

Research Foundation
Paper

Zip Zoom English

Foundations and Formative Research



EXECUTIVE SUMMARY

Scholastic's Zip Zoom English is the result of six years of educational research and development and a strong commitment to narrowing the English language learner achievement gap. This paper presents the foundational and formative research supporting the development of Zip Zoom English.

English language learners are transforming education through their positive impact on schools and teachers, theory and research, and educational policy. Due to the ever increasing numbers of ELLs in our nation's classrooms, Pacific Resources for Education and Learning (PREL) received a United States Department of Education grant to further examine this impact—and the impact that a strong curriculum and professional development program could have on ELLs' reading success. The culmination of their grant was the development of NEARStar, which became the prototype of Scholastic's Zip Zoom English.

WestEd conducted a preliminary evaluation of NEARStar's effectiveness at improving the language and early literacy skills of young English language learners. Through a close analysis of these evaluations, Scholastic gained insight into the specific language and literacy skills with the most potential to be positively impacted by Zip Zoom English, as well as critical instructional and implementation components that required improvement going forward.

The Zip Zoom Critical Word Readers and the books found in Zip Zoom English leverage the long history of research that informed the development of the NEARStar books. Dr. Elfrieda Hiebert developed the NEARStar books according to her research findings on the text characteristics that best support the unique needs of English language learners, including appropriate repetition of high frequency, high imagery, and decodable words.

Finally, Scholastic partnered with The Center for Children and Technology to conduct formative research on Zip Zoom English with both English language learners and their educators. The results were analyzed to inform and prioritize development decisions, including: advancements to the management system, further assessment development, a clear implementation model, and strong teacher-led lessons with guidance for differentiated instruction.

In sum, the result of this extensive and diverse research is Zip Zoom English: Scholastic's new supplemental program designed to accelerate the language and literacy development of K–3 English language learners.

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INTRODUCTION

English Language Learners: Transforming Education

Every year, students from diverse homes, cultures, and languages are welcomed into our schools and classrooms. As increasing numbers of English language learners (ELLs) enter our classrooms, it will be necessary to reexamine our instructional practices and curriculum to ensure that we are being effective in developing *all* children's language and literacy skills. The increased enrollment of ELLs in schools across the nation is currently influencing three important pillars of education: schools and teachers, theory and research, and educational policy.

This transformation has provided many benefits for those advocates of education who truly aim to leave no child behind. It has encouraged an increased understanding of language development for all students, including those whose primary language is not English. It has promoted the message that second language acquisition is of value, both academically and socially (August, Carlo, et. al., 2005). And, it highlights the fact that English language learners can and will attain the same high academic standards as their native English-speaking peers.

Transforming Schools and Teachers

The trend of increased enrollment of English language learners (ELLs) in schools across the nation is evident. As of 2004, approximately 5.5 million school-age children were English language learners. From 2001–2002, over 4.7 million ELLs were enrolled in our nation's public schools (Echevarria, Vogt, & Short, 2004). The latest census report and numbers from the Urban Institute underscore how immigration trends are continuing to impact our public school system (Fix & Passel, 2003). The flow of immigration is dispersing across the country; at least 21 states have observed their ELL population grow by 77% or more. In 2000, 20% of children in Grades K–12 were children of immigrants, and almost half of our public schools reported enrollment of limited English proficient (LEP) students (Ruiz-de-Velasco & Fix, 2000). The second language acquisition of these students will be influenced by a variety of factors, including age of exposure, attitudinal and motivational factors, and perhaps most importantly, quality of instruction.

Therefore, districts are now being challenged to provide effective and sustained professional development for their teachers, since most educators will need to be trained and prepared to meet the unique needs of English language learners (Baca, Bransford, Nelson, & Ortiz, 1994; Ruiz-de-Velasco & Fix, 2000). This is simply because the majority of ELLs are found in mainstream classrooms where instruction is delivered in English only by teachers who may have little or no specialized training in teaching them (Spangenberg-Urbschat & Pritchard, 1994). Changes in educational policy will require that all teachers, regardless of subject matter, become familiar with second language acquisition pedagogy. Children may enter English-language classrooms after only one year of Sheltered English Immersion (SEI) instruction. Furthermore, ELLs will have to participate in standardized assessments and their scores will be included in districts' Adequate Yearly Progress (AYP) analysis and reporting.

Transforming Theory and Research

Currently, research on the most effective instructional practices for English language learners is less extensive than research on reading instruction. Through the National Reading Panel report (NICHD, 2000) and publications such as *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998), significant knowledge has been gained about the critical components of effective literacy practices. The National Research Council report (August & Hakuta, 1998) strongly cautioned, however, that more research is needed to identify characteristics of both effective bilingual programs and effective English-only programs for ELLs. With this need and goal in mind, the National Literacy Panel was formed.

In early 2006, the Report of the National Literacy Panel on Language-Minority Children and Youth entitled “Developing Literacy in Second-Language Learners” was released (National Literacy Panel, 2006). The National Literacy Panel was formally charged with identifying, assessing, and synthesizing the research on the education of language-minority children and youth with regard to literacy attainment. Some of the major findings included:

- *Instruction that provides substantial coverage in the key components of reading as identified by the National Reading Panel has clear benefits for language-minority students.*
- *Oral language proficiency is critical for language-minority students to learn to read and write proficiently in English.*
- *Oral proficiency and literacy in the first language can be used to facilitate literacy development in English. However, language-minority students can acquire English literacy skills in English-only classrooms as well.*
- *Individual differences contribute significantly to English literacy development.*

The National Literacy Panel further recommended that policymakers and educators use the panel’s findings to benchmark their own practices and infuse research-based instruction into literacy programs for language-minority students.

Furthermore, leading educational researchers are now beginning to turn their attention to investigating proven effective approaches for English language learners. Examples of research topics include: predictors of reading success that function cross-linguistically, the impact of socio-economic status, intensive supplemental ELL intervention, and quality professional development for ELL educators. Research involving the strengths and challenges of English language learners is now being increasingly published. For example, the November 2004 Learning Disabilities Research & Practice journal was solely dedicated to this domain.

Transforming Educational Policy

Before the *No Child Left Behind* legislation, English language learners were often exempted from standardized academic achievement testing. Not all states had developed English language proficiency tests or standards. In addition, the focus was on testing English language proficiency, rather than academic achievement.

Now, through *No Child Left Behind*, the critical goal of narrowing the English language learner achievement gap is evident in current educational policy. As mentioned above, the *No Child Left Behind* legislation requires proficiency in reading and math for all students, including those whose native language is not English. ELLs will be assessed annually to measure how well they are learning English, so that teachers and families can effectively monitor their progress. When reporting student data for the evaluation of Adequate Yearly Progress (AYP), districts must include English language learners' results, demonstrating that their educational needs are being met, their English proficiency is developing, and they are transitioning successfully out of special services. Furthermore, both English language proficiency and academic achievement are measured to determine AYP and annual measurable achievement objectives (AMAOs). State developed English language proficiency tests (ELPs) must evaluate all four key skills—listening, speaking, reading, and writing.

Funding to support the needs of English language learners is increasingly high, with the inclusion of Title 1, Reading First, and Title III, in particular. Title III requires states and/or districts to help ELLs gain English language proficiency and develop high levels of academic achievement—the same as their native speaking peers. Schools will be held accountable for ELLs reaching their annual measurable achievement objectives under Title III. In sum, current educational policy mandates that English language learners are not left behind.

Zip Zoom English: Transforming K–3 English Language Learner Education

Zip Zoom English, Scholastic's supplemental language and literacy program for English language learners, is the result of six years of educational research and development and a strong commitment to narrowing the English language learner achievement gap. Zip Zoom English supports beginning ELLs in Grades K–3 by developing critical language and literacy skills simultaneously through the use of technology and research-based sequential books. The program accelerates oral language, vocabulary, and sight word acquisition—thus, providing young English language learners the ability to successfully access their basal or core reading program.

Zip Zoom English is a strong supplement to both ESL and core reading programs. The product is designed to support teachers who are new to English-language teaching through the online Scholastic RED professional development course, *Reading Success for English Language Learners*. In this course, teachers—especially mainstream classroom teachers—learn how to adapt instruction, monitor progress, and reinforce learning to help every English language learner become a successful reader.

ZIP ZOOM ENGLISH RESEARCH TIMELINE

1999 Awarding of the Grant

U.S. Department of Education Grant awarded to Pacific Resources for Education and Learning (PREL) to develop NEARStar: Network for English Acquisition and Reading Star Schools Program

1999–2002 Continuous Research, Evaluation, and Development

- 1999:** NEARStar interdisciplinary staff recruited and hired
- 1999–2000:** English as a Second Language Proficient Beginning Reading (ESL/PBR) model developed and curriculum defined
- Spring 2000:** First NEARStar prototype was tested at developmental school sites
- 2000–2001:** NEARStar was expanded to 23 sites in 12 states, serving approximately 3,100 grade K–3 ELLs in rural and urban settings
- 2001–2002:** Full program was completed and deployed to all developmental sites, including assessment and professional development components

2002–2004 Research and Implementation

Independent evaluation conducted by WestEd to determine early evidence of NEARStar’s effectiveness developing the language and literacy skills of English language learners

- 2002–2003:** Year One Implementation
 - 2003–2004:** Year Two Implementation
- Total of 658 Kindergarten–2nd grade ELLs participate in this research*

2004 Formative Research

To inform and prioritize Zip Zoom English development decisions

- July–October, 2004:** EDC’s Center for Children and Technology conducts formative evaluation of NEARStar with ELLs and their teachers
- December, 2004:** Scholastic Research and Evaluation Department conducts Teacher Round Tables with 50+ ELL educators

2004–2005 Research and Validation

To validate the research-based texts in Zip Zoom English—providing evidence that they support the unique needs of English language learners, build their reading fluency, and narrow the ELL achievement gap

- 2003–2004:** Research conducted by Dr. Elfrieda Hiebert and Dr. Charles Fisher with first grade English language learners
- February, 2006:** Hiebert and Fisher’s research entitled “Fluency from the First: What Works with First Graders” published in *Fluency Instruction: Research-based Best Practices* (T. Rasinski, C.L.Z. Blachowicz, & K. Lems [Eds.]

RESEARCH & DEVELOPMENT OF NEARSTAR—THE ZIP ZOOM ENGLISH PRECURSOR

Pacific Resources for Education and Learning (PREL)

In 1999, PREL was awarded a five-year grant from the United States Department of Education Star Schools Program as part of the initiative to increase distance-learning capacity and provide high-quality curriculum and professional development opportunities to underserved populations. The dramatic increase in enrollment of ELLs in our nation's schools and the lack of qualified teachers to teach them motivated PREL to create a product to support teachers in building a strong foundation for ELLs' early reading success. The proposed program of work was the Network for English Acquisition and Reading Star Schools (NEARStar) project.

The project's primary goal was to research and develop supplemental Web-based software that addressed the English-language acquisition and early literacy needs of young English language learners. The Star Schools program also proposed to provide teachers of ELLs with professional development opportunities, resources, and technology to ensure the full and effective utilization of NEARStar over the Internet.

Organization of Partnerships

In the first year of development, national partnerships were organized and "design" teams responsible for various key components of the project were formed:

- Dr. Elfrieda Hiebert and researchers from the University of Michigan (Literacy Instruction Through Technology [LITT])—developed research-based teacher and student content, materials, and resources.
- The Center for the Application of Information Technology (CAIT) at Western Illinois University—created the initial prototype of the student software.
- WestEd and PREL's content team—conducted the program evaluation, including both qualitative and quantitative analysis.

To maximize the project's effectiveness, NEARStar also collaborated with several educational and multimedia production organizations, including the national Comprehensive Centers (CCs), the Regional Technology in Education Consortia (RTECs), the Hawaii Department of Education, and school development sites located across the continental U.S. and U.S.-affiliated Pacific jurisdictions.

Research and Development of the Student Software

Central to the design of NEARStar's software was the convergence of the two traditionally discrete disciplines of reading instruction and English-language development. Dr. Hiebert and her research team developed the pedagogy that provided the foundation for the software instructional design.

This initial work was originally referred to as the English as a Second Language/Proficient Beginning Reading (ESL/PBR) model. The model blended knowledge of second language acquisition theory and practice with research-based knowledge of the beginning reading process that was supported by work from the Center for the Improvement of Early Reading Achievement and the publication of *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998). The release of the National Reading Panel Report (2000) during the development phase further validated the model.

The ESL/PBR model formed the instructional framework for NEARStar's student software, which became the prototype for Zip Zoom English. The instructional framework consisted of lesson components featuring a variety of learning opportunities, including singing songs, reading online books, making take-home books, and fun vocabulary and skill-building games to serve as meaningful contexts for the development of English oral language and beginning reading skills. The intent of the model was to provide extensive and varied exposure to meaningful print with explicit and systematic instruction in phonemic awareness and letter/sound correspondence.

A language and phonics scope and sequence was developed to correlate to national literacy standards and state English language development and language arts standards from participating demonstration school sites. This alignment to standards helped teachers to effectively integrate the program into their curriculum while addressing standards-based initiatives for English language learners.

Based on participating teachers' observations and feedback regarding the mundane educational software implemented in 1998, a conscious decision was made to create thirty unique lessons throughout three levels of learning to address the element of motivation and engagement. Each lesson was designed to provide students with a new adventure and new activities to pique the interest and imagination of young learners. In addition, significant attention was placed on recycling key content throughout the program. For example, the vocabulary words introduced in Level 1 were recycled to develop letter-sound correspondences in word-building activities in Levels 2 and 3.

The student management system was designed to be a critical element of the software, linking curriculum, instruction, and assessment. To support teachers' efforts to engage in data-driven decision making, a close-the-loop technology was developed to collect data and provide ongoing progress reports to teachers monitoring students' attainment of skills throughout the program. Instant access to individual and whole class reports led teachers to an extensive professional development database. The extension activities and other resources in the database were specifically selected to help teachers make concrete connections to effective instructional practices in the classroom that would meet the needs of diverse English language learners. The software closed the loop by using data to identify student needs and providing teachers with the appropriate resources to meet those needs.

PROGRAM EVALUATION: EARLY EVIDENCE OF NEARSTAR'S EFFECTIVENESS

WestEd, an independent research and development organization, served as the NEARStar external evaluator from 2002–2004. Their primary goal was to develop strong quasi-experimental study designs that would evaluate the program's effectiveness with young English language learners. Program sites were established at elementary schools in Rhode Island, New Mexico, California, and Hawaii. WestEd's evaluation spanned two academic years.

Year One: Spring 2003 Implementation

The first NEARStar evaluation was conducted during the spring of 2003, for one-half the school year. There were a total of five experimental and five comparison schools located within the four targeted states of Rhode Island, New Mexico, California, and Hawaii. Schools were selected to develop a sample meeting the following criteria: representation of key language groups, geographic representation across the United States, a range of urban/suburban schools, and all schools being identified as Title I to ensure the program targeted students from lower socio-economic status backgrounds. A total of 658 kindergarten through second grade students participated in this research. It should be noted that random assignment and baseline equivalence between the treatment and control groups was not assured with this evaluation, and as a result there are limitations to the interpretation of these findings. However, several significant findings and interesting trends emerged, through which the developers gained insight into the skills most likely impacted by NEARStar's implementation with young ELLs.

Students were evaluated using the following reliable and valid measurements:

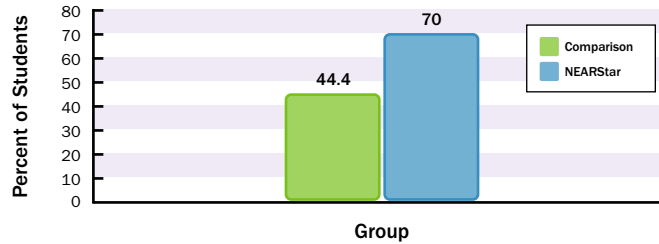
- Gates-MacGinitie Reading Tests, Fourth Edition (Pre-reading and Beginning reading levels)
- Potter's Alphabet Recognition Test
- Ohio State Letter Identification Test
- Fry's Sight Word Recognition Test
- Wepman's Auditory Discrimination Test (kindergarten only)

Year One: Results

Percentage of Students Achieving Increased Scores

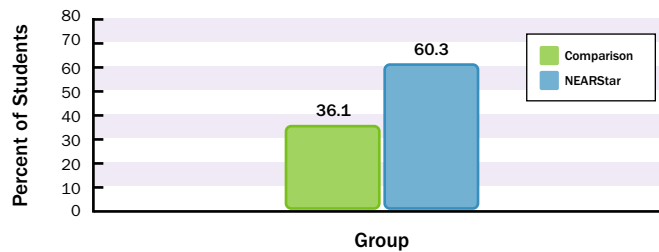
1. *A greater percentage of the NEARStar kindergarten group achieved increased scores on the Fry's Sight Word Recognition Test, the Ohio State Letter Identification test, and the Potter Alphabet Recognition test than the comparison kindergarten group.*
2. *A greater percentage of the NEARStar first grade group achieved increased scores on the Literacy Concepts and the Letter-Sounds subtests of the Gates-MacGinitie assessment than the comparison first grade group.*
3. *Significantly more students in the NEARStar group increased their letter recognition, letter-sound association, and sight word reading scores from pretest to posttest:*
 - A significantly greater percentage of students in the NEARStar group achieved gains on the Ohio State Letter Identification Test ($p < .01$) than students in the comparison group. (See Graph 1.)

Graph 1: Percent of Students with Increased Scores on the Ohio State Letter Identification Test



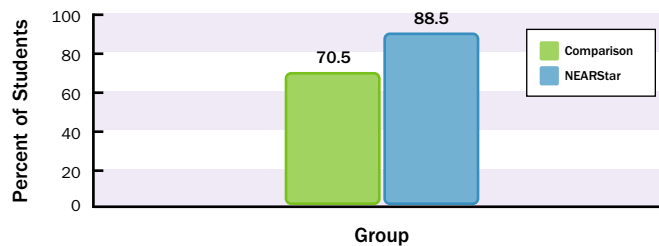
- A significantly greater percentage of students in the NEARStar group achieved gains on the Gates-MacGinitie Letter-Sounds Subtest ($p < .01$) than students in the comparison group. (See Graph 2.)

Graph 2: Percent of Students with Increased Scores on the Gates-MacGinitie Letter-Sounds Subtest



- A significantly greater percentage of students in the NEARStar group achieved gains on the Fry's Sight Word Recognition Test ($p < .01$) than students in the comparison group. (See Graph 3.)

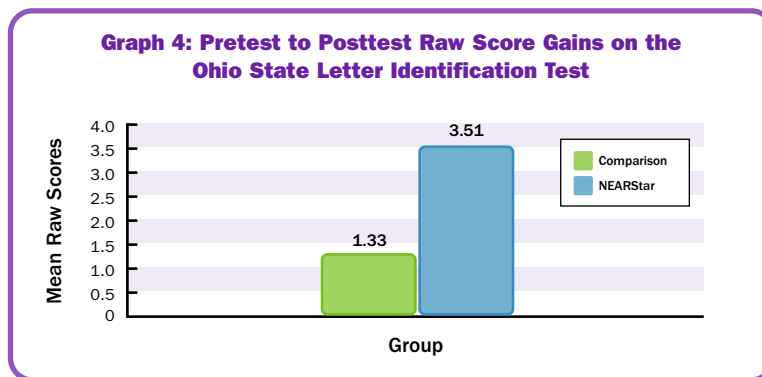
Graph 3: Percent of Students with Increased Scores on Fry's Sight Word Recognition Test



4. *A greater percentage of the comparison first grade group achieved increased scores on the Oral Language Concepts scale of the Gates-MacGinitie assessment than the NEARStar first grade group.*

Pretest to Posttest Growth

5. *The NEARStar kindergarten group achieved greater pretest to posttest growth than the comparison kindergarten group on the Fry's Sight Word Recognition Test, the Potter's Alphabet Recognition Test, and the Ohio State Letter Identification test.*
6. *The growth in early reading achievement among kindergarten students receiving NEARStar was significantly greater than growth among comparison kindergarten students:*
 - Students in the NEARStar group achieved a pretest to posttest gain significantly greater than students in the comparison group on the Ohio State Letter Identification Test ($p < .05$). (See Graph 4.)



7. *The NEARStar first grade group achieved higher pretest to posttest growth than the comparison first grade group on the Fry's Sight Word Recognition Test and the Gates-MacGinitie Letter-Sounds subtest.*
8. *The comparison first grade group achieved higher pretest to posttest growth than the NEARStar first grade group on the Gates-MacGinitie Literacy Concepts subtest and the Gates-MacGinitie Oral Language Concepts subtest.*

Narrowing the English Language Learner Achievement Gap

9. *NEARStar accelerated ELLs' language and literacy development and narrowed the English language learner achievement gap:*
 - Although the comparison group students always had higher pretest scores, students in the NEARStar group often caught up and exceeded them on posttest measures.
 - The NEARStar group's significantly greater increase in scores at posttest is most evident among kindergarten students for sight word recognition on the Fry's Sight Word Recognition Test and alphabet knowledge on the Potter's Alphabet Recognition Test. For both these assessments, the NEARStar kindergarteners outperformed the comparison group at posttest.

Year Two: 2003–2004 Implementation

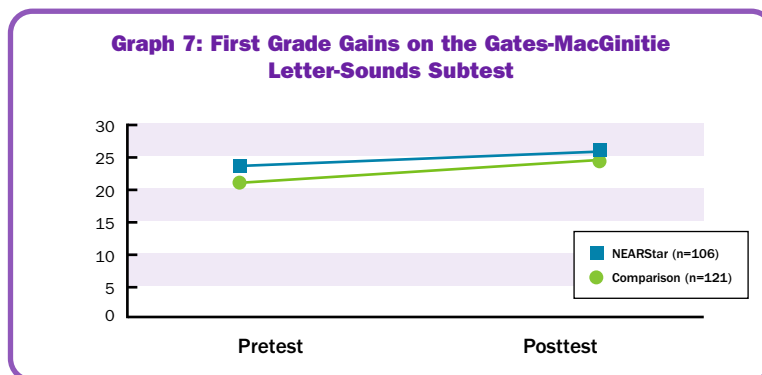
WestEd continued their evaluation of NEARStar’s effectiveness from 2003–2004. Unlike Year One, this evaluation spanned the entire school year. The same assessments were implemented, with the addition of the Test for Auditory Comprehension of Language 3rd Edition (TACL-3) to measure receptive vocabulary. This research employed the same quasi-experimental design from Year One with the same cohort of K–1 students receiving a second year of NEARStar implementation in Grades 1–2, and a new group of kindergarteners beginning the program in 2003. In addition, WestEd gathered qualitative data by surveying faculty regarding their knowledge of issues related to second language acquisition and reading, their comfort and use of technology in the classroom, the implementation of NEARStar with their students, and their observations about the effects of the program. Finally, group and individual interviews were conducted with faculty, technology coordinators, and administrators to understand implementation challenges.

Year Two: Results

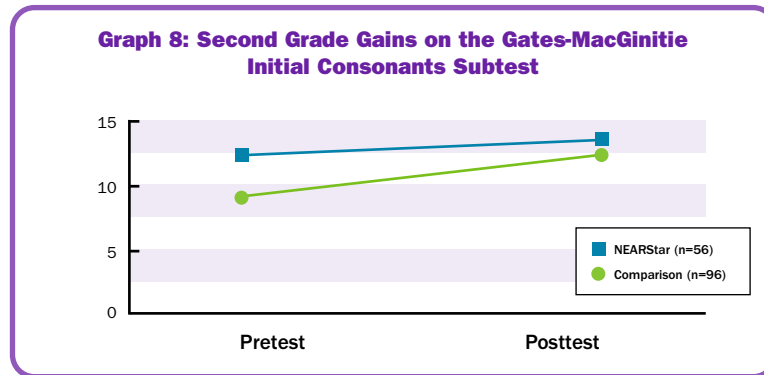
As with Year One, it is important to note that random assignment and baseline equivalence were not assured with this evaluation. Also, there was no clear and consistent implementation model to guide schools and teachers. However, several key trends still emerged. Teacher satisfaction with NEARStar remained strongly positive. In comparison to the Year One data, a greater number of teachers reported that they observed improvements in their students’ reading and language skills as a result of the program. In addition, schools reported increased satisfaction with program components and improved experiences with the technology.

Repeated measures MANOVA were used to statistically analyze the achievement data. Key findings include:

1. *Two significant interactions between time and condition in favor of the treatment (NEARStar) group:*
 - The NEARStar group achieved a gain significantly greater than the comparison group on the Letter-Sounds Subtest of the Gates-MacGinitie Reading Tests ($p = .015$). (See Graph 7.)



- The NEARStar group achieved a gain significantly greater than the comparison group on the Initial Consonants Subtest of the Gates-MacGinitie Reading Tests ($p < .000$). (See Graph 8.)



2. *Significant within-subjects main effects for period of testing, indicating that all participating students (NEARStar and comparison groups) demonstrated similar growth throughout the year on the following measures:*
 - Gates-MacGinitie Pre-Reading Tests (administered in first grade):
Literacy Concepts and Oral Language Concepts
 - Gates-MacGinitie Beginning Reading Tests (administered in second grade):
Final Consonant and Consonant Clusters, Vowels, and Basic Story Words
 - TACL-3 (administered in kindergarten, first, and second grade):
Vocabulary, Morphemes, and Phrases and Sentences
 - Potter’s Alphabet Recognition (administered in kindergarten)
 - Ohio State’s Letter Identification Test (administered in kindergarten)
 - Fry’s Sight Word Recognition Test (administered in kindergarten, first, and second grade)
3. *Significant between-subjects main effects reflecting that the comparison group demonstrated higher scores at both pretest and posttest periods.*
 - This finding was true for all the assessments mentioned in finding #2 above, with the exception of the Potter’s Alphabet Recognition Test and the Ohio State’s Letter Identification Test
 - There were no significant differences between the NEARStar group and the comparison group on those two tests

Knowledge Gained from Initial Effectiveness Research

Although preliminary, the WestEd research revealed a consistent trend that NEARStar accelerates the language and literacy development of young ELLs, while helping to narrow the English language learner achievement gap. Through a close review of these evaluations, Scholastic gained insight into the specific language and early literacy skills with the most potential to be impacted by Zip Zoom English, as well as critical areas that required improvement going forward. These included establishing a consistent implementation model for Zip Zoom English, developing a stronger teacher-led component, and emphasizing oral language development.

ZIP ZOOM CRITICAL-WORD READERS: DEVELOPED FROM A HERITAGE OF RESEARCH

The Zip Zoom Critical-Word Readers and the books found in Zip Zoom English leverage the long history of research that informed the development of the NEARStar books. Dr. Elfrieda Hiebert, in collaboration with Pacific Resources for Education and Learning (PREL), developed the NEARStar books according to her research findings on the text characteristics that best support the unique needs of young English language learners.

Dr. Hiebert and PREL were intent on creating texts that would engage children, while simultaneously including linguistic content that did not over-tax the cognitive capabilities of young children learning to read and write in a new language. English language learners' interest and familiarity with the concepts strongly influenced the word selection (Laing & Hulme, 1999). Words were analyzed according to van der Veur's imagery ratings, so that the majority of the words in all three levels of NEARStar texts have high imagery ratings (Hiebert et. al, 2004).

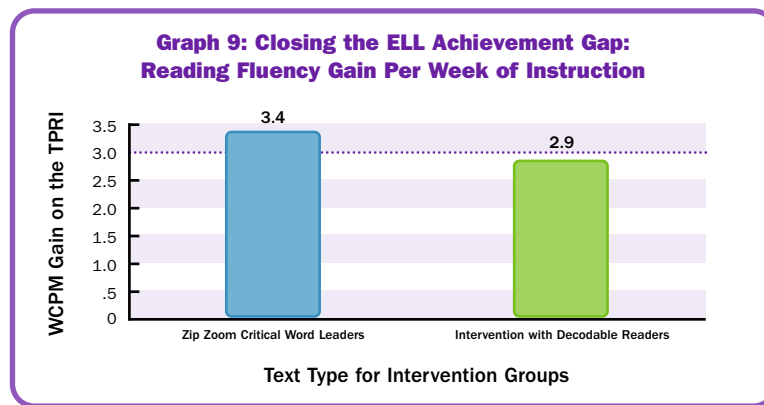
“While evidence points to the fact that word characteristics influence the number of repetitions beginning readers require to recognize a word, it is likely that many beginning readers—especially those who are learning to speak English at the same time they are learning to read it—require at least several repetitions of a word to remember it, even if the word is highly meaningful and phonetically regular” (Hiebert et. al, 2004). Therefore, the NEARStar books (and Zip Zoom Critical-Word Readers) were written to systematically introduce beginning readers to three types of written words: (a) words with common and consistent letter-sound patterns, (b) high-frequency words, and (c) high-imagery words, while also ensuring appropriate repetition of those key words. The goal was to repeat words sufficiently so that by the end of the NEARStar program, children would be exposed to a core vocabulary that will account for a substantial percentage of the words they will read in a typical, primary-level text (Hiebert et. al, 2004).

Closing the English Language Learner Achievement Gap

Researchers (Fuchs et. al, 1993) have proposed an ambitious goal for closing the ELL achievement gap. To quantify the gain necessary for English language learners to catch up to their English-speaking peers, students need to gain three words per week in oral reading fluency.

In their 2004 research, Hiebert and Fisher documented the results of an intensive 12-week reading intervention with two groups of first graders who were all English language learners (Hiebert & Fisher, 2006). Random assignment at the student level was employed to assign highly similar students to one of two supplemental interventions using different kinds of text. The first intervention group read Zip Zoom Critical-Word Readers while the second intervention group read decodable books from a core curriculum that systematically introduces beginning readers to phonemes. These results were compared to the results of a control group, who participated in their basal reading program, but received no additional instruction.

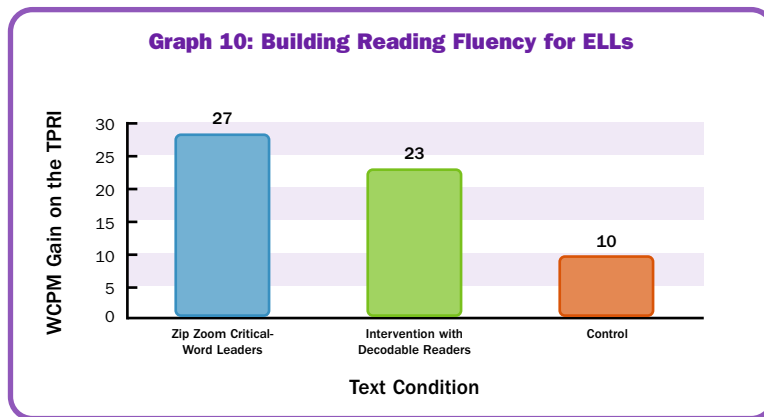
Students in the Zip Zoom Critical-Words Readers group improved their oral reading fluency by 3.4 words correct per minute (WCPM) for every week of instruction, exceeding the rate which researchers have proposed as necessary for closing the English language learner achievement gap. (See Graph 9.)



Building Fluency For English Language Learners

In Hiebert and Fisher’s 2004 research, all three groups of students completed a posttest consisting of first-grade passages from the Texas Primary Reading Inventory (TPRI), as well as the 40th text of the Zip Zoom Critical-Word Readers and the decodable text used in the second intervention group.

Results revealed significant differences between the two intervention groups and the control group. The Zip Zoom Critical-Word Readers group outperformed the decodable books intervention group on all posttest measures of reading fluency, as well as achieving significantly higher Words Correct Per Minute (WCPM) scores than the control group on all posttests. On the TPRI, the Zip Zoom Critical-Word Readers group gained 27 WCPM throughout the program, exceeding gains made by students in the other intervention group and significantly outperforming the control group, who only gained 10 WCPM while using their core reading program alone. (See Graph 10.) Similarly, on the Critical-Word Readers assessment text, the Zip Zoom Critical-Word Readers group achieved significantly greater fluency growth (23 WCPM) than the second intervention group using traditional decodable readers (13 WCPM) (Hiebert & Fisher, 2006).



Knowledge Gained from Critical-Word Reader Research

Research has consistently revealed that fluent reading at an appropriate rate and with limited word recognition errors is necessary for comprehending grade-level text (National Reading Panel Report, 2000; NAEP, 1995). Hiebert’s groundbreaking research reveals how the uniquely developed Zip Zoom Critical-Word Readers will help close the English language learner achievement gap while simultaneously building their reading fluency. This research provides solid evidence that English language learners reading with the research-based Zip Zoom Critical-Word Readers and the books included in Zip Zoom English are well positioned to catch up to their native English-speaking peers while attaining the reading fluency skills necessary to comprehend grade-level text.

Scholastic continued to develop these proven effective books for young English language learners to be included in Zip Zoom English. Some of the initial books were rewritten to ensure more high-frequency and high-imagery words, as well as an appropriate repetition of all critical words.

FORMATIVE RESEARCH: STUDENT & TEACHER FEEDBACK TO INFORM DEVELOPMENT

Scholastic's Research and Evaluation department conducted formative research on NEARStar with the primary goal of learning how young English language learners and their teachers would react, respond, and interpret the program, thus informing key decisions during the Zip Zoom English development process.

Two primary avenues of formative research were implemented:

- The Center for Children and Technology conducted a formative evaluation with both students and teachers.
- Scholastic conducted Teacher Round Tables with experienced English language learner educators.

The Center for Children and Technology (CCT)

Scholastic contracted with researchers from the Education Development Center (EDC)'s Center for Children and Technology, esteemed experts in the formative evaluation of technology products for children. This formative research project was structured to investigate how a variety of teachers responded to NEARStar and how English language learners would navigate through and interact with the software.

The work was conducted in two rounds. Round One was exploratory with CCT researchers enlisting an expert teacher who had extensive expertise with ELLs to review the product. In addition, a group of nine teachers including kindergarten and first grade classroom teachers, English as a Second Language teachers, and Title 1 Reading teachers were interviewed after exploring the program online. Finally, three English language learners (with a variety of native languages and English-language proficiency levels) were observed interacting with the NEARStar software. Round Two focused more specifically on critical areas, including instructions and directions, how to use the help function, feedback to students, assessments, reports, teacher resources, and the home-to-school connection. Four additional student observations were conducted, as well as four additional teacher interviews.

English language learners and their teachers responded positively to NEARStar. Students, regardless of their age or level of English proficiency, were highly engaged and motivated by the program. Teachers were enthusiastic about the software and articulated several implementation scenarios they could envision working successfully in their classrooms. The teacher resources provided by the program were also universally praised.

Knowledge Gained from the Center for Children and Technology

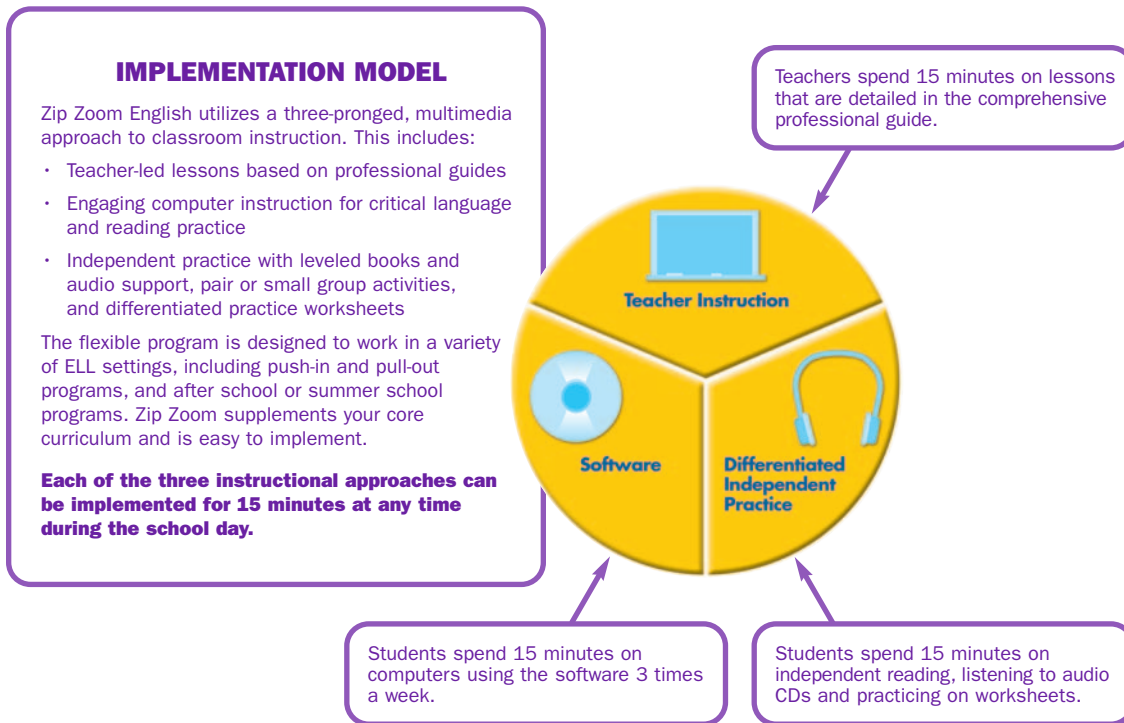
During the formative evaluation process, some thought-provoking trends emerged related to directions, the help function, feedback to the students, level of difficulty, assessments, and consistency across the program. In light of this feedback, Scholastic made numerous improvements to the software experience for young English language learners. Zip Zoom English now requires students to move sequentially through the program, with the possibility of skipping Level 1 according to high scores on the Placement Assessment and/or teacher judgment. The instructional path, including three unique level maps, was greatly clarified. New voiceovers with audio/visual cues were made clearer to both children and teachers. In addition, the assessments now have straightforward directions while being explicitly connected to each student's unique instructional path. Finally, the help function was added to Level 3 for continuous and consistent support and feedback to young learners.

Teacher Round Tables

In addition to partnering with the Center for Children and Technology, Scholastic's Research and Evaluation department conducted teacher round tables to develop a more detailed understanding of how teachers would respond to and implement Zip Zoom English in their classrooms. The primary areas of investigation included implementation, the scope and sequence, lesson plans, and program components (books, songs, and software).

The teacher round tables were conducted in late 2004 in New York City. Fifty teachers participated in the round tables, which were conducted both on-site at schools and at Scholastic's offices. Teachers were drawn from several public schools in New York City (specifically in Manhattan, Brooklyn, and Port Washington, NY). All participating teachers had extensive K–3 experience working directly with English language learners. 95% of these teachers had Master's degrees, with the majority also holding TESOL certification. Teachers working in a variety of instructional settings that support ELLs were included in the research: English as a Second Language teachers, English as a Second Language coordinators, classroom teachers (with significant numbers of ELLs) and bilingual teachers.

Teachers provided valuable insights on the scope and sequence for each level of Zip Zoom English, preferred teaching techniques for ELLs of varying levels of proficiency, and lesson plan structure. In addition, various implementation scenarios were discussed with the teachers, including pull-out ESL, general class, teacher table, learning centers, and independent practice.



Knowledge Gained From the Teacher Round Tables

Feedback from the teachers was analyzed for key trends, which influenced many product development decisions during the transition from NEARStar to Zip Zoom English. The scope and sequence was clarified and enhanced, particularly the phonics element to align with typical first grade expectations. For example, all 26 phonemes are now addressed in the program. The most significant addition, however, was the development of the Zip Zoom English Professional Guide for small group instruction, including full lesson plans and guidance for offline differentiated practice. The lesson structure was informed by leading researchers and advisors including Elfrieda Hiebert, Maria Carlo, and Diane August. Read-Alouds placing an additional emphasis on oral vocabulary and listening comprehension were added to the program. Finally, the Professional Guide now includes guided, point-of-use instruction for the software activities.

- ***Advancements to the Management System***

The teacher management system was significantly improved to support teachers beyond simply providing educational support on the Teacher Resources CD. The Zip Zoom English teacher management system monitors students' progress on all key skills, as well as their performance history. By doing so, teachers now have the resources necessary to use assessment to inform daily instruction. The management system tracks class usage, provides grouping assistance, sends alerts to the teacher regarding struggling students, and—most importantly—directly ties students' performance to their instructional path with Zip Zoom English.

- *Further Assessment Development*

In conjunction with the enhanced teacher management system, the Zip Zoom English assessment story was significantly clarified and improved. Zip Zoom English now includes Placement Assessment (for placement into Level 1 or Level 2 of the program), Progress Monitoring Assessment (five software assessments per level and teacher-evaluated learning goals for every lesson), *and* Outcomes Assessment (at the middle and end of each level to evaluate word and passage reading fluency plus comprehension). Outcomes Assessment scores may be compared and evaluated against widely accepted fluency benchmarks and norms, including the TOWRE, DIBELS, and Hasbrouck and Tindall norms.

Through the formative research approach, Scholastic can truly state that both the software and print components of Zip Zoom English respond to the unique needs and experiences of young English language learners, as well as the teachers responsible for educating them.

LOOKING FORWARD: EVALUATING THE IMPACT OF ZIP ZOOM ENGLISH

Developing English language learners' language proficiency and reading fluency are the primary educational promises of Zip Zoom English. Through focused skill development and differentiated practice, Zip Zoom English provides young ELLs access to their basal/core curriculum. With these important goals in mind, Scholastic is committed to evaluating the effectiveness of Zip Zoom English with young English language learners. Given that Zip Zoom English can be effectively implemented in a variety of instructional settings, research may examine and compare the effect of the program in both regular classrooms, as well as pull-out ESL and other settings to support English language learners. To do so, consistent implementation model(s), training support, and research tools are being developed.

Scholastic is mindful of critical educational policy shaping the teaching, testing, and accountability for English language learners in our nation today. With strong foundational, formative, and preliminary outcomes research, in addition to well-designed evaluations to come, the Zip Zoom English research program meets the rigorous requirements set forth by *No Child Left Behind*.

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