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ABSTRACT

Research in school districts throughout the United States shows that children who use "Breakthrough to Literacy" achieve significant and lasting improvement in their reading skills. At virtually every site studied where implementation criteria were met, children who participated in "Breakthrough" demonstrated marked increases in critical developmental areas, such as vocabulary, phonemic awareness, alphabet knowledge, word recognition, and language and writing skills, as measured by a number of widely accepted assessment tools. Improvements were noticeable across socioeconomic lines. Longitudinal data confirm that "Breakthrough to Literacy" provides a strong foundation for continued achievement. First-, second-, and third-grade children who previously had used "Breakthrough" performed substantially better on standardized tests and state standards assessments than did those who had not participated in the program. Children who had used "Breakthrough" in kindergarten were retained less frequently in first, second, or third grade than children who had not used the program. The program provides a conceptual framework of language and literacy based on the best perceptual/behavioral and environmental predictors of reading achievement, while incorporating a view of "balanced" literacy that has practical, instructional significance for each child. This framework drives the program's curriculum, instruction, and individualized, computer-based assessment. In the classroom, "Breakthrough" translates the conceptual framework into four essential instructional practices that provide rich experiences with the predictors of early reading achievement. To a great extent, results achieved through "Breakthrough to Literacy" are related to the quality of the program's implementation at each site. For this reason, the "Breakthrough" process also includes extensive training and support to build strong partnerships among teachers, administrators, and their "Breakthrough" team. Both formal and anecdotal evidence indicate a high level of satisfaction with "Breakthrough to Literacy" among teachers, children, parents, and administrators. (Contains 22 references and 37 figures of data.) (Author/RS)





Breakthrough to Literacy

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Abstract



Research in school districts throughout the United States clearly shows that children who use *Breakthrough to Literacy*™ achieve significant and lasting improvement in their reading skills.

At virtually every site studied where implementation criteria were met, children

who participated in *Breakthrough* demonstrated marked increases in critical developmental areas, such as vocabulary, phonemic awareness, alphabet knowledge, word recognition, and language and writing skills, as measured by a number of widely accepted assessment tools. Improvements were noticeable across socioeconomic lines — for example, in districts with high percentages of children who receive free or reduced-cost lunches as well as in those with high percentages of affluent families.

Longitudinal data confirm that *Breakthrough to Literacy* provides a strong foundation for continued achievement. First-, second-, and third-grade children who previously had used *Breakthrough* performed substantially better on standardized tests and state standards assessments than did those who had not participated in the program. Children who had used *Breakthrough* in kindergarten were retained less frequently in first, second, or third grade than children who had not used the program.

Developed through almost two decades of research in clinical and classroom settings, *Breakthrough to Literacy* is a unique process that helps children make an effective and confident transition from spoken language to print. The program provides a conceptual framework of language and literacy based on the best perceptual/behavioral and environmental predictors of reading

Breakthrough to Literacy almost wraps its arms around you. You cannot fail.

Helen Jones

Executive Director Elementary Education Richland District I Columbia, South Carolina



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Breakthrough to
Literacy ... helps me
create a balanced
literacy program in
my classroom that is
developmentally
appropriate ... What
more could a
teacher ask for?

Bronwyn McLemore

Former First-Grade Teacher

Visiting Instructor
University of
North Florida

achievement, while incorporating a view of "balanced" literacy that has practical, instructional significance for each child. This framework drives the program's curriculum, instruction, and individualized, computer-based assessment.

In the classroom, *Breakthrough* translates the conceptual framework into four essential instructional practices that provide rich experiences with the predictors of early reading achievement. These practices include Book-of-the-Week oral comprehension activities, daily writing, regular use of the Take-Me-Home™ books, and daily work in the software curriculum.

To a great extent, results achieved through *Breakthrough to Literacy* are related to the quality of the program's implementation at each site. For this reason, the *Breakthrough* process also includes extensive training and support to build strong partnerships among teachers, administrators, and their *Breakthrough* team.

Both formal and anecdotal evidence indicate a high level of satisfaction with *Breakthrough to Literacy* among teachers, children, parents, and administrators.

Methods: The Breakthrough to Literacy™ Process



Breakthrough to Literacy is a research-based, comprehensive program that helps young children, prekindergarten through second grade, develop the foundations for reading success. Breakthrough helps teachers create classrooms where children become engaged with language and print in a natural and

positive way. As a result, children learn not only to read but to enjoy the experience of reading. In school districts throughout the

United States, *Breakthrough* has demonstrated consistently successful results, even in classrooms where socioeconomic or other factors could have affected children's achievement.

Developed by Carolyn Brown, Ph.D., while she was a research scientist in the Department of Speech Pathology and Audiology at the University of Iowa, Breakthrough to Literacy is built on a strong conceptual framework that combines behavioral predictors of language and literacy with the environmental predictors of reading success. The program guides both students and teachers through this conceptual framework with the aid of a well-tested process that includes Breakthrough's curriculum, instructional activities, and computerized assessment.

Confirmation and Resources

Later research into the precursors to competent, confident reading has confirmed the foresight of Dr. Brown's methods. (See Adams, 1990; Snow, Burns, and Griffin, 1998.)

For example, recent research has shown that, to learn to read, a child must develop an awareness of spoken language (phonological awareness) and be able to understand the concept of "word." The child must know that words can be broken into syllables and that sounds can be separated, blended, and rearranged. (See Adams and Bruck, 1995; Bradley and Bryant, 1983; Liberman et al., 1974; Treiman, 1985.)

In fact, a child's sensitivity to the sound structure of speech is held by many to be the strongest single predictor of success in learning to read or, conversely, of failure to learn to read. (See Blachman, 1984; Juel, 1991; Stanovich, 1986. See also Adams and Bruck, 1995, for a general discussion.) The model for the development of phonological awareness incorporated into the *Breakthrough to Literacy* program has been corroborated by Dr. Vicki Snider of the University of Wisconsin at Eau Claire (Snider, 1995) and others.



In my 22 years of teaching, I've never been blessed with a class of first graders so ready to read.

Sharon Palmer

First-Grade Teacher Ernest Horn Elementary School Iowa City, Iowa

University-Based Research

Breakthrough to Literacy is the product of two decades of research in clinical and classroom settings. Over that time, investigations by Dr. Brown and her team focused on three questions that she believed held the keys to early literacy education:

- 1. How do children make the link between oral language and print?
- 2. How can teachers incorporate appropriate tools into ongoing classroom activities to create effective early literacy environments that meet the needs of children from diverse backgrounds?
- 3. How can principals and other administrators help teachers build successful readers and learners?

Dr. Brown's search for the answers to these questions shaped the three phases in the development of *Breakthrough to Literacy*.

Case Study: Garrett

Garrett, a seven-year-old second grader, met Dr. Brown in 1981. An intelligent and personable youngster, he had done well in school until he had to deal seriously with print. Despite considerable special assistance provided by his school, his reading had not improved, causing frustration and concern to Garrett and his family. At the time Garrett began working with Dr. Brown, he performed below the 5th percentile in the reading subtest of the *Iowa Tests of Basic Skills* (ITBS).

Almost every day for 18 months, Garrett visited Dr. Brown's laboratory at the Wendell Johnson Speech and Hearing Clinic on the University of Iowa campus in Iowa City. During that time, he became Dr. Brown's collaborator in a very real sense, wearing a white lab coat and acting as her research assistant.

In their sessions, Dr. Brown first set out to discover how Garrett had learned what he already knew about the relationship between sounds and written symbols. Observing that these associations were difficult for him, she and her colleagues developed interactive computer modules that let Garrett control the flow of the sound, picture, and print information he received. The software tracked his responses and identified his successful learning strategies. As Garrett began to build associations among sound, print, and meaning, the researchers developed software algorithms to make his learning more efficient.

In the comfortable, safe, and private laboratory environment, Garrett was immersed in language and print experiences that were both rich and diverse. He listened to stories, made up his own, wrote and recorded them, and edited his work. With the tools Dr. Brown provided, he explored language and print at his own pace and gradually began to make connections between them. He actively began to engage with print and became excited about its possibilities.

To those who had known Garrett during his earlier struggles with reading, his progress was, indeed, a breakthrough. In 18 months, Garrett climbed from below the 5th percentile to the 76th percentile on the ITBS (*Figure 1*). He developed phonemic awareness, learned the alphabetic principle, and was able to associate sounds and symbols. He loved stories, was no longer intimidated by print, read for comprehension, and became a lifelong reader and learner.

If you use

Breakthrough, you
can teach anybody
to read.

Regina Boyd

Kindergarten Teacher Collinswood School Charlotte, North Carolina

I. Linking Oral Language to Print

In her laboratory at the Wendell Johnson Speech and Hearing Clinic on the University of Iowa campus, Dr. Brown first identified the steps children must take to move from oral language to print.

Her research clearly showed that children need to acquire the skills and knowledge that form what have become the well-known perceptual/behavioral predictors of reading achievement:

- enhanced oral language and vocabulary;
- phonological/phonemic awareness;
- knowledge of the alphabetic principle; and
- word-recognition skills.

Investing thousands of hours, Dr. Brown and her team developed computer modules that let children control the informational support they needed to make the transition, at their own pace, from sound and images to print. While gently moving young students along the continuum of phonological awareness — from words in sentences to syllables to onsets and rimes to phonemes — her computer program enabled them to wean themselves from sound and picture cues until they were reading text alone.

Dr. Brown's early research also led to computer-based tools to assess what children already knew about reading and where they needed help. Using multimedia software, she tracked and recorded each child's success in moving from oral language to print so she could provide appropriate support as the child needed it.

Because children received the individualized support they needed, they began to view themselves as effective, rather than struggling, readers. The self-paced, individualized lessons and the focus on achievement rather than failure energized and motivated the children with whom Dr. Brown worked. Children viewing themselves as successful became a hallmark of *Breakthrough to Literacy*.



Integrating Technology

Between 1981 and 1988, Dr. Brown and her team worked intensely with individual children in her laboratory to investigate further how early learners use sounds, pictures, and text and to determine what learning strategies would best support them. Her research confirmed that, to develop the motivation and focus to learn, all children need ample — but varying — exposure to specific experiences that help them make the transition from spoken language to print. These experiences include:

- substantial and meaningful lap-reading time listening to and "reading" along with an adult;
- experience exploring the structures of language and print;
- sufficient private time in which to explore the experience of reading;
- auditory and visual support to learn sound/symbol relationships (phonics); and
- many opportunities to feel successful in interactions involving reading.

Dr. Brown was convinced that no one-size-fits-all, formulaic approach could ever be effective for the complex and highly individualized process of early literacy education. She recognized, for example, that young children have different learning styles for gaining the precursor skills for reading, such as internalizing the structure of language, developing phonological and phonemic awareness, building vocabulary, learning sound/symbol relationships, and understanding the structure and function of print.

She also was aware that children need to progress at their own pace and in their own ways as they discover, explore, and internalize those vital relationships between oral language and

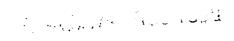


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print. For example, some children need extensive, explicit experiences in associating sounds with printed letters, while other children make the associations with less explicit help.

Appreciating that the computer afforded the best means to present personalized material to children and to track their individual responses, Dr. Brown nonetheless was determined to avoid the distractions, such as overactive graphics and rapidly changing video screens, that are common to much educational technology.

Dr. John Manning, past president of the International Reading Association and professor of reading at the University of Minnesota, recognized the success of these efforts. According to Dr. Manning, "Breakthrough to Literacy is designed to help children seriously attend to print, which is the only way to develop confident and comfortable readers. Somehow, someone resisted the temptation to show off technology."





2. From Laboratory to Classrooms

Applying Dr. Brown's methods in the larger context of the classroom was a logical next step, but it presented some challenges. The greatest was one of scale: How could the focused attention and positive expectations that proved so helpful in the laboratory be replicated daily in a typical public school classroom full of young children?

Research in the growing discipline of early literacy provided an important clue. Findings from a number of studies strongly suggested that certain home and environmental factors played determining roles in reading development. Young children who grew up in homes rich in language and reading material, where parents talked with their children and read to them often, were far more likely to develop the perceptual/behavioral predictors of reading achievement and go on to become successful readers. Conversely, children who were raised in environments where such experiences were not available were much more likely to fail when

From their studies, researchers identified specific environmental factors that, like their perceptual/behavioral counterparts, predicted reading success. These factors include:

they attempted to learn to read.

	spending substantial lap-reading time with an adult;
\square	being around adults who read;
	having access to books in their homes;
	having books of one's own; and
[]	talking and listening with family and friends

Predictors of Reading Achievement

Home/Environmental

Hours of Lap Reading
Hours of Parents Reading
Books in the Home
Books the Child Owns
Oral Language in the Home

Perceptual/Behavioral

Vocabulary
Phonological/Phonemic
Awareness
Alphabet Knowledge
Word Recognition



in the home.

As they began to adapt and implement their laboratory model in local classrooms, Dr. Brown and her team observed that successful teachers communicated to students, through words and actions, the importance of language and print. These teachers guided children in activities that purposefully explored the meaning of language and its relationship to print. They also encouraged children to work on their own — to spend time with books and stories, to read at their own levels of development, and to speak with and listen to others. As a result, the students not only developed the critical perceptual/behavioral predictors of reading success, they also began, at very early ages, to see themselves as successful readers.

Teachers in these successful classrooms motivated students to participate in a coherent and systematic classroom structure integrating speaking, listening, reading, and writing. They helped students build their oral language skills and move comfortably and confidently to understand the structure and meaning of print. Dr. Brown used what she learned from these successful teachers as she

Figure 2
The Teacher Is at the
Center of Breakhrough's
Integrated Curriculum

Small Group Reading and Writing

Independent Reading and Writing developed the curriculum and classroom implementation model that later became *Breakthrough to Literacy*.

Figure 2 portrays the teacher's central role in the Breakthrough to Literacy classroom structure. The

integrating framework that links *Breakthrough's* essential practices with other reading and writing activities is described on the following pages.

Software-Curriculum Daily Time on the Computer



Daily Writing

Take-Me-Home Books

Reading and Writing at Home

Book-of-the-Week
Shared Reading
and Writing

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Balanced Instruction for Each Child

While the "great debate" between phonics and "whole-language" raged, Dr. Brown's research focused attention on the developmental needs of each child. In meeting these needs, she gave practical significance to the term "balance" — at the level of the child.

The cornerstone of Dr. Brown's approach involves moving each child from understanding oral language to understanding the meaning and structure of print. Each child learns at his or her own pace. Reading comprehension is ensured by systematic instruction on foundational word-recognition, oral vocabulary, and language skills.

Dr. Brown arrived at a model of balanced literacy that

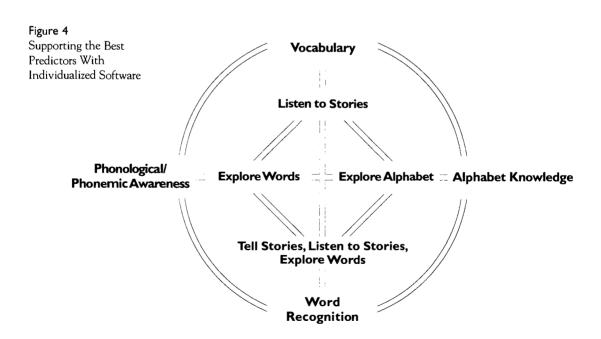
Figure 3
Breakthrough's Practical
View of "Balance"

recognizes the role played by four key predictors of **MEANING** reading achievement as children master both the meaning and the structure of language. Figure 3 illustrates this very practical view: ■ The vertical axis, with the predictors Word **STRUCTURE** Recognition and Vocabulary, illustrates a child's awareness of meaning in both oral language and print. ■ The horizontal axis. with the predictors Phonological/Phonemic Awareness and Alphabet Knowledge, reflects the child's Word knowledge of *structure* — specifically, Recognition phonemic awareness and the relationship between sounds and symbols and the alphabetic code.



Based on this model, Dr. Brown developed the conceptual framework that enables *Breakthrough* to lay a comprehensive early literacy foundation in the classroom, while providing children with instruction targeted to their individual needs. The framework moved the discussion of early literacy away from the great debate (whole language vs. phonics) and focused attention on the critical, unique developmental needs of each child.

Breakthrough's software curriculum is a key tool in this process. Figure 4 shows the relationship among the four instructional components — Listen to Stories, Explore Words, Explore Alphabet, and Tell Stories — and the best predictors.



Listen to Stories provides the child "lap-reading" experiences as he or she listens to the stories read aloud by engaging speakers. Self-directed exploration of words and sentences within stories provides wonderful experiences with language and meaning. Explore Words allows the child to listen, blend, segment, and recognize words and sentences broken into different language units: syllables, onsets and rimes, or sounds. This component provides children experiences with the structure of language at each child's developmental level. Explore Alphabet provides unlimited experiences for the child as he or she learns the letter names and the associated sounds. Tell Stories allows the child to experiment and practice reading aloud using a microphone and then comparing his or her own production to the model on the computer.

In experiencing these four activities, students are building their vocabulary, phonological and phonemic awareness, alphabet knowledge, and word-recognition skills. Each child's progress is individualized and self-paced. The software also tracks individual responses and enables teachers to determine how best to support each child's growth.



Breakthrough to Literacy

In the classroom, *Breakthrough*'s conceptual framework integrates the perceptual/behavioral predictors of reading success with the equally important home/environmental predictors. *Breakthrough* helps teachers build these integrated elements into daily activities through four essential instructional practices (*Figure 5*).

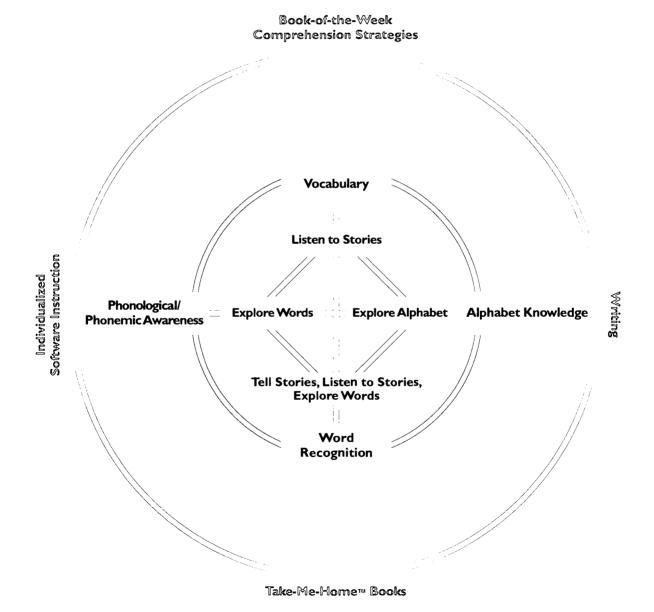
■ Book-of-the-Week Comprehension Strategies.

Each week, the teacher selects one Breakthrough to Literacy title to read aloud every day for a different purpose. The focus on Mondays is Predict and Read; on Tuesdays, Remember, Retell, and Read; on Wednesdays, Read, Integrate (personalize), and Read Again; on Thursdays, Read and Create; and on Fridays, Read, Summarize/Analyze, and Celebrate.

Children are encouraged to read each story by themselves, too, both in print and on the computer. The teacher provides both whole-class and small-group instruction related to text structure and meaning. (*Breakthrough*'s software reports help teachers group the children in appropriate skill levels.) By the end of the week, children know the book well and can read (or "read") it independently.

■ Writing. Even very young children write by making marks or drawing pictures. As they learn to make the connection between spoken language and print, they produce increasingly sophisticated written and pictorial records of their thoughts and ideas. The practice of daily writing encourages children to value their own print production and to practice the sound/symbol connections they observe in the software and the books. Daily writing also provides the teacher with insights into each child's stage of development in the reading/writing process.

Figure 5 Supporting the Best Predictors With Daily Essential Practices





Breakthrough to Literacy

Our Breakthrough program is very successful with our children!

Harold Fuller, Ph.D. Principal

Holmes Elementary
School
Mesa.
Arizona

- Take-Me-Home™ Books. One predictor of reading success is having books and participating in reading activities in the home. For each Book-of-the-Week, every child receives a personal Take-Me-Home book to keep. During the week, children use their Take-Me-Home books in classroom activities, such as writing alternative endings to a story, reading the story to peers, or identifying frequently used words. After a week of reading and working with the Book-of-the-Week, both in print and on the computer, children know the story well enough to take their books home and share them with their families. This brings parents into the child's literacy experience and encourages the use of language and discussion at home activities that are predictors of reading comprehension.
- Individualized Computer Instruction. Research shows that most children who become successful readers spend 1,000 hours or more in lap-reading experiences (Adams, 1990). Although it cannot replace time spent with a caring adult, Breakthrough's software replicates the all-important rehearsals with symbols and sounds as children listen to and read stories as many times as they wish. Because Breakthrough's software curriculum is based on the perceptual/behavioral predictors of reading success, children also gain practice in the basic skills they must master to become successful readers.

Each child's progression through the lessons is tailored by the software to meet his or her individual needs. For example, a child may start a lesson with full auditory and visual support. These cues automatically drop away as the child experiences success. If needed, they reappear, providing just the amount of support the child needs. In addition, *Breakthrough*'s branching curriculum provides virtually unlimited opportunities for success as a child gains mastery over the lesson concepts.



What makes
Breakthrough so
unique is the quality
of the professional
development.

Mark Tavernier

Senior Director Communication Skills Norfolk,Virginia Public Schools

Effective Teacher Support

To implement and maintain a culture supportive to reading, teachers need both professional development and specific tools, including materials and ways to integrate literacy into all classroom activities.

Breakthrough's highly skilled, certified literacy coaches provide comprehensive training and support to partnering teachers and administrators. Focusing on the perceptual/behavioral and home/environmental predictors of reading achievement that comprise Breakthrough's conceptual framework, this professional development includes three days of on-site training in the first year, plus an additional training day the second year. In addition, the literacy coach makes five to nine classroom visits the first year and four to seven visits the second year.

Like most successful teachers, who incorporate assessment into their teaching, *Breakthrough to Literacy*'s interactive software curriculum generates ongoing reports of each child's progress. The program also provides teachers with in-depth training in interpreting and using the *Breakthrough* reports to customize instruction.

In addition, *Breakthrough to Literacy* provides schools and teachers with a set of tools based on the program's conceptual framework. These tools include:

- extensive teacher resources, including suggestions for small- and large-group lessons, and other multidisciplinary materials that complement existing curricula and classroom themes;
- integrated technology, including 4,500 interactive software lessons that provide individualized instruction for students and immediate feedback for the teacher; and

■ engaging student materials, including Big Books for teachers to read with the class, full-color pupil books for individual classroom reading, and Take-Me-Home books for children to build their own libraries.

Support for Early Literacy Learning

Because early reading success grows out of effective environments for early literacy in homes and classrooms, *Breakthrough* also offers extensive, personalized support for parents, teachers, and school administrators:

- home support, including print material and videotapes that show parents how to encourage a child's reading and writing, an in-school information session, and customized computer printouts for parent-teacher conferences;
- administrative support, including conferences with school leaders to lay the foundation for a long-term partnership with a shared vision of expectations; and
- technical support, including a toll-free hot line.

For their part, schools and districts commit to establishing the local learning and administrative conditions that encourage early literacy. These conditions include visible support and involvement of principals and other leaders, sufficient time and resources for professional development, a focus on results to improve student achievement, and a willingness to share with a growing network of educators their "best practices" strategies for using *Breakthrough*.





3. Partners for Results

Most school initiatives fail because of improper implementation or lack of support within the school organization. For change to be successful in any group, including schools and classrooms, it takes leadership, proper expectations, and a shared vision of the goal and the process for getting there. Today's organizational theorists and business consultants now recognize that initiatives for change also benefit from well-functioning teams (Senge, 1990).

To identify the variables associated with successful implementations, Breakthrough to Literacy engaged an education consulting company to conduct quality-assurance visits with principals and teachers in more than 150 classrooms in several school districts, comparing formative assessments with objective performance measures. The message from these evaluations was clear: Strong administrative involvement and leadership, proper expectations, and follow-through are correlated highly with program success.

Key indicators of success include:

- ongoing discussions among all team members (administrators, teachers, and the *Breakthrough* support staff);
- a commitment by principals and teachers to make early literacy a priority;
- effective professional development for teachers and principals;
- in-classroom support by a highly trained, certified literacy coach; and
- appropriate assessment.



Studies similarly confirmed that principals need to understand the role and process of *Breakthrough to Literacy*. The more principals know about the program, the better they can monitor its effectiveness as well as support, encourage, and coach teachers toward successful implementations.

In short, the quality-assurance studies underscore the importance of a well-established partnership between Breakthrough to Literacy, Inc., and classroom teachers and administrators. When such partnerships are in place, *Breakthrough to Literacy* students and teachers achieve maximum results.



£5 24

Results



Assessment Tools

Research on *Breakthrough to Literacy* has focused on the predictors of early literacy as assessed by several well-established and reliable tools. The following assessment tools are used most often:

Observation Survey, Clay, 1993;

Test of Phonological Awareness (TOPA), Torgesen and Bryant, 1994;

Yopp-Singer Test of Phoneme Segmentation, Yopp, 1995;

Peabody Picture Vocabulary Test (PPVT), American Guidance Service, 1997;

Iowa Tests of Basic Skills, Form M (ITBS), Riverside Publishing Company, 1996;

Metropolitan Achievement Tests, Seventh Edition (MAT-7), The Psychological Corporation, 1993;

Metropolitan Readiness Tests (MRT), The Psychological Corporation;

TerraNova, CTB/McGraw-Hill, 1997, 1999;

Preschool Work Sampling System, Meisels et al., 1994; and

children's writing samples.

Other measures of longitudinal effects are reported using indicators such as:

retentions at first, second, and third grades; and performance of third graders on high-stakes state tests.

From the beginning, Dr. Brown and her colleagues have used the results achieved at Breakthrough to Literacy[™] sites across the United States to evaluate, develop, and refine the program. Schools have undertaken assessments to determine the following:

- the impact on test scores in Breakthrough to Literacy classrooms;
- * the longitudinal impact of Breakthrough to Literacy;
- teacher reactions to the Breakthrough program; and
- effective implementation strategies.

Results of many of these studies are presented in this report.

One important element in the success of any *Breakthrough to Literacy* implementation is how well a teacher knows and understands the program's curriculum and instructional practices. For this reason, ongoing professional training and support are essential elements of every *Breakthrough* implementation (see page 18).

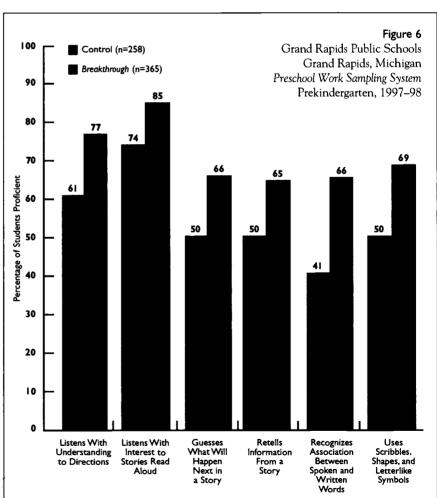
Increases in Critical **Developmental Skills**

Research at diverse Breakthrough sites documents significant improvements in critical developmental areas such as vocabulary, phonological/phonemic awareness, alphabet knowledge, word recognition, and language and writing skills. Evaluators noted positive results at each grade level — prekindergarten through early elementary.

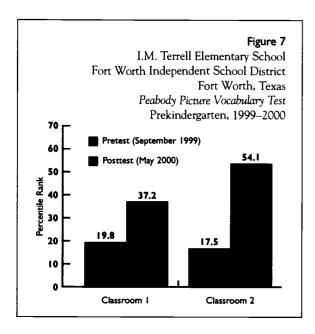
Prekindergarten Results

Grand Rapids, Michigan: Increased proficiency in language and literacy skills in 19 classrooms

During the 1997–98 school vear, Grand Rapids Public Schools administered the Preschool Work Sampling System (Meisels et al., 1995) in 19 Breakthrough prekindergarten classrooms and in a set of control classrooms to assess developmental behaviors critical to school success. In each category studied, the percentage of students found to be proficient was substantially higher for the Breakthrough classes than for the control classes (Figure 6).



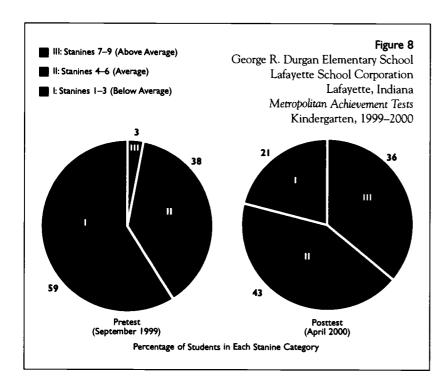




Fort Worth, Texas: Dramatic increases in vocabulary and phonemic awareness

Many schools have measured vocabulary and phonemic awareness to assess the impact of *Breakthrough to Literacy* on prekindergarten children.

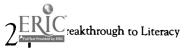
Figure 7 shows classroom results from I.M. Terrell Elementary School, where *Breakthrough* students had dramatic score increases on the PPVT.



Kindergarten Results

Lafayette, Indiana: "Above average" progress

The percentage of kindergartners at Durgan Elementary School who scored above average on the MAT-7 rose from 3 percent prior to implementation to 36 percent after using *Breakthrough*. After implementation, the number of children scoring below average dropped from 59 percent to 21 percent (*Figure* 8).

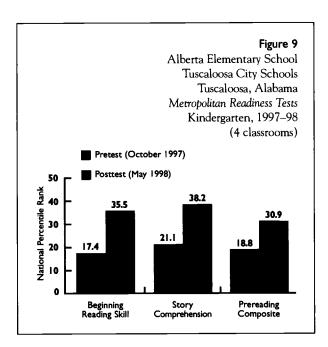


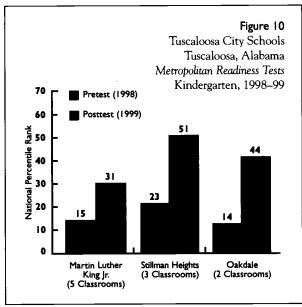


Tuscaloosa, Alabama: Extending the program

In 1997, Tuscaloosa City Schools implemented *Breakthrough* in Alberta Elementary School's kindergarten. By the end of the school year, the children's national percentile rank increased by 18.1 points in Beginning Reading Skill, 17.1 points in Story Comprehension, and 12.1 points in the Prereading Composite (*Figure* 9).

Based on the children's improved scores on the Metropolitan Readiness Tests,
Breakthrough to Literacy was implemented in three additional elementary schools the following year. Figure 10 shows that in 1998–99, the national percentile rankings of students at Martin Luther King Jr. and Stillman Heights increased twofold, and the national percentile rankings of students at Oakdale increased threefold.





East Chicago, Indiana: Skills sustained over summer

School City of East Chicago has undertaken an extensive assessment of the longitudinal impact of *Breakthrough to Literacy* on kindergartners, using results from 1997 through 2000 (ongoing). Figure 11 shows the fall results for 280 entering first graders who had used *Breakthrough* in kindergarten compared with a matched control group of approximately 300 non-*Breakthrough* students. For each subtest of the *TerraNova*, including those testing mathematical and

Figure | | School City of East Chicago East Chicago, Indiana TerraNova 100 Entering First Graders, Fall 1998 Control (n=300) Breakthrough (n=280) 90 79 80 **77** 73 70 Percent Correct 54 47 40 30 20 10 Geometry Basic Introduction Number Measurement Data/Stats. Comprehension Understanding to Print and Probability Spatial Sense Number Relations

spatial concepts, the Breakthrough students scored substantially higher than did the non-Breakthrough students.

Although Breakthrough is not a mathematics program, improved mathematics and spatial scores are quite common. Other results reported by School City of East Chicago demonstrated that use of the Breakthrough program was more predictive of success than whether a child was in a half- or full-day kindergarten or was monolingual in English or Bilingual (Figure 12). (Breakthrough's impact on Bilingual students in East Chicago is discussed on page 39.)



Figure 12
School City of East Chicago
East Chicago, Indiana
Analysis of TerraNova Data
Kindergarten, 1997–98
(Percentages indicate number correct on subtests)

Student Performance

Full-Day vs. Half-Day Kindergartens

,	Oral Comprehension	Basic Understanding	Introduction to Print	Number and Number Relations	Measurement		Statistics, and Probability
Full Day	76%	51%	72%	66%	70%	82%	51%
Half Day	79%	51%	72%	63%	69%	81%	45%

Monolingual vs. Bilingual Kindergartens

	Oral Comprehension	Basic Understanding	Introduction to Print	Number and Number Relations	Measurement	Geometry and Spatial Sense	Data Analysis, Statistics, and Probability
Monolingual	76%	52%	73%	66%	70%	82%	50%
Bilingual	78%	49%	71%	64%	69%	82%	48%

With Breakthrough vs. Without Breakthrough

	Oral Comprehension	Basic Understanding	Introduction to Print	Number and Number Relations	Measurement	Geometry and Spatial Sense	Data Analysis, Statistics, and Probability
Breakthrough	81%	56%	77%	69%	74%	86%	54%
Without Breakthrough	73%	47%	68%	61%	66%	79%	45%

Bilingual Kindergartens With Breakthrough vs. Without Breakthrough

		Oral Comprehension	Basic Understanding	Introduction to Print	Number and Number Relations	Measurement	Geometry and Spatial Sense	Data Analysis, Statistics, and Probability
	Breakthrough	83%	54%	76%	68%	74%	86%	53%
ı	Without Breakthrough	68%	39%	62%	55%	58%	75%	37%



Charlotte, North Carolina:

Progressive improvement on critical skills

Dilworth Elementary School used its district assessment battery to determine the impact of its kindergarten implementation of *Breakthrough to Literacy*, which began in January 1999, midway through the 1998–99 school year. Data are reported for three years: 1997–98 (before *Breakthrough*), 1998–99 (five months into the *Breakthrough* implementation), and 1999–2000 (after

Figure 13 (Before Breakthrough) Dilworth Elementary School 1998-99 Charlotte-Mecklenburg Public Schools (First Year of Breakthrough) Charlotte, North Carolina 1999-2000 District Assessment Battery (Second Year of Breakthrough) Kindergarten, 1997-2000 90 80 76 73 Percentage of Students At or Above Grade Level 60 30 20 10 **Book and Print Phonemic** Decoding and Word Language Overall Literacy Awareness **Awareness** Achievement Recognition

a full year of implementation).

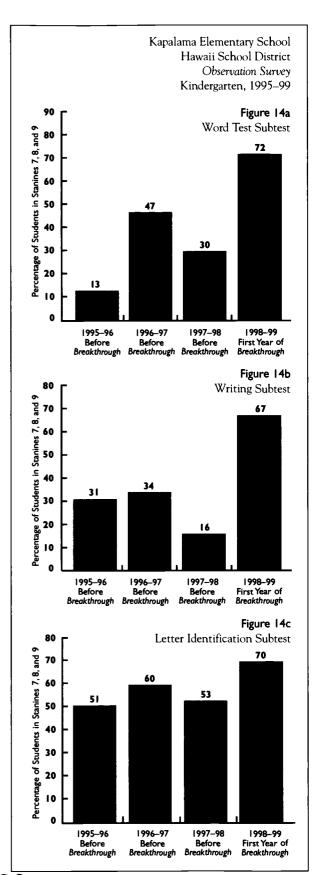
Figure 13 clearly shows that, across the three-year period, a progressively larger percentage of children scored at or above grade level on critical language and literacy skills, including phonemic awareness and language comprehension. Scores on mathematics assessments showed similar increases. The results reflect continuous improvement of the implementation, and the development of teacher and administrator effectiveness.

Honolulu, Hawaii: Improvements on word test, writing, and letter identification tasks

Clay's Observation Survey has been used widely to assess children's early language and literacy skills. Figures 14a, 14b, and 14c show results from the Observation Survey for the 1998–99 school year at Kapalama Elementary School. Compared to the previous three years, test scores substantially improved following the introduction of Breakthrough to Literacy in fall 1998.

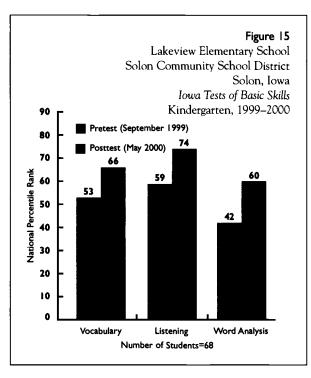
Effectiveness Across Socioeconomic Factors

Many of the results discussed in this document are reported from schools with large percentages of students receiving free or reduced lunches (Durgan Elementary, Lafayette, Indiana; Grand Rapids Public Schools, Grand Rapids, Michigan; St. Helena Elementary and other Breakthrough to Literacy schools in Norfolk, Virginia; and Tuscaloosa City Schools, Tuscaloosa, Alabama). Still, it would be wrong to assume that Breakthrough benefits only students with economic or other barriers to learning achievement. In fact, Breakthrough districts have reported substantial improvement in test scores regardless of whether the free-or-reduced lunch count was low or high.



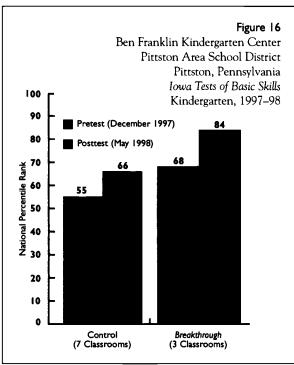


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Solon, Iowa: Significant gains on ITBS

Lakeview Elementary School in Solon, Iowa, is among the Iowa schools with the fewest children receiving free or reduced lunches (5 percent). As indicated by *Figure 15*, Lakeview Elementary children also experienced substantial gains from pre to posttest administrations of the ITBS (Vocabulary, Listening, and Word Analysis subtests) following implementation of *Breakthrough to Literacy*.



Pittston, Pennsylvania: More improvements in basic skills

Pittston Area School District also used the ITBS to assess the impact of *Breakthrough to Literacy*. Figure 16 shows greater gains in national percentile rank for children in *Breakthrough* classrooms than for children in non-*Breakthrough* classrooms in Pittston's Ben Franklin Kindergarten Center. During the 1997–98 school year, 50 percent of children at the kindergarten center received free or reduced lunches.



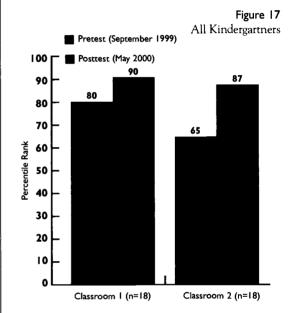
Iowa City, Iowa:

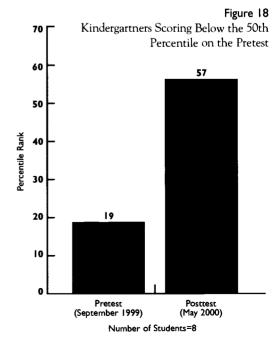
Significant gains in national percentile ranks

Ernest Horn Elementary School serves a relatively affluent university community. Only 2 percent of Horn's children received free or reduced lunches during the 1999–2000 school year. Figures 17 and 18 demonstrate the impact of Breakthrough on the PPVT national percentile ranks in two Horn kindergarten classrooms. Both kindergarten classes substantially increased national percentile ranks from pretest to posttest. Although the pretest scores were relatively high, the children still made substantial gains.

Importantly, even those children who scored below the 50th percentile on the PPVT pretest increased their national standing nearly threefold from pre- to posttest (*Figure 18*). These gains mimicked those found in early work at Horn, which demonstrated greatly enhanced scores on the ITBS compared to historical norms.

Ernest Horn Elementary School Iowa City Community School District Iowa City, Iowa Peabody Picture Vocabulary Test Kindergarten, 1999–2000



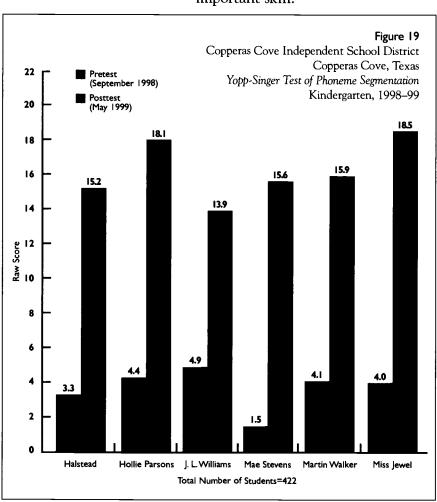






Phonemic Awareness

The importance of phonemic awareness as a predictor of reading achievement or reading failure has been firmly established (Snow, Burns, and Griffin, 1998). Administrators and teachers are using *Breakthrough* to ensure that students in kindergarten develop this important skill.

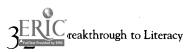


Copperas Cove, Texas: Dramatic gains on Yopp-Singer

Results from a large study in the Copperas Cove Independent School District show that kindergartners' phonemic awareness grows with the use of *Breakthrough*. Note the differences among schools, indicating varying levels of implementation or different emphases in instruction (*Figure 19*). All six schools are Title I Schools.

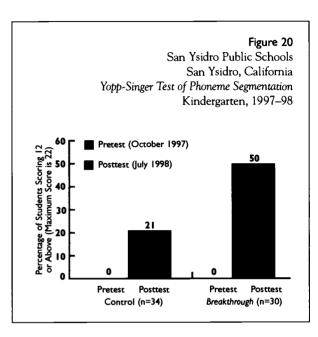
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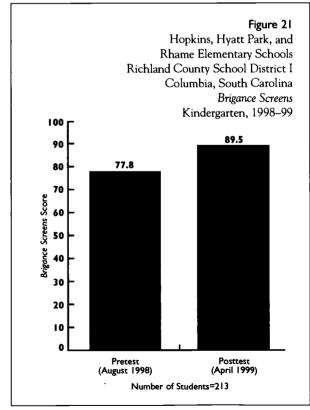
San Ysidro, California: High scores double

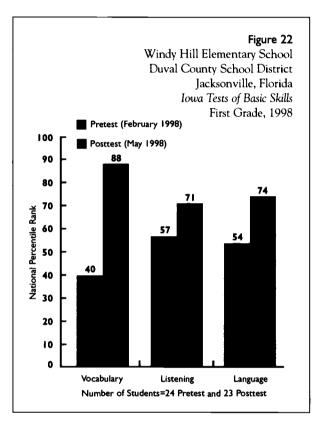
In a study using appropriate control students, San Ysidro Public Schools reported that, on the posttest, twice as many *Breakthrough* kindergartners as non-*Breakthrough* kindergartners scored above 12 on the Yopp-Singer Test of Phoneme Segmentation (Figure 20).



Columbia, South Carolina: Gains in three classrooms

Richland District I used the *Brigance Screens* to assess the impact of *Breakthrough* in its kindergarten classrooms. *Figure 21* shows nearly a 12-point gain from the pretest to the posttest.

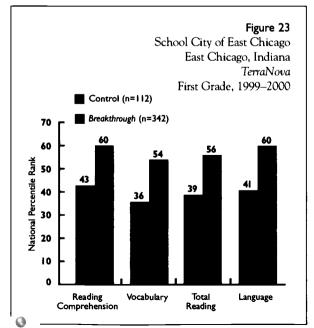




First-Grade Results

Jacksonville, Florida: Dramatic gains in four months

At Windy Hill Elementary School, results from a first-grade implementation reflected the high level of integration of *Breakthrough*'s essential practices into ongoing classroom activities. *Figure 22* shows the results from the ITBS. The children were pretested in February, at the start of the implementation, and posttested in May, near the end of the school year. In less than four months, the *Breakthrough* children made substantial gains on the ITBS.



East Chicago, Indiana: Better in all skills

In the 1999–2000 school year, first-grade Breakthrough students in School City of East Chicago scored considerably higher on each subtest of the TerraNova than did their non-Breakthrough counterparts (Figure 23).

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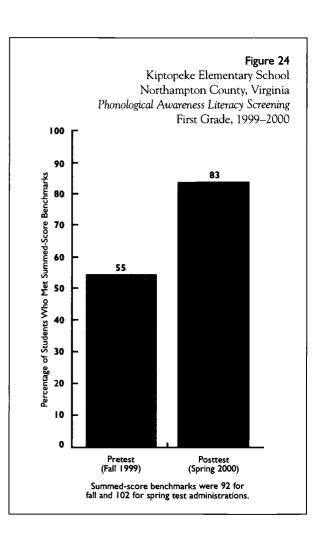
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Northampton County, Virginia: Meeting grade-level expectations

Kiptopeke Elementary School used the *Phonological Awareness Literacy Screening*, a statewide diagnostic literacy assessment, to document first graders' acquisition of fundamental literacy skills and identify children who would benefit from accelerated reading instruction. At the beginning of the 1999–2000 school year, only 55 percent of Kiptopeke first graders met or exceeded the fall summed-score benchmark of 92 (*Figure 24*), indicating that 45 percent of the children failed to meet gradelevel expectations.

Following implementation of *Breakthrough*, 83 percent of the first graders met or surpassed the spring summed-score benchmark of 102. This result demonstrates that 62 percent fewer children were considered to be at risk for reading problems beyond first grade.





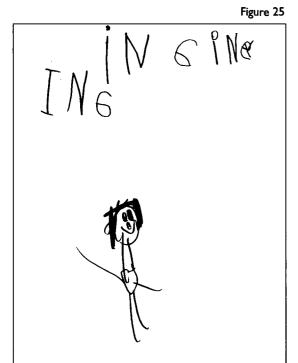
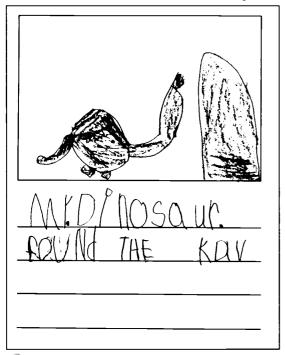


Figure 26



Writing as an Indicator of Success

Writing, one of the four essential practices of *Breakthrough to Literacy*, is an integral part of professional development and a daily classroom practice. It should not be surprising, then, that improvement in writing is one of the most important results of many *Breakthrough* implementations.

Nearly all *Breakthrough* teachers observe dramatic increases in students' interest and proficiency in writing, as well as accelerated progress through the developmental stages of writing.

The writing samples on these pages are a representative sampling from three *Breakthrough* kindergartners.

The first two writing samples (Figures 25 and 26) represent Lisa's growth during her kindergarten year. Lisa came to school with no alphabet knowledge and limited experiences with "writing."

At midyear, she continued to lag behind her peers in expressive writing, but she successfully had learned her alphabet letters and sounds. As seen in this writing sample (*Figure 25*), Lisa was able to write letters from left to right and from the top of the page to the bottom. She was most comfortable copying letters and repeating patterns.

By the end of the year (*Figure 26*), Lisa had made remarkable gains. She viewed herself as a writer. She understood that she could express her "story" in writing and was using the word wall, developmental spelling, and illustrations to facilitate her written expression.

Jody started kindergarten with an excellent foundation in language development and early literacy skills. She knew the alphabet letters and sounds, had good rhyming skills, understood concepts of print, and had very good expressive language. However, Jody was a very young kindergartner who struggled to pay attention and maintain focus in classroom activities. Use of the computer helped to focus Jody's attention.

By midyear, Jody was able to translate her knowledge of the alphabet to written words, as illustrated by the developmental spelling in her writing sample (*Figure 27*). She also was able to recognize and use print from the word wall as she worked to express her thoughts in written form. Her teacher reported that, through her writing experiences, Jody was beginning to explore her own knowledge of language and the ways that words work.

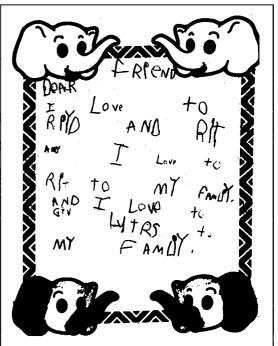
Erica began kindergarten with good oral language skills but knew only a few letter names and did not recognize her name in print. She was very motivated by "Peanut" (the elephant friend provided to each classroom by *Breakthrough*), who was especially interested in her writing. She quickly learned that her journal writing provided a wonderful opportunity to display her new skills and knowledge to her teacher, her peers, and her mother.

By midyear, Erica not only had learned her alphabet letters and sounds, but also was able to translate the spoken sounds of her own words into written language. As shown in her writing sample (Figure 28), Erica was using developmental spelling, sight-word knowledge, and the conventions of writing (e.g., spaces between words and left-to-right directionality) to express her thoughts in sentences.

Figure 27



Figure 28



Breakthrough to Literacy

All that my kids need now is a lap and a hug.

Mary Lumpkin Principal Roberts Park Elementary School Norfolk, Virginia

Breakthrough to Literacy and English as a Second Language

Teachers and administrators serving children for whom English is a second language (ESL students) have supported *Breakthrough to Literacy* enthusiastically. An early study from Dallas illustrated the impact of *Breakthrough* in Bilingual and Speakers of Other Languages (SOL) programs. The following fall, a report from the Dallas Public Schools' Division of Accountability and Information Systems (Urrabazo, 1998, p. 95) concluded that:

- kindergarten Breakthrough students outperformed all comparison groups on the spring 1998 WMLS [Woodcock-Munoz Language Survey, Comprehensive Manual].
- kindergarten program SOL students who took the spring 1998 ITBS Word Analysis and Reading Vocabulary subtest matched the district median percentiles. They outperformed SOL students in the Jostens and Writing to Read programs.
- in a pre/post study, kindergarten SOL students in the Breakthrough program had the highest gain on WMLS, outperforming all comparison groups including the district.
- first-grade SOL students in the program outperformed all comparison groups on the spring 1998 WMLS.

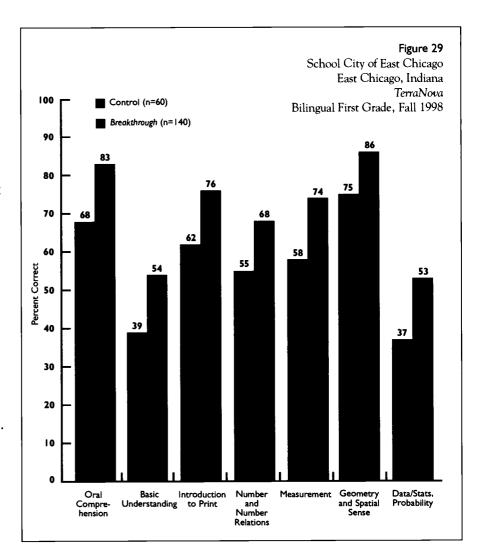
Breakthrough to Literacy's success in Bilingual and SOL programs is believed to be the result of the enhanced opportunities that Breakthrough provides for children. These include:

- perceiving the structure of spoken language,
- developing phonemic awareness of English,
- learning vocabulary, and
- gaining confidence in speaking and writing English.

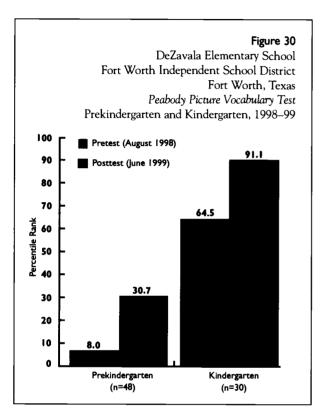
Data from classrooms around the country support this position.

East Chicago, Indiana: Success in Bilingual classrooms

School City of East Chicago used the TerraNova to assess the impact of Breakthrough to Literacy. In fall 1998, first graders who had been in Bilingual kindergarten classrooms in 1997-98 were tested on critical developmental parameters. The district compared Breakthrough children to a matched sample of children from Bilingual classrooms that did not have Breakthrough. Figure 29 shows that the children from Bilingual classrooms using Breakthrough outperformed the children in the control groups.

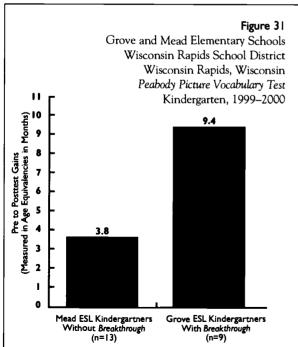






Fort Worth, Texas: Comparative advantage on PPVT

DeZavala Elementary used the PPVT to assess progress of their *Breakthrough* children in prekindergarten and kindergarten classrooms. *Figure 30* shows the results of their pre- and posttest assessments, demonstrating substantial growth at both grade levels.



Wisconsin Rapids, Wisconsin: Gains for ESL students

Grove Elementary School has a large number of students whose second language is English. The school reported gains for ESL students measured on the PPVT. These gains were compared to scores from an appropriate, non-Breakthrough control group. Figure 31 shows the increased performance on the PPVT for the Breakthrough students. They showed an average gain in age equivalencies of 9.4 months, while the control students showed only a 3.8 month gain.

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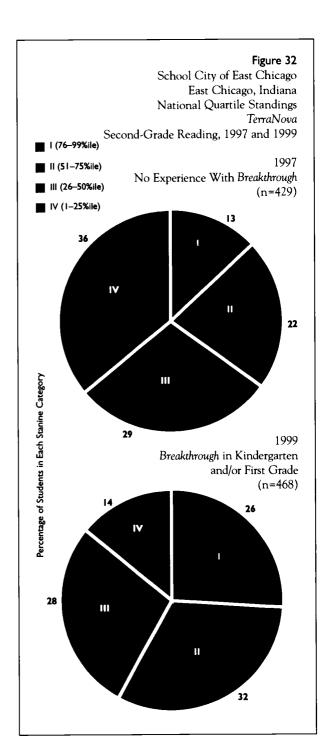
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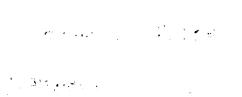
Longitudinal Impact

Several districts have undertaken studies to determine the longitudinal impact of Breakthrough to Literacy. In these studies, test scores and other measures of second and third graders who have had Breakthrough in kindergarten and/or first grade have been compared to scores of non-Breakthrough children or to district averages.

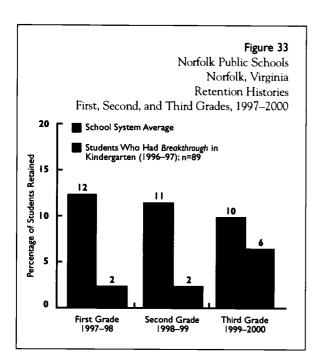
East Chicago, Indiana: Substantial impact on TerraNova scores

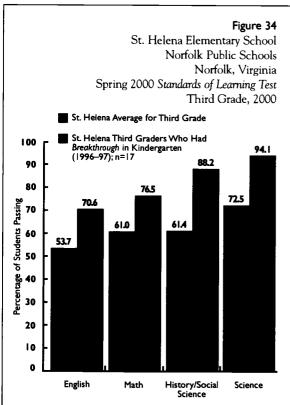
At School City of East Chicago, second graders were tested on the *TerraNova*. The 1997 second graders had no experience with *Breakthrough to Literacy*. By contrast, the 1999 second graders had used *Breakthrough* in kindergarten and/or first grade. Compared to the 1997 second graders, the percentage of 1999 second graders in the top quartile (quartile I) doubled, and the percentage of students in the bottom quartile (quartile IV) dropped from 36 to 14 percent in reading (*Figure 32*).











Norfolk, Virginia: Fewer retentions, higher performance on state assessments

At the end of the 1999–2000 school year, researchers evaluated the retention histories of third graders from three schools in which Breakthrough was used with kindergartners in 1996–97. Comparing retention rates for Breakthrough students with district averages, researchers found that fewer students who had used Breakthrough to Literacy in kindergarten were later retained in first, second, or third grade. This benefit of Breakthrough was evident even up to three years after using the program (Figure 33).

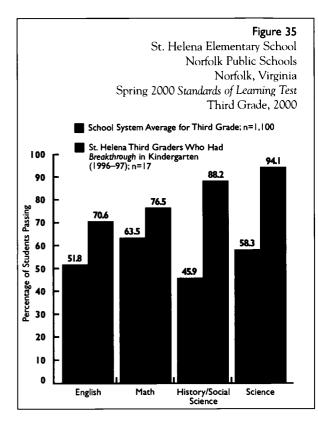
In the 1996–97 school year, a class of kindergarten students at St. Helena Elementary School in Norfolk used *Breakthrough to Literacy*. Three years later, as third graders, these same children were tested using the Virginia *Standards of Learning* assessment, the state's high-stakes test. Their scores were consistently higher than those of St. Helena students who had not used *Breakthrough* in kindergarten (*Figure 34*).

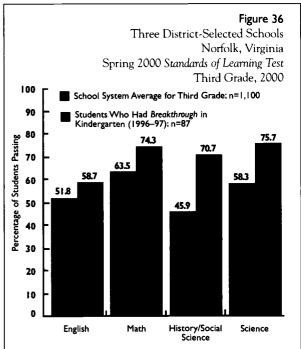
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As third graders (1999–2000), students who had used Breakthrough in kindergarten at St. Helena also performed significantly better than the district average in all categories of the Virginia Standards of Learning examination (Figure 35). Note the increase of the St. Helena third-grade scores for children using Breakthrough to Literacy (n=17) compared to 1,100 control students from 11 schools in Norfolk. One hundred percent of St. Helena's 1999-2000 students received free or reducedcost lunches.

In addition, Norfolk Public Schools compared 1999–2000 scores on the Standards of Learning assessments for students who had used Breakthrough during the 1996-97 school year in three elementary schools with the school system average. The Breakthrough students exceeded the district average in every content area (Figure 36).



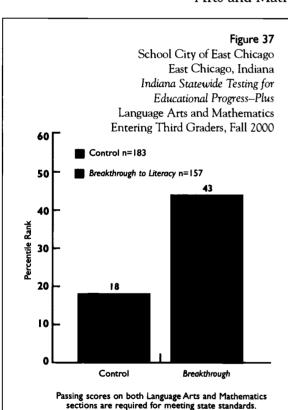




East Chicago, Indiana:

High achievement in language arts and mathematics

In fall 2000, third graders at School City of East Chicago who had used *Breakthrough* in first grade took part in the *Indiana Statewide Testing for Educational Progress–Plus* (ISTEP+), Indiana's high-stakes test. On this assessment, only students passing both Liberal Arts and Mathematics sections of the exam meet state standards.



Of the 340 third graders taking the ISTEP+, more than twice as many who used *Breakthrough* met state standards as those who had not used the program in first grade (*Figure 37*).

Results from these longitudinal studies demonstrate the lasting impact of *Breakthrough to Literacy*. When strong foundations are built, the program's impact remains. Research is under way to determine the additive effect of *Breakthrough to Literacy* when children are engaged with the program in prekindergarten through second grade.

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Discussion and Conclusions



Results clearly show that Breakthrough to Literacy[™] can enhance classroom performance, increase test scores, and engage children in important language and print activities in school and at home. The answer to the often-asked question, "Does Breakthrough to Literacy work?" should, therefore, be a resounding "Yes!"

Neither the question nor the answer, however, is actually that simple. Breakthrough to Literacy can and does "work" because the curriculum, instructional practices, and assessments are parts of an integrated conceptual framework that teachers find especially effective.

As expected from any serious initiative, the results of the process depend on the quality of the implementation: how consistently teachers engage children in the program's four essential instructional practices and how carefully they focus instruction on each child's developmental needs. Results clearly demonstrate the importance of *Breakthrough*'s professional development and ongoing support, as well as strong partnerships among the *Breakthrough* organization and a school's administrators and teachers.

For educators, then, the appropriate question is, "How can we establish the conditions that we know will ensure a successful implementation?"

By focusing on this primary goal, educators place themselves in the best position to achieve it. Children, teachers, and schools all will benefit.



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More Praise From Educators



Educators across the nation enthusiastically praise *Breakthrough to Literacy*[™]. Below is a selection of comments made by educators about the *Breakthrough* program and the ongoing support provided to teachers through Breakthrough to Literacy's Partnership for Results.

"What makes *Breakthrough* so unique is the quality of the professional development. *Breakthrough* uses a methodical, step-by-step process that is provided incrementally over time."

> Mark Tavernier, Senior Director, Communication Skills Norfolk Public Schools Norfolk, Virginia

"We haven't found anyone *Breakthrough* doesn't work well with. We have a lot of ESL students, as well as students with developmental delays and speech-and-language impairments. Last year, we gave the *Language Assessment Scale* pretest in late December or early January to 24 students. We gave the posttest in April and found huge gains. The mean increase of 17 points was found to be statistically significant. In the fall, ESL students who had spoken their native language all summer maintained their gains within two or three points of their spring scores! We were very impressed."

Jo McElroy, ESL Coordinator Dishman-McGinnis School District Bowling Green, Kentucky





"In Breakthrough to Literacy, I have found a computer-based program that actually helps me create a balanced literacy program in my classroom that is developmentally appropriate for my first-grade children. And with wonderful books like Mrs. Wishy-Washy and The Farm Concert, what more could a teacher ask for?"

Bronwyn McLemore Former First-Grade Teacher Visiting Instructor University of North Florida Jacksonville, Florida

"The support of the *Breakthrough to Literacy* program in Norfolk is unparalleled by any other initiative over the past five years."

Peggie Robertson, Ph.D., Principal Larrymore Elementary School Norfolk, Virginia

"Our teachers are thrilled with it! The children don't even want to paint, they love the books so much. They love *Breakthrough*."

Cathy Corotta, Principal Louisville Deaf Oral School Louisville, Kentucky

"I think the most wonderful thing about Breakthrough to Literacy is that it is truly geared for each child."

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Karen Slagle, Kindergarten Teacher Fairlawn Elementary School Norfolk,Virginia



"My two kindergarten teachers from last year would die if we took *Breakthrough to Literacy* away from their students."

> Lilian Thomas, Principal St. Helena Elementary School Norfolk, Virginia

"Thank you for developing a wonderful program that makes reading fun yet provides a strong reading foundation for children in kindergarten."

> Mrs. Lindberg, Parent Temple, Texas

"One of the children in my class had no English to begin with. ... At the end of the school year he was reading in the top reading group, and he may have a place in the gifted program. *Breakthrough* gave him the opportunity to progress at his own rate and develop the skills for success. I feel it is a terrific program and wish all the kindergarten and first grades in our school were using it."

Louise Stark, Kindergarten Teacher High Point Elementary School Atlanta, Georgia

References



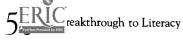
- Adams, M.J. (1990). Beginning to Read: Thinking and Learning About Print. Cambridge, Mass.: MIT Press.
- Adams, M.J. and M. Bruck (1995). "Resolving the 'Great Debate.' " American Educator 19 (2): 9-20.
- Blachman, B.A. (1984). "Language Analysis Skills and Early Reading Acquisition." In Language Learning Disabilities in School-Age Children, eds. G. Wallach and K. Butler, 271–87. Baltimore, Md.: Williams and Wilkins.
- Bradley, L. and P.E. Bryant (1983). "Categorizing Sounds and Learning to Read — A Causal Connection." Nature 310: 419–21.
- Chall, J.S. (1967). Learning to Read: The Great Debate. Updated edition. New York: McGraw-Hill.
- Clay, M. (1993). "Concepts About Print." In An Observation Survey of Literacy Achievement. Portsmouth, N.H.: Heinemann.
- Clay, M. (1993). Reading Recovery: A Guidebook for Teachers in Training. Portsmouth, N.H.: Heinemann.
- Darling-Hammond, L. (2000). "Teacher Quality and Student Achievement: A Review of State Policy Evidence." Education Policy Analysis Archives 8 (1). Journal online. Available from http://olam.ed.asu.edu/epaa/v8n1; Internet.
- Dykstra, R. (1968). "Summary of the Second-Grade Phase of the Cooperative Research Program in Primary Reading Instruction." Reading Research Quarterly 4 (1): 49-70.
- Fox, B. and D.K. Routh (1975). "Analyzing Spoken Language Into Words, Syllables, and Phonemes: A Developmental Study." The Journal of Psycholinguistic Research 4: 331–42.
- Juel, C. (1991). "Beginning Reading." In Handbook of Trading Research, Vol. 2, eds. R. Barr, M.L. Kamil, P.B. Mosenthal, and P.D. Pearson, 759-88. New York: Longman.
- Liberman, I.Y., et al. (1974). "Reading and the Awareness of Linguistic Segment." Journal of Experimental Child Psychology 18: 201–12.
- Lindamood, C.H. and P.C. Lindamood (1979). Lindamood Auditory Conceptualization Test. Boston: Teaching Resources Corporation.





Breakthrough to Literacy

- Meisels, S.J., J.R. Jablon, D.B. Marsden, M.L. Dichtelmiller, A.B. Dorfman, and D.M. Steele. (1995). *The Work Sampling System: An Overview.* Ann Arbor, Mich.: Rebus Planning Associates, Inc.
- Senge, P. (1990). The Fifth Discipline: The Art and Practice of the Learning Organization. New York: Currency Doubleday.
- Snider, V.E. (1995). "A Primer on Phonemic Awareness: What It Is, Why It's Important, and How to Teach It." School Psychology Review 24 (3): 443–55.
- Snow, C., M.S. Burns, and P. Griffin, eds. (1998). Preventing Reading Difficulties in Young Children. Washington, D.C.: National Research Council and National Academy Press.
- Stanovich, K.E. (1986). "Matthew Effects in Reading: Some Consequences of Individual Differences in the Acquisition of Literacy." *Reading Research Quarterly* 21 (4): 360–407.
- Torgesen, J.K. and B.R. Bryant (1994). Test of Phonological Awareness. Austin, Texas: Pro-ed.
- Treiman, R. (1985). "Onsets and Rimes as Units of Spoken Syllables: Evidence From Children." *Journal of Experimental Child Psychology* 39 (1): 161–81.
- Urrabazo, T. (1998). "Final Report on the 1997–98 Breakthrough to Literacy Computer Instructional Program." Approved Report of the Division of Accountability and Information Systems, Dallas Independent School District.
- Yopp, H. (1995). "A Test for Assessing Phonemic Awareness in Young Children." The Reading Teacher 49 (1): 20–29.





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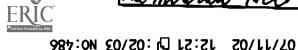
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