reading fluency;
- Poor comprehension due to the inability to form mental models, lack of vocabulary and limited background knowledge;
- An inability to process and understand grade-level content-area text with a high concentration of academic language;
- Low motivation and lack of connection to materials and school.

The team sought to develop innovative methods using technology to provide assessment-driven individualized instruction. Partially funded by a grant from the U.S. Department of Education's Office of Special Education Programs, the team created a software program called the Peabody Learning Lab. The program consisted of a carefully planned sequence of student activities that provided individualized skills instruction and practice. Each element was designed to address one or more of the reading problems Dr. Hasselbring had identified.

The Peabody Learning Lab became the prototype for the software component of READ 180. The Software formed one element of what would eventually become a comprehensive reading intervention program.

ORANGE COUNTY LITERACY PROJECT

The second phase in the evolution of READ 180 came in 1993 when administrators in Orange County, Florida, set out to create a reading intervention program and selected the support of Drs. Hasselbring and Janet Allen, a reading education specialist from the University of Central Florida. Their collaboration led to the development of the Orange County Literacy Project in 1994. The Literacy Project was based on two complementary approaches to improving essential skills. The first was a literacy workshop in which classes of 20 students or less engaged in 90 minutes of literacy activities such as self-selected reading, books on tape, and the

reading of different forms of text such as newspapers and rule books for games. The second approach was Dr. Hasselbring's Peabody Learning Lab. Impressed with how the technology tracked individual student progress and adjusted instruction, the project leaders integrated the Software into their program.

Many of the key elements from the Orange County project were subsequently incorporated into the *READ 180* instructional model. These elements included: a combination of direct instruction and guided practice; modeled and independent reading of high-interest materials; good reading models — including teacher read alouds, books on tape, and shared reading; and a supportive environment that develops a sense of belonging to a community of learners.

The Orange County Literacy Project was first piloted in three middle school classrooms in 1994. It proved so successful that eventually this *READ 180* prototype was used with more than 10,000 students in Orange County between 1994 and 1999.

PARTNERSHIP WITH SCHOLASTIC

Vanderbilt University and Orange County

In 1997, Scholastic entered into collaboration with Orange County Schools and Vanderbilt University. Scholastic sought to replicate the best practices of the Literacy Project in a published program and to add its own expertise in the development of innovative components that are easily managed by teachers and are motivating for students.

Specifically, Scholastic added to the Orange County project by:

- Organizing all content within the CD-ROMs, Audiobooks, and leveled Paperback libraries, and aligning these components with curriculum themes in Science and Math, History and Geography, and Peoples and Cultures, to build content literacy.
- Adding a complete scope and sequence of phonics skills to the program content.
- Emphasizing direct instruction in reading comprehension, word analysis, phonics, spelling, and writing.
- Infusing controlled decodable text and leveled practice throughout the content-area reading.

These years of research and observation came together for Scholastic's 1999 launch of *READ 180*. Now, after over four years of classroom implementation nationwide, the program is serving the needs of over 100,000 students.

One of my students had very poor confidence and self-esteem. He told me once that he felt stupid because he did not know how to read and he wanted to drop out of school. However, since he has participated in READ 180, he reads recreationally and is very proud of himself. Now, he is successful in his general education classes and wants to stay in school.

—Keri Jenson
Special Education Teacher

Students from different grades, ethnicities, education, and learning abilities are making strides in their reading. *READ 180* is a program that transforms the struggling reader into someone who has the skills and motivation to become a lifelong, successful reader. It offers the promise for below grade-level students to achieve several years of growth in only one year. The effectiveness report conducted in the Des Moines Independent Community School District is one example of how *READ 180* students are able to achieve accelerated results.

Proven and Accelerated Results

Since *READ 180*'s classroom launch in 1999, Scholastic has actively encouraged evaluation and assessment to learn more about both the quantitative and qualitative effects of the program on student reading achievement and attitudes. The results of one of the most in-depth studies on special education students are presented here.

DES MOINES EFFECTIVENESS STUDY

The effectiveness study by the research department at the Des Moines Independent Community School District includes an analysis of students classified in special education during the 2000 – 2001 and 2001 – 2002 school years. The primary objective of this research was to determine to what degree *READ 180* accelerates reading performance for 6th, 7th, and 8th grade special education students. The Des Moines Independent Community School District implemented this program in ten comprehensive middle schools.

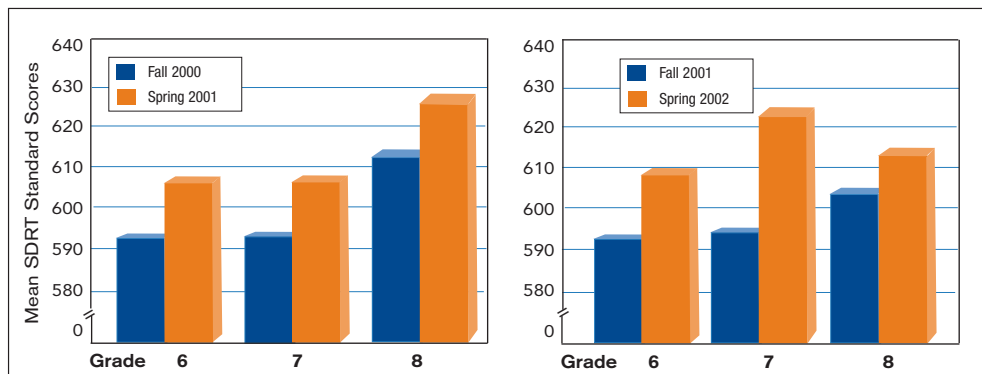
Pre-and post-test data were collected by school psychologists for all of the *READ 180* students. Performance results are presented for approximately 300 students in special education in the 2000 – 2001 school year and approximately 160 students in the 2001 – 2002 school year. Results are presented for normative referenced and criterion referenced tests including:

- (1) The Stanford Diagnostic Reading Test (SDRT);
- (2) The Scholastic Reading Inventory (SRI); and
- (3) District-developed fluency probes.

Stanford Diagnostic Reading Test

The SDRT₄ is a norm-referenced assessment that provides relevant information about students' reading processes and strategies. The SDRT₄ has six levels. For the purpose of this study, the Purple level was administered including subtests in Vocabulary, Comprehension, and Scanning.

Graph 1: Mean Stanford Diagnostic Reading Test Totals, Fall 2000–Spring 2002



With READ 180, students are motivated to decide for themselves. They feel empowered to make independent choices about what to read. They get so much out of the software and see themselves making progress, often for the first time. So many students have told me that READ 180 is the only reason they keep coming back to school.

—Charlene Shakleford
Special Education Teacher

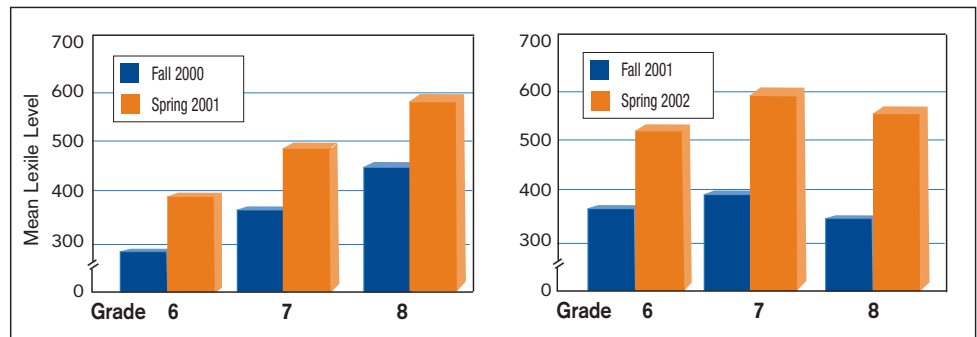
“Results revealed significant gains in reading fluency and comprehension with 18% of students placing out of special education services for reading during the 2000–2001 school year.”

—Nancy Palmer
Assessment Specialist
Des Moines Independent
School District

Scholastic Reading Inventory™ (SRI)

The SRI is a computer-adaptive assessment designed to measure how well readers read literature and expository text of varying difficulties. Performance is reported in terms of a student’s Lexile Level. Lexile measures describe the readability (or difficulty) of text and the reading ability (level of reading comprehension) of readers.

Graph 2: Mean SRI Lexile® Levels, Fall 2000–Spring 2002

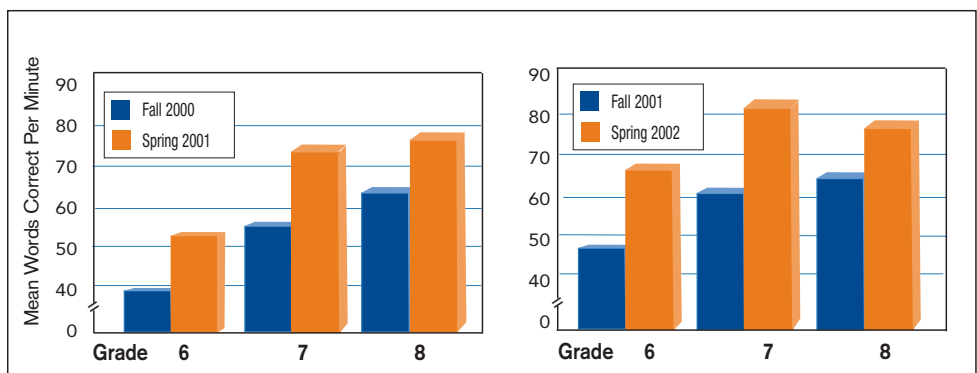


Fluency Probes

Fluency probes are short reading passages taken from curriculum-based materials that the students are asked to read aloud for one minute. The number of words read correctly is computed.

For the purposes of this study, the passages were taken from the Jamestown Readers (7th and 8th graders) and the Des Moines 5th grade reading curriculum (6th graders). Passages selected were one grade level below the students’ grade level placement.

Graph 3: Mean Fluency Probe Levels, Fall 2000–Spring 2002



STUDENT GAINS IN READING

According to the Des Moines Independent School District research, prior to the implementation of *READ 180*, special education students made an average of two to three months progress in reading per year. The average gains made while in *READ 180* are significantly greater than this and exceed the expected gains. Expected gains are based on results of the *READ 180* Efficacy Study, Scholastic/Council of Great City Schools, March 2001 for Lexile and SDRT scores, and on realistic CBM (fluency) growth rates (Fuchs, 1993) supplied by AEA 11.

My students are making the kind of progress they deserve to make. The READ 180 Software tracks reading progress, meets student needs, and provides actionable information.

*—Betty Lewing
Special Needs Teacher*

This section provides a comprehensive list of *READ 180* features, including their benefits and research base, which address the needs of special education students and teachers. Together, these components form a comprehensive program for special education students who are struggling with reading.

Below you will find full descriptions of how *READ 180* features address the following special education needs:

- Adjustable speed for comprehension and fluency activities
- Anchored instruction
- Building background to create a mental model
- Closed captioning and alternate color scheme
- Comprehension development
- Continuous assessment to drive instruction
- Controlled text
- Explicit, systematic instruction of phonics and phonemic awareness
- Home involvement
- Immediate corrective feedback
- Motivational features
- Professional development
- Self-pacing/infinite patience
- Tools for building automaticity
- Tools for building fluency
- Tools for developing spelling skills
- Universal access
- Use of technology

SUPPLEMENT: READ 180 FEATURES FOR SPECIAL EDUCATION

Special Education Need	Adjustable speed for comprehension and fluency activities	Anchored instruction
READ 180 Feature	Students may set the speed for Word-by-Word, Phrase-by-Phrase, and Practice reading modes in the Reading Zone. The setting ranges from 1 (slowest) to 5 (fastest).	Instruction in reading comprehension, decoding and word recognition, spelling, and fluency is “anchored” by a motivating video to help students build background knowledge and develop a mental model. Anchored instruction provides a situation or realistic context that allows students to solve problems “by applying skills and concepts introduced in class, as well as students’ prior knowledge” (Moore, Rieth, and Ebeling, 1993). It has also been found to be highly motivating to students (Brown, Collins, and Duguid, 1989).
Student Benefits and Research Base	Students can practice at their own pace without frustration or embarrassment. This feature also allows students to increase speed as they make progress.	More specifically, research has shown that video-based anchored instruction significantly increases the vocabulary learning rate of students with learning disabilities (Xin, 1996).

Building background to create a mental model	Closed captioning and alternate color scheme	Comprehension development	Continuous assessment to drive instruction
<p>After they log on to the Software, students view a news-magazine-style video feature. This video presents visual and auditory information that develops content-area background knowledge and academic vocabulary to help students form a mental image or model. Next, when the students read a text passage related to the video, they have the background information necessary to comprehend the text and develop a “mental picture” of what they are reading.</p>	<p>Captioning can be activated so that students may read the narration of the videos and the host’s feedback. The button rollover feature provides a text label as well as an audio prompt for the software buttons in <i>READ 180</i>. The label appears when the student moves the cursor over the button.</p> <p>In addition, teachers may change the text screen from dark text on a light background to light text on a dark background for students with vision impairment.</p>	<p>The software’s context or “discrepancy passages” in the Success Zone require the use of higher-level thinking skills to evaluate the information in the different passages based on their knowledge of the original passage. Immediate corrective feedback is provided.</p> <p><i>Reading Strategies</i> includes scaffolded direct instruction, modeling, and guided practice in comprehension skills and strategies as well as higher-order thinking skills.</p> <p><i>READ 180</i> also introduces students to critical thinking through its graphic organizers that accompany the guided and independent reading.</p> <p>A Reading Coach on the <i>READ 180</i> Audiobooks models comprehension, vocabulary, and self-monitoring strategies at important points during reading. Students experience first-hand the habits and strategies of a good reader throughout the supported reading of each grade- and age-appropriate book.</p>	<p><i>READ 180</i> students begin with assessment by taking the electronic Scholastic Reading Inventory (SRI), which automatically places students at the correct level. The “intelligent” software continually monitors and adjusts the level of instruction and allows teachers to target instruction accordingly.</p>
<p>Studies have found that media and technology work together to help students in the building of mental models and schemata for learning (Kozma, 1991; The Cognition and Technology Group, 1994).</p> <p>Building background is crucial for all learners since “all people build new knowledge and understanding on what they already know and believe” (Hasselbring, 2001).</p> <p>It is of particular importance, however, for children with learning disabilities since their more limited life experiences and exposure to text have given them less to build on. In addition, developing a mental model has a highly motivating and confidence-boosting effect. This is why specialists in special education have concluded that building background knowledge is one of the “six principles of effective curriculum design” (Kameenui and Simmons, 1996).</p>	<p>Closed captioning is particularly helpful for hearing-impaired students, but can also be useful for ELL students. The button rollover function makes the software easier to use for both vision- and hearing-impaired students. The alternate color scheme can help students with visual impairment.</p> <p>Integrating such features into the software allows <i>READ 180</i> to accommodate students with special needs without singling them out for “special” treatment.</p>	<p>Special education researchers have found that graphic organizers and “cognitive maps” aid in learning basic content and can serve as “an intermediate step in more complex learning situations” such as higher-level thought processes (Boyle and Yeager, 1997).</p> <p>The metacognitive modeling of the <i>READ 180</i> Audiobook Reading Coach and the scaffolded direct instruction of <i>READ 180</i> combine some of the most powerful comprehension solutions, according to experts in special education (Mastropieri and Scruggs, 1997).</p>	<p>Matching students to appropriately leveled text ensures that students are challenged but not frustrated. Software-generated diagnostic reports allow the teacher to further pinpoint problems for extra support during whole- and small-group instruction.</p> <p>California’s Special Education Reading Task Force stressed the importance of continuous assessment, stating, “we need assessment procedures that provide more detailed diagnostic information... to precisely select instructional goals and objectives and to monitor a student’s continuous progress to ensure optimal achievement gains” (California Special Education Reading Task Force, 1999).</p>

Special Education Need	Controlled text	Explicit, systematic instruction of phonics and phonemic awareness	Home involvement
READ 180 Feature	<p>Controlled text is text that specifically targets a student's reading level. The text contains only vocabulary words and phonetic elements that are appropriate for a student's stage in reading development. In addition, the length of the passage is controlled.</p> <p>READ 180 uses the Lexile Framework to match students to text at their level, and the software passages are deliberately seeded with a progression of phonetic elements that students must master.</p>	<p>Based on individualized assessment, the software provides training in segmentation and blending with instruction in letter-sound relationships related to words and patterns the student has not yet mastered.</p> <p>Training is achieved through explanation, modeling, and guided practice with immediate corrective feedback. The training, which is customized for each word, highlights common phonemic elements and provides word analysis strategies.</p> <p>A complete phonics scope and sequence has been embedded into the READ 180 Software to provide intense and differentiated phonics practice and instruction.</p>	<p>READ 180 Software generates reports that make it easy to share student progress with parents or caregivers during parent-teacher conferences. The software produces a Parent Letter specifically designed to keep parents informed of progress and to encourage them to get involved in the student's reading practice at home.</p>
Student Benefits and Research Base	<p>Students are consistently matched to high-interest, age-appropriate text that engages their interest and prevents frustration.</p> <p>Reading text with controlled vocabulary and phonetic skills has been found to be helpful for students who are slow to develop reading proficiency (Vadasy, Jenkins, and Pool, 2000).</p>	<p>The importance of phonics and phonemic awareness cannot be underestimated for any student. The report published by the National Reading Panel entitled "Put Reading First" states simply that "systematic and explicit phonics instruction significantly improves children's reading comprehension" and that "phonemic awareness instruction helps children learn to read, spell, and comprehend text" (The National Reading Panel, 2001).</p> <p>Yet this is even more so the case for students with reading difficulties. Validated research has shown that the "vast majority of students with severe reading difficulties [such as dyslexia] have substantial weakness in auditory-related skills, such as identifying individual sounds with words (phonemic awareness) and associating those sounds with written letters (sound-symbol relationships)" (California Special Education Reading Task Force, 1999).</p>	<p>Studies have long shown that parent involvement impacts student reading achievement, but actively encouraging "parent education" has not always been a priority. This is now beginning to change, with researchers supporting the idea of parents or caregivers becoming involved in early intervention (Mahoney, Kaiser, Girolametta, and MacDonald, 1999).</p> <p>In fact, home involvement is held to be so important that the 2002 "No Child Left Behind" Act mandates that that "each state plan shall describe how the state educational agency will support the collection and dissemination to local educational agencies and schools of effective parental involvement practices" (NCLB, Title 1, Part A, Subpart 1, Sec. 1111).</p>

Immediate corrective feedback	Motivational features	Professional development	Self-pacing/infinite patience
<p><i>READ 180</i> Software provides immediate corrective feedback in all the zone activities. For example, when students spell a word incorrectly on the software, they receive immediate corrective feedback customized to the specific error for precise error correction.</p>	<p><i>READ 180</i> videos emphasize content-area-based topics designed to motivate students. Topics range from history mysteries and extreme sports to weird science. Students are also motivated by the on-screen host, Ty, who encourages students when they make a mistake and congratulates them when they succeed. Feedback is private and respectful to the student. Leveled, age-appropriate texts ensure that students will experience success. This in turn promotes self-confidence and a desire to achieve further progress.</p>	<p><i>READ 180</i> has a comprehensive in-service program as well as opportunities for ongoing professional development such as Scholastic Red—a multiple-session course offered both online and in-person—which is customizable to meet the needs of each district. Scholastic Red’s courses and workshops include strategies for differentiated instruction to maximize learning for all students.</p>	<p>Students advance through the zone activities only when they have achieved mastery and are ready for the next activity or level. The host provides the student with continuous support.</p>
<p>Validated research has shown that “precise and immediate feedback during learning” is imperative for students with reading difficulties (California Special Education Reading Task Force, 1999).</p>	<p>As previously stated, video-based anchored instruction has been shown to greatly improve student motivation. Students with learning disabilities in one study responded, “This is more fun than learning words the boring way,” and “I can really see what you mean.” Student task engagement rates surpassed 85% (Xin, 1996).</p>	<p>Many teacher education programs do not address technology training, and unfortunately, “lack of adequate teacher training has an especially strong impact on students with disabilities because technology is often a critical component in planning and implementing an educational program for these students” (Hasselbring, 2000).</p> <p><i>READ 180</i> provides professional development that addresses both general pedagogy for struggling readers and a specific plan of action incorporating the program’s special features and technology.</p>	<p>The importance of self-pacing and patience has been confirmed by researchers in the field of special education. As Dr. Ted Hasselbring has noted, one of the factors of deep learning, or learning with understanding, is “time to learn. Although this may seem obvious, too often we simply do not give students enough time to learn information, especially students with learning problems” (Hasselbring, 2001).</p>

Epilogue

Given the increasing numbers of special education students and calls for higher standards and greater accountability, an effective and proven solution to help students achieve accelerated results is essential. *READ 180* meets this need and already plays an important role in the lives of many students with a multitude of learning abilities and challenges.

As demonstrated in the effectiveness report for the Des Moines Independent Community School District, special education students are making significant improvements in their reading abilities using *READ 180*. These proven results show significant gains in vocabulary, comprehension, and fluency. More importantly, 18% of the students successfully exited special education classes for reading, enabling the district to divert limited resources to other areas.

READ 180 solves the problems special education students encounter with reading. It offers a comprehensive solution through assistive technology, individualized instruction, and high-interest materials, all of which support and engage students. The program also offers motivational support that is truly effective in improving student confidence and attitudes towards reading and school. As students experience small doses of success, they seek more both within and outside of the *READ 180* classroom.

Why is *READ 180* consistently successful? In addition to the program's research-based instructional model and valuable educational materials, the program also offers support to all of the individuals who contribute to student success:

- Teachers can provide data-driven instruction with accurate and individualized progress reports, allowing teachers to focus on specific problem areas during small-group and one-on-one instruction. Teachers also benefit from instructional materials that include the latest teaching strategies across all fundamental reading skills.
- Principals and districts can show Adequate Yearly Progress (AYP) by easily monitoring progress through reporting and assessment tools. With detailed understanding of student strengths and weaknesses, resources can be diverted to help students in need well before state exams.
- Parents can take part in improving student performance through individualized Parent Letters with tips and strategies for continued growth. This home-to-school connection offers a tremendous opportunity for parents to stay involved in their child's education.

Imagine a classroom where students are actively engaged, applying important skills, and becoming fluent readers. *READ 180*'s research-based, respectful, and motivational features directly address the learning difficulties of students with special needs. With *READ 180*, Scholastic has combined research and best practice to produce a program that is proven to provide measurable learning gains with special education students.

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