

Effects of Two Tutoring Programs on the English Reading Development of Spanish-English Bilingual Students

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Abstract

Spanish-dominant bilingual students in grades 2–5 were tutored 3 times per week for 40 minutes over 10 weeks, using 2 English reading interventions. Tutoring took place from February through April of 1 school year. One, Read Well, combined systematic phonics instruction with practice in decodable text, and the other, a revised version of Read Naturally, consisted of repeated reading, with contextualized vocabulary and comprehension instruction. The progress of tutored students ($n = 51$) was compared to that of nontutored classmates ($n = 42$) using subtests of the Woodcock Reading Mastery Tests—Revised. Students who received systematic phonics instruction made significant progress in word identification but not in word attack or passage comprehension. There were no significant effects for students in the repeated reading condition.

Despite increased attention to the teaching of reading in recent years, many students in the United States continue to have reading difficulties. On a recent National Assessment of Educational Progress, about 40% of fourth graders scored below the “proficient” level, and nearly 60% of children eligible for free and reduced-price lunch failed to reach even the “basic” standard (U.S. Department of Education, 2001).

Students for whom English is not the primary language have particular difficulties in developing English literacy (August & Hakuta, 1997). The National Research Council, however, concluded that, “With regard to reading instruction in a second language, there is remarkably little directly relevant research” (August & Hakuta, 1997, p. 59). Although large-scale scientific studies of English reading instruction for students who speak English as a second lan-

guage are currently underway (S. Vaughn, personal communication, September 2, 2003), the literature on this topic remains limited.

In this study we investigated two tutoring methods to provide support for the acquisition of English reading skills by Spanish-dominant students enrolled in a transitional bilingual program. These students, in grades 2–5, were referred for supplemental tutoring by their classroom teachers because they were having difficulty learning to read in English. As McLaughlin (1987, p. 57) noted, “For many minority-language children, reading is the beginning of school failure.”

It is important to provide effective intervention for at-risk readers, including those who are learning to read in a second language, in the early grades. In the United States, if students fail to learn to read adequately in first grade, there is about a 90% probability that they will remain poor readers in grade 4 (Juel, 1988; Torgesen & Burgess, 1998) and about a 75% probability that they will be poor readers in high school (Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996). For students in transitional bilingual programs, the process of making the transition to English reading is crucial for subsequent school success in English-only environments.

English Reading Instruction for English Language Learners

Decoding Instruction

Evidence suggests that students who speak English as a second language and are learning to read in English benefit from systematic, explicit instruction in English phonology (Gunn, Biglan, Smolkowski, & Ary, 2000; Gunn, Smolkowski, Biglan, & Black, 2002; Quiroga, Lemos-Britton, Mostafapour, Abbott, & Berninger, 2002), with attention given to elements of English that differ from students’ native language (Fashola, Drum, Mayer, & Kang, 1996; Jiménez, 1994). Quiroga et al. (2002) found that four first-

grade English language learners (ELLs) who were at risk for reading difficulties significantly improved in English word reading after receiving individual intervention that included phonological awareness instruction in both English and Spanish and explicit decoding instruction in English. Skills instruction appears most effective when coupled with practice in reading connected text and with extended opportunities to converse about text (August & Hakuta, 1997; Gersten, 1996; Gersten & Baker, 2000).

Vocabulary Instruction

Vocabulary development is critical for the English reading progress of ELLs (Brisbois, 1995; Fischer & Cabello, 1981; Grabe, 1991). Effective vocabulary instruction is directed toward a deep, integrated understanding of words and must be concentrated and repetitive (Beck, Perfetti, & McKeown, 1982). For ELLs, instruction that facilitates vocabulary development includes the preteaching of selected key words (Rousseau, Tam, & Ramnarain, 1993; Saunders, O’Brien, Lennon, & McLean, 1998), the use of visuals (Gersten & Baker, 2000), networks of words such as semantic maps (Anderson & Roit, 1996), and/or the integration of words with students’ prior experiences (Saunders et al., 1998). Ulanoff and Pucci (1999) found that building background knowledge in Spanish before reading aloud to ELLs in English supported English vocabulary development in Spanish-English bilingual third graders. The strategy of identifying and using cognates is also important for efficient reading in a second language (Nagy, Garcia, Durgunoglu, & Hancin-Bhatt, 1993).

Comprehension Instruction

The teaching of cognitive and metacognitive strategies has been shown to improve language-minority students’ comprehension of text (Chamot & O’Malley, 1996; Jiménez, 1997; Klingner & Vaughn, 1996; Muniz-Swicegood, 1994). This approach is most effective when students have ade-

quate decoding skills and adequate verbal proficiency (Klingner & Vaughn, 1996). Although good bilingual readers report the use of many strategies that competent monolingual English readers also use (Calero-Breckheimer & Goetz, 1993; Fitzgerald, 1995), some effective strategies appear to be specific to bilingualism (Jiménez, Garcia, & Pearson, 1996). Bilingual readers can be taught to take advantage of similarities between their two languages and to use strengths inherent in their bilingualism (Jiménez, 1997). Although there appears to be a transfer of strategies and processes from Spanish to English, students may need explicit instruction to facilitate this transfer (Jiménez, 1994).

Effective Instruction for Struggling Native English Readers

Over the past 25 years, numerous high-quality studies have focused on preventing reading difficulties in young native English-speaking students. Evidence suggests that the combination of effective classroom instruction and supplemental intervention in the elementary grades can prevent reading problems for most of these children (Denton & Mathes, 2003; Mathes & Denton, 2002; Snow, Burns, & Griffin, 1998; Torgesen, 2000). Likewise, struggling readers make the best progress when provided with explicit instruction balanced with extended opportunities to apply reading and writing skills in connected text. Effective instruction for these students includes the critical components of phonemic awareness, phonemic decoding skills, fluency in word recognition and text processing, construction of meaning, vocabulary, spelling, and writing (see Foorman & Torgesen, 2001; National Reading Panel, 2000; Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001; Snow et al., 1998). Intervention in small-group formats has been shown to help at-risk monolingual English readers make accelerated progress, closing the gap between their performance and that of their more proficient peers (see

Heibert & Taylor, 2000; Mathes & Denton, 2002; Wasik & Slavin, 1993).

Torgesen, Wagner, Rashotte, Alexander, and Conway (1997) identified students in kindergarten who had difficulty blending and segmenting sounds in speech, phonemic awareness skills critical to reading development. After receiving supplemental intervention, 75% of these students were able to read on grade level by the time they were in second grade. Similarly, Vellutino et al. (1996) identified middle-class students with low word-recognition skills at the beginning of grade 1. After one semester of intervention, 70% could read grade-level text, and after two semesters, over 90% were at grade level. Mathes et al. (2003) obtained similar outcomes when they provided supplemental small-group reading intervention to first graders who were at risk for reading difficulty, using two instructional approaches. At the end of first grade, 93% of the students who received intervention using one approach and 99% in the second intervention group had average or above-average basic reading skills. Thus, there is strong evidence that both classroom and supplementary instruction can reduce reading problems among monolingual English-speaking students. Similarly, there is evidence of the benefits of intensive tutoring for the English literacy development of students whose primary language is Spanish (e.g., Gunn et al., 2000, 2002; Neal & Kelly, 1999; Quiroga et al., 2002).

Virtually all of the effective interventions researchers have used provide explicit, systematic phonics instruction along with opportunities for application of the alphabetic principle in text. For English-speaking students who have adequate decoding skills but are not fluent readers, interventions including repeated reading of connected text have promoted improved oral reading fluency (Dowhower, 1987; Herman, 1985; O'Shea, Sindelar, & O'Shea, 1985; Rasinski, 1990; Samuels, 1979; Sindelar, Monda, & O'Shea, 1990; Weinstein & Cooke, 1992), which in turn supports com-

prehension (National Reading Panel, 2000). The effectiveness of these instructional practices for bilingual students who are learning to read in English has seldom been investigated.

Purpose and Design

The purpose of this study was to examine the effectiveness of two English reading tutoring interventions for Spanish-dominant English language learners. Given the preponderance of evidence of the effectiveness of supplemental reading instruction in enhancing the reading development of struggling native English readers, we hypothesized that this approach would likewise benefit children who were learning to read English as their second language. We further hypothesized that interventions that included explicit phonics instruction and repeated reading of connected text would be effective for ELLs, as they are for native English readers, particularly if these interventions included instructional strategies supported by evidence from research on English reading instruction for ELLs, including direct instruction in English phonology with opportunities to apply skills in connected text (Gunn et al., 2000, 2002), focusing instruction on phonic elements that differ between the students' first and second languages (Fashola et al., 1996; Jiménez, 1994), preteaching selected key vocabulary words (Rousseau et al., 1993; Saunders et al., 1998), engaging in conversation that facilitates the integration of vocabulary words with students' prior experiences (Saunders et al., 1998), and the provision of opportunities for extended conversation about text (Gersten, 1996; Gersten & Baker, 2000). In sum, our goal was to study the effectiveness of early literacy interventions that combine instructional strategies previously validated for native English readers with strategies that have research support for ELLs.

This study was initiated when we were approached by the director of bilingual education in a local school district with the

request that we evaluate one or more approaches for scaffolding the transition to English reading for bilingual students who were struggling to learn to read in their second language. The request was for programs that classroom teachers or tutors could implement with minimal training. The director also requested that tutoring address the specific needs of each child, because some students needed instruction in English decoding, whereas others were fairly proficient at decoding but needed instruction to improve reading comprehension.

We investigated several programs and selected two, based on the research we have summarized and on the students' instructional needs. The first was Read Well (Sprick, Howard, & Fidanque, 1998), in which students receive explicit, systematic instruction in English decoding along with sustained practice of skills in decodable text and ample opportunity for discussion of vocabulary and concepts presented in the text. We determined that this program was most appropriate for children who needed support in decoding English text. The second program we selected consisted of repeated reading of English text to develop oral reading fluency, contextualized vocabulary and comprehension instruction, and systematic monitoring and graphing of student progress. This intervention was a modified version of a published program called Read Naturally (Ilnot, 1992). We determined that it was most appropriate for children who had already attained at least a grade 1 decoding level in English. Because the two programs target different populations, we did not compare them. Instead, we compared the progress of students in each program to that of matched nontutored students from the same classrooms.

The research question addressed was: Did students in the Read Well and Read Naturally groups have significantly higher rates of growth over 10 weeks in English decoding and comprehension than did students in nontutored comparison groups?

Method

This question was addressed through an experimental design with random assignment of one member of a matched pair of students to either the tutored or nontutored condition. However, because the study was conducted in schools rather than a controlled research environment, a number of scheduling and other logistical problems emerged. We describe our design, along with problems we encountered and adaptations they necessitated.

Participants

We selected the original pool of 99 student participants based on a number of criteria. Students had to be bilingual and have Spanish as their native language. They had to have been recommended by their teachers for tutoring because of difficulty learning to read in English, and standardized assessments administered by the school had to have suggested that the students had (a) adequate oral English proficiency to benefit from tutoring provided in English and (b) at least basic proficiency in Spanish reading. For the nine students whose English oral proficiency and Spanish reading proficiency were not assessed by the school district because of student absences or lack of accessibility, we placed increased weight on teacher recommendations when deciding whether to include them in the study. The final condition of participation was parent consent.

Three students were lost to attrition, and three students in a nontutored comparison group had to be dropped because their classroom teacher began to provide the Read Naturally intervention in English as part of the regular classroom reading program. Of the final sample of 93 students, 22 were in grade 2, 37 were in grade 3, 28 were in grade 4, and six were in grade 5. All students were Hispanic, and they ranged in age from 7 years to 12 years, with a mean age of 9 years. Forty-eight were males and 45 were females. Students were enrolled in 17 bilingual classrooms in five schools. We

included students with a wide range of ages and grade levels because (a) they had similar performance in English reading, (b) school administrators were interested in evaluating interventions for older students who had not yet learned to read in English, (c) many students who were recent immigrants entered the bilingual program in the upper-elementary grades as their first experience with English education, and (d) evaluating the progress of matched pairs of tutored and nontutored students made it possible to validly contrast the progress of students in a range of grade levels and in different schools and classrooms.

Group assignments. Students were assigned to one of two reading ability groups based on their scores on the word attack subtest of the Woodcock Reading Mastery Tests—Revised (WRMT-R; Woodcock, 1987). Students with scores below a grade 1 equivalency were assigned to the emergent decoding group. Students who had a grade equivalency score on this subtest at or above grade 1 were assigned to the established decoding group. Within each of these groups, students were matched as closely as possible on pretest scores from the WRMT-R subtests (i.e., word identification, word attack, and passage comprehension). When possible, matched pairs of students came from the same classroom. One student from each matched pair was then randomly assigned to either a treatment or comparison group for one of the two interventions, with treatment students in the emergent decoding group receiving Read Well and those in the established decoding group receiving Read Naturally. Of the 93 students who completed the study, 19 were in the Read Well treatment group, 14 were in the Read Well comparison group, 32 were in the Read Naturally treatment group, and 28 were in the Read Naturally comparison group. The treatment and comparison group numbers are uneven because of attrition and the necessity of dropping three Read Naturally comparison students, as described above. One student from the Read Well compari-

son group was moved to an alternative education placement during the study and was no longer eligible to participate. In addition, one school in our study demanded that three children originally assigned to the Read Naturally comparison group receive tutoring and that three who had been assigned to the treatment group be moved to the comparison group, as a condition of the school's continued participation in the study. Because a large number of participants were from this school, we complied, changing the placements of the students approximately 1 week after the study began. We acknowledge that these changes of group assignment compromised the random assignment of students to groups, but they did not compromise the preintervention equivalence of the treatment and comparison groups.

Oral language and Spanish reading proficiency. As described above, school district personnel had evaluated students' Spanish and English oral proficiency and Spanish reading as part of their normal assessment routine prior to the study, using the Language Assessment Scales—Oral (LAS-O; De Avila & Duncan, 1990) in English and Spanish and the reading subtest of the Language Assessment Scales—Reading and Writing (LAS R/W; Duncan & De Avila, 1988) in Spanish. The LAS-O yields a categorical score varying from 1 to 5, with a score of 1 representing the lowest level of oral language proficiency and a score of 5 the highest. The LAS R/W yields a categorical score ranging from 1 to 3, with a score of 1 representing the lowest level of Spanish reading and 3 representing the highest. Table 1 contains the mean beginning scores on these measures for students in each group.

Language of instruction. As is inherent in transitional bilingual programs, of the students participating in the current study, some received the majority of their classroom reading instruction in Spanish, some were instructed mostly in English, and some received nearly equal reading instruction in both languages. Table 2 illustrates

the predominant language of instruction used in the classroom reading programs of students in each group, as reported by classroom teachers when asked whether each participating student received reading instruction primarily in English, Spanish, or in both languages.

Schools

The study was conducted in five schools in a central Texas district. During the school year in which the study was conducted, the district served a population of 13,664 students, 24.4% of whom were African American, 31.9% Hispanic, 43.1% White, 0.6% Asian/Pacific Islander, and 0.1% Native American. During the same school year, 56.2% of the students enrolled in the district were identified as economically disadvantaged based on their qualification for free or reduced-price lunch. Approximately 9% had limited English proficiency, and 7.3% were served by bilingual or English as a Second Language (ESL) programs (Texas Education Agency, 1999).

Classroom Reading Instruction: Teacher Interviews

To provide information about students' classroom bilingual reading instruction, nine of the 17 classroom teachers were interviewed about practices relating to their reading programs. Three of the teachers taught second grade, three taught third grade, two taught fourth grade, and one taught fifth grade. Five were Hispanic, and four were White. The remaining teachers were not interviewed because of time constraints or because they declined the interview. Interviews were conducted by a doctoral student who had prior experience as an educational diagnostician and was familiar with school and classroom contexts, using questions developed in advance by the first author. Teachers were interviewed in their classrooms after school or when their students were out of the room for a period of approximately 30 minutes.

The teachers were asked whether their

TABLE 1. Preintervention Performance on Language Assessment Scales (LAS) for Treatment and Comparison Groups

Group	<i>n</i>	LAS-O				LAS Reading/ Writing Spanish ^a	
		English		Spanish		<i>M</i>	<i>SD</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Read Well:							
Treatment	16	2.69	1.25	3.56	1.03	2.00	.89
Comparison	14	3.07	1.07	3.00	1.18	1.85	.80
Read Naturally:							
Treatment	29	3.76	1.15	3.86	.99	2.28	.65
Comparison	25	3.52	1.05	3.64	1.25	2.28	.79

NOTE.—LAS-O ratings range from 1 to 5, with 5 indicating high oral proficiency. LAS R/W ratings range from 1 to 3, with 3 indicating high reading and writing proficiency.

^aScores are for reading only.

TABLE 2. Predominant Language of Instruction (Percentages) in Classroom Reading Programs, Reported by Classroom Teachers

	<i>n</i>	Spanish	English	Spanish and English
Read Well:				
Treatment	19	32	10	58
Comparison	14	36	7	57
Read Naturally:				
Treatment	32	9	22	69
Comparison	28	7	29	64

reading instruction was conducted primarily in Spanish or English, or about the same amount in both languages. Following the model of the transitional bilingual program and district guidelines, Spanish was most predominant in grade 2, and English was used for almost all instruction in grade 5. Grade 3 teachers said that they tried to use as much English as possible, supplementing with Spanish as needed. All five teachers in grades 3 and 4 reported starting the year with more instruction in Spanish and increasing the proportion of English instruction as the year went on. However, they noted that students with varying English proficiency entered the bilingual program at different grade levels and that newcomers often needed substantial support in Spanish. One third-grade teacher explained that, although she taught the majority of her reading lessons in English, she sometimes

stated key terms or important information in the text first in English and then translated them into Spanish. She said that students rarely needed this translation by the end of the school year.

When asked about decoding instruction, six teachers stated that they did not teach phonics in either language. The other three teachers reported including phonics in their English, but not Spanish, reading instruction. One of these teachers described her phonics instruction as an explicit, systematic approach. One teacher noted that she taught a brief English phonics lesson for 10 minutes every other day before text reading. The third teacher discussed the use of worksheets and manipulatives to reinforce her students' understanding of English phonetic patterns.

All of the teachers interviewed stated that English vocabulary instruction was an important part of their curriculum. Four mentioned the use of word lists, and four used vocabulary lessons in the English grammar textbook. Four teachers said they taught vocabulary in the context of reading. Three stated that they read to students in English and translated difficult words into Spanish. One teacher said that she pre-taught key vocabulary in both English and Spanish before reading, and two discussed the use of visual or kinesthetic strategies to teach new English words.

All of the third- and fourth-grade teachers described their English comprehension instruction as consisting primarily of oral questioning before or during reading. One said that she translated key concepts from English text into Spanish to facilitate English comprehension. The fifth-grade teacher said that she used a systematic direct instruction method to teach comprehension skills. Three teachers in grades 3 and 4 stated that they taught comprehension skills and assigned worksheets related to a mandated statewide test. The three second-grade teachers said that they taught reading comprehension only in Spanish.

Other Sources of Reading Instruction

Three of the schools implemented a program in which community volunteers tutored students after school in reading. Some participants received this tutoring, including five from the Read Well treatment group, four from the Read Well comparison group, four from the Read Naturally treatment group, and three from the Read Naturally comparison group. Volunteers tutored 11 of these students for 1 to 2 hours per week, and the other five students attended tutoring 3 to 4 hours per week. Four students in the study received special education services for at least 1 hour per week, including two children in the Read Well comparison group, and one each in the Read Naturally treatment and comparison groups. Some bilingual classroom teachers in the study implemented the Read Naturally program in Spanish as part of their classroom reading program. This program was received in Spanish by one child in the Read Well treatment group, one in the Read Well comparison group, four in the Read Naturally treatment group, and three in the Read Naturally comparison group.

Measures

Participants were individually assessed before and after the intervention period using the word identification, word attack, and passage comprehension subtests of the

Woodcock Reading Mastery Tests—Revised (WRMT-R; Woodcock, 1987). Word identification is a measure of decoding; children are asked to read words in a list format. Word attack assesses phonemic decoding and involves reading a list of nonwords. Passage comprehension is a test of reading comprehension that employs a cloze format. That is, students are asked to read a brief passage that has a word omitted and to supply the target word or an acceptable alternative. Although we included weekly monitoring of oral reading fluency in the original study design, student and tutor absences, school cancellations of tutoring sessions, and other logistical problems resulted in some instances of potentially unreliable administration and many missing data points, rendering these data invalid for analyses. Thus, we present only the norm-referenced pre- and posttest data.

Procedures

Read Well. The Read Well program combines systematic, explicit phonics instruction with practice in decodable text and contextualized vocabulary and comprehension instruction. The procedures implemented in the Read Well treatment were: (a) tutor-directed decoding practice (10–15 minutes), including explicit instruction in letter-sound correspondences, phonemic awareness activities, and word-reading practice; (b) practice reading decodable text, with prereading and during-reading discussion and questioning designed to build vocabulary and comprehension (10–20 minutes); and (c) completion of simple comprehension worksheets.

A notable characteristic of the Read Well program is the format of the connected text used for reading practice. A series of small books is included in the program, and these contain two types of stories, those read by the students alone and those in which the teacher and students each have parts to read (duet stories). The student-read portions of all stories are decodable using the phonic elements previously taught in the

program. In the duet stories, the teacher's portion of the text contains more sophisticated language than the decodable student text. For example, in one early unit on the topic of metamorphosis, students read words such as "the," "wind," "did," and "Tim," and the teacher's part includes the text, "A hard shell called a chrysalis was beginning to form around each caterpillar" (Sprick et al., 1998). This format provides more opportunity for the introduction of vocabulary and for the application of comprehension skills than most typical decodable text formats offer.

Each Read Well unit teaches a letter-sound or letter combination. In our implementation of Read Well, tutors monitored the progress of their students using unit tests included in the program. These unit tests were also used to pretest students before beginning instruction in a new unit. If a unit focused on sounds that were the same in Spanish and English, and if the students in the group already knew these sounds, there was no need to teach the unit, and the tutor moved to the next unit. Thus, instruction was concentrated on elements that were different in the two languages, and it built on students' prior knowledge. Considerable repetition and practice were provided through reading decodable text, along with immediate feedback and error correction. The decision to implement the program in this way was supported by the research of Fashola et al. (1996) and Jiménez (1994), who concluded that ELLs benefit from explicit instruction and feedback about differences in Spanish and English orthography and phonology.

Read Naturally. This intervention consisted of repeated reading of connected text, vocabulary and comprehension instruction in the context of reading, and goal-setting and progress monitoring, based on strategies outlined by Samuels (1994). There are indications that participation in Read Naturally can promote oral reading fluency in English-speaking students (Hasbrouck, Ihnot, & Rogers, 1999) and Spanish oral

reading fluency in Spanish-speaking students (De la Colina, Parker, Hasbrouck, & Lara-Alecio, 2001).

In Read Naturally, students practice orally reading instructional-level expository passages. The program includes passages beginning at level 1, or first grade, through level 8, or eighth grade. Most students in our study read passages at first-through fourth-grade levels ranging in length from about 75 to 175 words. In Read Naturally, students practice reading a text until they can meet a preset goal for oral reading fluency, read the passage with three or fewer errors, and read with acceptable phrasing and expression. In addition, students' attention is focused on comprehension through prereading prediction and through the requirement of a written retell and/or completion of multiple-choice questions about the passage after reading. Audiotapes of the passage serve as models as students read along quietly with the tapes and work toward their fluency goals. Students normally read each passage three times with the tapes, followed by repeated readings without tape support. A final key component of the program is that students monitor their own growth by graphing the number of words read correctly per minute before and after the repeated practice. For a detailed description of the program, see Hasbrouck et al. (1999).

We modified the standard Read Naturally program, adding and extending activities related to vocabulary, decoding, and comprehension. We included oral discussion of vocabulary and comprehension because of the benefits of this type of discussion for ELLs (Gersten & Baker, 2000). Prior to the intervention, the first author identified two vocabulary words for each Read Naturally passage that were key to comprehending the passage and would likely be encountered with relatively high frequency in other text. For each word, tutors were provided with one to two sentences using the word as it was used in the passage and a question designed to stimulate discussion

of the word. For example, for the word "truth," the sentences were, "It is important that we do not tell lies. We must tell the truth. If I broke a lamp, I would tell the truth and say that I did it. Tell me about a time when you told the truth about something." Tutors pretaught the vocabulary words using this format before each new passage was read. In addition, they taught one high-frequency word for each passage (e.g., "when," "some," "have"). These words were written on flash cards by the tutors and reviewed cumulatively with the goal of fluent recognition. Further, Read Naturally tutors in our study facilitated decoding by asking students to identify words that they did not know in the passage prior to the repeated reading practice activities and by teaching those words. Tutors also monitored students' performance as they were engaged in repeated reading and supplied feedback and instruction when words were not decoded correctly. After students completed the repeated reading, tutors asked questions and attempted to draw students into discussions of the passage content.

Students followed the same routine for each expository passage, including the following steps: (a) student selects a text passage from a set of passages on his/her instructional reading level; (b) student reads the passage orally for the first time, timed by the tutor; (c) tutor engages in prereading activities with the student, teaching vocabulary and high-frequency words and establishing prior knowledge to provide a context for the passage content; (d) student graphs the fluency level (in words correct per minute or WC₁PM) for the initial reading, comparing the level to a previously established individual goal; (e) student practices reading the passage with and without audiotape modeling until he/she reaches the fluency goal; (f) student completes four to five multiple-choice comprehension questions; (g) student again reads the passage orally while being timed by the tutor; (h) tutor asks oral comprehension questions, checks answers to written compre-

hension questions, and provides scaffolding and/or instruction as necessary; and (i) student graphs the WC₁PM from the final reading, comparing this fluency rate with the goal rate.

Tutors

Tutors were 23 undergraduate university students enrolled in a class in teaching students with reading difficulties. The major field of study of all tutors was special education. For most tutors, this project represented an initial teaching experience. Tutors received training in the implementation of both the Read Naturally and Read Well programs as part of their course instruction. They were supervised by graduate students who were experienced educators. The supervisors were present at the school during tutoring, observed the tutors, provided feedback, rated their fidelity of implementation, and participated in data collection.

Implementation

Students in both programs were tutored three times per week for 40-minute periods over 10 weeks. Tutoring took place during the school day, outside of students' classrooms. At two schools students were tutored at the beginning of the school day, in the schools' cafeterias, while morning procedural activities and journal writing were taking place in the students' classrooms. Another group at each of these schools was tutored late in the afternoon in the cafeteria or commons area while other students in the classrooms had social studies or science. In two other schools tutoring was held late in the school day in empty classrooms. Tutors provided weekly reports of student attendance. According to these reports, students attended an average of 22 sessions. Tutoring sessions, particularly those occurring late in the day, were periodically cancelled by schools for various reasons, including school parties, school holidays, assemblies, field trips, and preparation for high-stakes statewide testing. The ratio of tutor to students varied from one to four

because of severe scheduling difficulties. Six students received tutoring individually, 19 were tutored in groups of two, 18 were tutored in groups of three, and eight were tutored in groups of four.

The graduate student supervisors rated tutoring sessions for fidelity to prescribed procedures for each intervention, active engagement of students in the instructional group, and lesson pacing. The fidelity ratings collected during two to five observations were averaged for each tutor. The mean fidelity rating for the 23 tutors was 90%, with 100% representing perfect fidelity of implementation.

Results

The research question examined progress in English word reading, word attack, and passage comprehension for students in each of two experimental and two comparison groups. Results are reported separately for the Read Well and Read Naturally interventions because it was not our purpose to compare these two interventions.

Preanalysis Data Inspection

Results of evaluation of the assumptions of normality and homogeneity of variance were satisfactory. The Read Well treatment and comparison groups had equivalent Spanish and English language abilities and equivalent Spanish reading abilities, as measured by the LAS-O and LAS R/W. Pretest scores on the WRMT-R subtests were also equivalent. As with the Read Well groups, there were no preintervention differences between the Read Naturally treatment and comparison groups on any of the language or reading measures.

Read Well

We calculated WRMT-R standard score means and standard deviations for the Read Well treatment and comparison groups, along with the mean gains made by students in each group. These are reported in Table 3. The standard score group mean for word identification remained essentially

unchanged for the Read Well comparison students, whereas tutored students gained an average of 4.06 standard score points during the 10-week intervention.

We conducted a repeated-measures mixed analysis of variance (ANOVA) to examine the interaction between group and change in raw scores on the WRMT-R subtests. The within-subjects factor was time, or change in raw scores between pretest and posttest. The between-subjects factor was group assignment (treatment or comparison), or the effect of tutoring. The interaction between time and group was statistically significant only for the word identification subtest, $F(1,31) = 5.70$, $p = .023$. Squared etas indicated that 16% of the variance in word identification growth was attributable to the Read Well program. Although the interaction between time and group was not statistically significant for the word attack subtest, the effect size (η^2) indicated that 6% of the variance in word attack growth was accounted for by group assignment.

Read Naturally

As with the Read Well groups, WRMT-R standard score means and standard deviations were calculated for the Read Naturally treatment and comparison groups, along with the mean gains made by students in each group (Table 4). Again, we conducted a repeated-measures mixed ANOVA to examine the interaction between group and change in raw scores on each of the WRMT-R subtests. We found no statistical significance and minimal effect sizes for the interaction between group assignment and time for all variables, indicating that the modified Read Naturally program failed to lead to growth in word identification, word attack, or passage comprehension as measured by the WRMT-R.

Discussion

The purpose of this study was to evaluate the effects of two English literacy interventions on the reading progress of Spanish-

TABLE 3. Performance on the Woodcock Reading Mastery Tests—Revised Subtests, for Read Well Treatment ($n = 19$) and Comparison ($n = 14$) Groups

Subtest/Group	Pretest		Posttest		Mean Gain ^a
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Word identification:					
Treatment	84.68	9.74	88.74	10.79	4.06
Comparison	87.93	8.20	88.14	7.06	.21
Word attack:					
Treatment	86.79	7.55	91.95	8.69	5.16
Comparison	88.86	6.59	91.21	6.15	2.35
Passage comprehension:					
Treatment	81.26	12.27	82.84	11.69	1.58
Comparison	83.07	7.37	84.64	9.70	1.57

^aMean gain is in standard score units.

TABLE 4. Performance on the Woodcock Reading Mastery Tests—Revised Subtests, for Read Naturally Treatment ($n = 32$) and Comparison ($n = 28$) Groups

Subtest/Group	Pretest		Posttest		Mean Gain ^a
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Word identification:					
Treatment	93.72	8.74	94.84	11.64	1.12
Comparison	94.79	8.75	96.54	9.65	1.75
Word attack:					
Treatment	96.53	8.45	96.31	9.37	-.22
Comparison	97.57	8.88	98.54	8.99	.97
Passage comprehension:					
Treatment	87.62	7.77	89.75	7.90	2.13
Comparison	89.36	9.31	90.07	10.26	.71

^aMean gain is in standard score units.

dominant bilingual students who are learning to read in English. Outcomes of students in the two programs were not compared to each other but to those of nontutored comparison students.

Read Well

Decoding. The Read Well intervention resulted in improvement in bilingual students' ability to read English words. Specifically, students in this program outperformed their nontutored classmates in context-free word reading. Differences in growth in English word reading between the tutored and nontutored students were statistically significant and educationally meaningful, particularly given the brief du-

ration and relatively low intensity of the intervention. These findings are consistent with those of Gunn et al. (2000, 2002), who found that Hispanic first graders who were tutored in English reading with a systematic, explicit phonics approach made significant gains in decoding skills after 1 year of instruction. In its review of the effects of phonics instruction, the National Reading Panel (2000) included one study evaluating tutoring for low-achieving monolingual readers in grades 2–6 that was similar in duration to ours. In this study (Greaney, Tunmer, & Chapman, 1997), phonics-based tutoring provided individually for 30 minutes three to four times per week for 11 weeks had a moderately low effect on word identification ($d = .37$) and a moderate ef-

fect on nonword reading ($d = .51$). These results are similar to ours, in that Read Well tutoring had a moderate effect on word identification (16% of variance accounted for) and a moderately low effect on nonword reading (6% of variance accounted for), although most students in our study received tutoring in small groups rather than individually.

In our study, English language learners who received direct instruction and supported practice in English decoding made encouraging progress over a relatively brief period. As we described, Read Well tutors administered pretests before each unit was taught, providing instruction only in phonic elements that were different in Spanish and English and that students did not know. It is interesting that most of the teachers in our study reported that they did not provide phonics instruction in Spanish or English in their classroom reading programs. Our results indicate that even a small amount of systematic English phonics instruction that builds on students' strengths and prior knowledge and addresses their needs may have significant effects on English decoding ability for ELLs. This kind of instruction could be provided regularly in bilingual classrooms and could offer significant support for transitioning bilingual students. If teachers of ELLs spend time teaching students how their second language differs in phonology and orthography from their first language, students are more likely to successfully adapt what they already know in their first language to reading in English rather than to approach learning to read in a second language as learning an overwhelming body of new knowledge. As Jiménez (1994) found, some students must be taught to transfer knowledge and skills from their first language to their second.

Comprehension. We theorized that the balanced nature of the Read Well program, with its explicit instruction in decoding coupled with ample reading and discussion of connected text, would enhance reading comprehension. However, program stu-

dents' gains in this area were negligible and did not differ from those of comparison students. Accurate and fluent reading has been identified as critical in the development of competent reading (LaBerge & Samuels, 1974; National Reading Panel, 2000; Stanovich, 1990). Although students who received the Read Well intervention made gains in decoding, their automaticity and fluency were likely not sufficient to facilitate comprehension. In the Gunn et al. (2000) study, Hispanic students made minimal growth in oral reading fluency during a similarly brief intervention, but students in this study who were tutored for 2 years had oral reading fluency gain scores comparable to non-Hispanic students in the same intervention. The limited duration of our study probably precluded large gains in fluency that would have affected comprehension.

Although we can only speculate, the lack of comprehension growth of the Read Well students alternatively may have been due to inadequate instruction in English vocabulary. Adequate vocabulary has been identified as critical for the comprehension of text in a second language (Brisbois, 1995; Fischer & Cabello, 1981; Grabe, 1991). In Read Well, vocabulary instruction is informal and takes place in the context of decoding instruction and text reading. Words are not introduced systematically and reviewed. This approach may have been insufficient for students to achieve the level of word acquisition required to improve comprehension. In their review of ESL vocabulary instruction, Blachowicz and Fisher (2000) observed that multiple studies have suggested that ELLs must learn a core vocabulary to benefit from incidental vocabulary learning as a result of engaged reading practice. Effects of the Read Well intervention might be enhanced for ELLs by the addition of a structured vocabulary component that includes active engagement of students, immersion in the words being taught, and opportunities for systematic repeated practice.

Read Naturally

Decoding. We found no evidence that the Read Naturally repeated reading intervention improved the English decoding skills of tutored students. This program offered students extended and sustained practice in reading English text, with support from audiotapes and substantial feedback and incidental instruction from the tutors. As we described, Read Naturally tutors taught the decoding of words that students indicated were difficult for them and provided feedback and instruction when students did not decode words correctly during repeated reading practice. These strategies did not produce measurable gains in bilingual students' ability to decode lists of English words and non-words. Such findings reinforce the importance of explicit instruction in English phonology for ELLs. Subsequent research should investigate the effects of the combination of a decoding-focused intervention with a repeated-reading fluency intervention on ELLs' ability to apply decoding skills and strategies to connected text.

Comprehension. Our prediction that the Read Naturally program, with its emphasis on repeated reading and discussion, would promote comprehension of English text was not supported. After observing students in the intervention, we recognized the need to determine how fast students learning to read in English as a second language *should* read. It is possible that increased fluency may have an adverse effect on comprehension for these students, who may need adequate time to integrate what they have read in a language that is not their native tongue. Furthermore, as in the Read Well intervention, we theorize that some students require more systematic vocabulary instruction in order to make large gains in comprehending English text. The effects of interventions targeting English vocabulary development for ELLs should be investigated in future research. This kind of instruction might be combined effectively

with a repeated-reading intervention such as Read Naturally.

Limitations and Directions for Future Research

Relative to other reading intervention studies, ours was shorter and less intensive in that inexperienced preservice teachers tutored groups of up to four students. These limitations, along with our small sample size, biased the results against supporting our hypothesis that the Read Well and Read Naturally programs would significantly improve children's reading abilities. For example, the observed power for the Read Well word attack contrast was .26, which detected an O^2 of .06, using an alpha of .05. Likewise, the standardized achievement test we employed as the measure of growth in this study may have lacked the sensitivity to detect meaningful change over a brief period. Thus, future research that employs more powerful methods is needed to fairly evaluate these tutorial programs, and our results should not be interpreted as definitive evidence that the programs are ineffective for students learning to read English as a second language.

Educators have long realized that there is "no quick fix" (Allington & Walmsley, 1995, p. 253) for reading difficulties some monolingual English students experience. Stanovich (1986) observed that reading problems become compounded by lack of reading practice as students progress through the grades, and Francis et al. (1996) illustrated the persistence of early reading difficulties into high school. Our study illustrates that students in grades 2–5 who struggle to learn to read in a second language may need prolonged intervention to overcome reading difficulties in English. More research is needed to extend the understanding of effective intervention programs and instructional strategies for students learning to read in a second language. For example, the optimum levels of oral reading fluency for second-language students at different stages of English literacy

acquisition are not known. Similarly, this study indicates that more research on the interactions between explicit phonics instruction, engaged text practice, and dialogue with adult tutors or teachers is warranted.

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