Literacy Characteristics of Hispanic Adolescent Immigrants with Limited Prior Education

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Abstract

Secondary school-aged students with little schooling in their native countries face severe obstacles to school achievement in the United States. The most critical of these obstacles is limited literacy in either their native language or English. In contrast, students who arrive well-prepared academically and highly literate in a language other than English possess conceptual knowledge and skills such as reading and writing that can be transferred from their native language. Adolescent students lacking an appropriate educational background must develop literacy as quickly as possible so that they can use reading and writing as learning tools to acquire the concepts and skills they have missed by not having had access to formal schooling in their native countries. Information about effective instructional practices for developing literacy with secondary English language learners is lacking, yet secondary schools are reporting a significant number of non-English-speaking students with limited or no native language literacy.

This paper reports on Project Accelerated Literacy (PAL), a study designed to identify effective approaches to developing literacy in under-schooled adolescent English language learners. The study is investigating the English literacy development of approximately 80 recent teenaged immigrants from Spanish-speaking countries with low levels of literacy in Spanish. Two different instructional conditions are being compared: English literacy instruction with native language support (referred to as the bilingual condition) and all-English literacy instruction (referred to as the monolingual condition). The study is also investigating the relationship of each condition to referrals for special education. The study is being conducted over a three-year period (1997-2000). In the first year, participating teachers completed two graduate level courses at The George Washington University (GWU) as preparation for implementing the literacy curricula in the second year. This same process was repeated in the second year with a new cohort of teachers, who are currently implementing the curricula. During the implementation years, teachers are enrolled in a six-credit-hour graduate practicum course at GWU in which their classes are observed and they meet for a biweekly seminar. The two cohorts of students (Years 2 and 3) will be combined for data analysis purposes to increase the size of study participants, which is necessary because of the high rate of attrition of this student population.

Introduction

High-school-aged adolescents who emigrate to the United States with no knowledge of English and little schooling in their native countries encounter even greater difficulties in American schools than their peers who have had the benefit of appropriate schooling in their country of origin. Students without a native language foundation of reading, writing, and schooling lack the skills and academic knowledge that can be transferred to English literacy
development and school achievement. In contrast, students who arrive well-prepared academically and highly literate in a language other than English possess conceptual knowledge and skills such as reading and writing that can assist their development of full literacy in English.

Adolescent immigrant students with limited prior educational experiences must develop reading, writing, and other literacies as quickly as possible so that they can use these skills as learning tools to acquire the concepts and skills they have missed by not having had access to formal schooling in their native countries (Chamot, 1998). Information about effective instructional practices for developing literacy with secondary English language learners (ELLs) is lacking, yet secondary schools are reporting a significant number of non-English-speaking students with limited or no native language literacy (Chamot, Keatley, & Schiavone, 1997). These students arrive from countries that include, but are not limited to, Spanish-speaking areas and some parts of Africa. The reasons for students’ lack of prior schooling is in most cases due to war, civil unrest, cultural customs, or a combination of these factors.

The most effective and efficient approach to developing literacy in English for secondary students lacking native language reading and writing skills is an unresolved question. Much more is known about young children’s second language literacy development. While research points to the desirability of developing literacy first in young children’s native language so that they can transfer reading and writing skills to English (August, 1998; Collier, 1992; 1995; Crawford, 1997; Krashen, 1993; Ramírez, 1992; Thomas & Collier, 1999), little is known about the most effective instructional approach for adolescent students. Logic indicates that older English language learning students, like their younger counterparts, would find it much easier to learn to read and write first in the language they can already speak, and that skills developed in the first language could be transferred to literacy acquisition in the second language. However, there has not yet been any research to confirm this hypothesis. It could be that secondary school English language learners’ developmental and cognitive maturity facilitate literacy acquisition directly in English. Adolescent attitudes and motivation are also developmentally different from those of young children. Since teenagers are attempting to establish both independence and a sense of their own individuality, they may be less likely to accept what they may perceive as a slower path to English literacy through initial literacy development in their native language.

The purpose of this paper is to describe an ongoing study (Project Accelerated Literacy) that is examining the characteristics of Spanish-speaking high school students with limited prior education in their native countries and the effects of instruction on their development of English literacy. Although this study focuses on Spanish-speaking high school ELL students, the results will have applications to all populations of older students with limited native language literacy.

Background

High levels of literacy are essential for meeting the nation’s needs for productive citizens and workers in the new century, yet many immigrant youth are unable to complete high school because they lack the academic language and literacy skills needed for successful school achievement. Of these, the largest group come from Spanish-speaking countries, comprising about 75% of limited English proficient students in the United States (USDE, 1992). School-aged students with Spanish-language backgrounds comprise about 12% of all students in U. S.
schools (NCES, 1995). The school dropout rate for students who did not speak English well was over 35% for Spanish-speaking students aged 16 through 24 in 1991 (NCES, 1993). For students who did not speak English at all, the dropout rate in 1992 was over 83% (NCES, 1994). Only one in ten recent immigrant youth were enrolled in college in 1989 and, of these, Spanish speakers were half as likely to enroll in college as other immigrants (NCES, 1994).

Since published information about numbers of low-literacy immigrant students enrolled in secondary schools was not available, a telephone survey was conducted of the 29 school districts in the United States with the largest numbers of English language learners (Chamot et al., 1997). Each school district was asked the number of secondary school students enrolled in ESL and/or bilingual education programs. Then, the school district representative was asked what percentage of this number had been identified as having limited literacy in their native language. The responses were tallied, with the result that just over 10% or 17,579 students out of a total of 172,128 secondary school ESL students were identified as low literacy.

This survey and the other statistics cited paint a bleak picture of the current prospects for Spanish-language background students to complete high school and continue into college. The picture is equally bleak for low-literacy students with other language backgrounds.

Educators acknowledge the need to identify effective instructional practices for low-literacy adolescent English language learning students. The research of Cummins (1981; 1984; 1993; 1996) and Collier (1992; 1995) has documented the length of time needed for ELL students to reach grade-level norms in school achievement. The average number of years ranges from 4 to 7 for students with schooling in their native language, to up to 10 years for students without native-language schooling. Since older students do not have an extended time period to develop academic English skills, it is important to find ways to accelerate their literacy development and, through literacy, their access to the academic curriculum.

One instructional approach is to develop literacy first in students’ native language so that they can transfer reading and writing skills to English. Extensive research supports the transfer of literacy from a first language (L1) to a second language (L2), and it may be that explicit instruction in learning strategies for reading and writing can increase students’ ability to transfer comprehension and composition skills from L1 to L2.

Literacy and transfer of skills from L1 to L2 has been studied thoroughly with elementary school students. The most extensive study of K-6 students to date found that students provided with extensive native language instruction would eventually reach higher levels of achievement than students who are exited quickly into all-English instruction, and that the native language instruction did not hinder the acquisition of English literacy (Ramírez, 1992). However, the gains favoring a bilingual approach appear over the long-term, while in the first few years of English acquisition, students receiving all-English instruction appear to be making faster progress (Collier, 1992; Thomas & Collier, 1999).

We do not know if the research findings at the elementary school level will hold equally true for secondary school students. In addition to the factors mentioned above involving differences in level of cognitive development and possible motivation issues for older students,
there are practical concerns as well. Most school districts do not have the resources or licensed
teachers needed to provide native language instruction in all curriculum areas. At the secondary
level, it would be an easier task to provide native language support rather than a complete
bilingual curriculum. This support could consist of intensive literacy development in students’
native language coupled with explicit instruction on ways to transfer skills to English. However,
given the short number of years that secondary students are in school before they can legally
drop out, it may be more beneficial to provide them with intensive instruction in literacy
exclusively in English in the hope that initial faster progress (if this holds true as in elementary
students) will foster feelings of success that will motivate students to stay in school.

In addition to the need for identifying the most effective instructional approach for low-
literacy adolescent ELL students in general, effective instruction for ESL students with special
needs also has to be considered (Brice & Roseberry-McKibbin, 1999). Identifying special needs
of native language low-literacy and non-English speaking students is especially challenging, as it
is difficult to separate difficulties due to limited literacy and those caused by other factors.
Culturally and linguistically diverse students continue to be both over- and under-represented in
Special Education classes (Baca & de Valenzuela, 1998). This is of concern, since students
receiving inappropriate placement are more likely than others are to fail. These special education
issues were important components of Project Accelerated Literacy (PAL).

The principal thrust of the PAL study, however, was an investigation of the impact of all-
English literacy instruction (referred to as the monolingual condition) compared to English
literacy instruction with native language support (referred to as the bilingual condition). No
comprehensive research studies on the acquisition of English literacy had been conducted
previously with adolescents with low literacy in their native language. The PAL study
documented the characteristics of Spanish-speaking adolescents with low or no literacy in
their native language and their acquisition of literacy in English in each of the two conditions
(Chamot, Keatley, Mazur, & Anstrom, in preparation).

**Overview of the PAL Study**

The study was conducted over a three-year period (1997-2000). In the first year,
participating teachers completed two graduate-level courses at The George Washington
University (GWU) as preparation for implementing the literacy curricula in the second year. This
same process was repeated in the second year with a new cohort of teachers, who then
implemented the curricula in their classrooms. During the implementation years, teachers
enrolled in a further six-credit hour graduate practicum course at GWU in which their classes
were observed and they met for a biweekly seminar. The two cohorts of students (Years
2 and 3) were combined for data analysis purposes to increase the size of study participants. This
was necessary because of the high rate of attrition of this student population.

**Context and Participants**

The PAL study was conducted in a linguistically and ethnically diverse setting.
Participants included teachers and their beginning-level ESL students who had been placed in
“literacy” classes because of interrupted prior schooling and low native-language literacy.
**Context:** Four school districts in the Washington, DC, metropolitan area, representing both urban and suburban settings, participated in the study. These school districts have been receiving large numbers of immigrant students for several years, and are therefore experienced in meeting the needs of English language learning students. Across the four school districts, more than 70 different languages are represented in the ELL population. Of these, the predominant language background is Spanish (about 75%). In recent years, each school district has become aware of the needs of older immigrant students with limited prior education, and has established “literacy” or "special needs" classes where numbers of students are sufficient to support a separate class. These classes are likely to be composed of predominantly Spanish-speaking students, though they may also include speakers of languages such as Somali or Amharic. Within each class, students are at different literacy levels in their native languages, though all are beginners in acquiring English proficiency. Students in literacy classes may arrive or leave at any time during the school year, and the number of students in a class at any given time may range from 4 to 20. These factors, among others, make both teaching and research extraordinarily challenging.

**Teacher Participants:** Teachers in the PAL study were licensed to teach ESL in their respective school districts and were recommended for project participation by their school district and/or by GWU faculty. Teachers in the native language support condition were fully bilingual in Spanish and English. All PAL teachers completed 12 graduate-credit hours at GWU during their participation in PAL. This course work was designed to acquaint teachers with issues and approaches in literacy instruction for adolescent ELL students, to reach consensus on instructional approaches, and to develop monolingual and bilingual literacy curricula. Fourteen teachers participated in the study over the two years of instructional implementation.

**Student Participants:** Students in the PAL study were native-Spanish speakers, aged 14 to 20, and enrolled in public high schools in participating school districts in the Washington, DC, area. All student participants had been identified by their school districts as low-literacy, meaning that they had experienced gaps in their prior education sufficient to make it difficult if not impossible to succeed in the regular beginning ESL class. Native countries represented by participating students were El Salvador, Bolivia, Nicaragua, Honduras, Guatemala, Mexico, and the Dominican Republic. Parental permission was obtained for all study participants younger than 18, and informed consent to participate in the study was given by students 18 and older. No student was included in the data collection without informed written permission to participate in the research.

Pre- and post-test data will be available for a combined total of 74 students, 29 in Cohort 1 (1998-1999) and 45 in Cohort 2 (1999-2000). The attrition rate for both cohorts was about 25%. This not-unexpected attrition was due to factors such as returning to native country, moving to a different location, or dropping out of school.

**Instruments:** Two of the measurement instruments used in the PAL study were standardized measures, The Woodcock Language Proficiency Battery - Revised: Spanish and English Forms and The Language Assessment Scales - Reading and Writing, Spanish and English. In addition, a number of instruments were developed for this study in order to obtain an
in-depth understanding of student characteristics and achievement. These included individual structured interviews at the beginning and end of the school year, a test of phonemic awareness in English and Spanish, a reading test in English with comprehension questions and recall in Spanish, a learning strategies think-aloud interview, a translated and adapted version of the Pintrich Motivation Strategies Questionnaire (MSQ), and teacher interviews and questionnaires.

**Procedures**

The components of the PAL study included: development and implementation of two literacy curricula, professional development of teachers, identification of students’ literacy characteristics in Spanish at the beginning of the school year, pre- and post-testing of student’s literacy skills in English and Spanish to assess the impact of each curriculum, and an investigation of how each curriculum affected special education students.

**Professional Development of Teachers and Instructional Model**

In order to maintain as much consistency as possible in instruction across classrooms, a common curriculum was developed and implemented. This curriculum had two versions: one provided instruction exclusively in English (the monolingual curriculum), while the second provided the same curriculum with native-language support (the bilingual curriculum). It was considered important to involve teachers in the curriculum development process for two major reasons. First, the expertise of ESL teachers experienced in working with literacy students provided invaluable practical insights for meeting student needs. Second, we believed that teachers would be more likely to implement a curriculum that they had had a hand in developing. The curriculum development process took place during the first two graduate-level courses (Foundations of Reading Development and Diagnostic Teaching of Reading in the Secondary School) completed by participating teachers.

During the first course, it became apparent that teachers from participating school districts had differing philosophical and methodological views. Some of the teachers were strong proponents of a whole language approach to literacy development, while others argued in favor of a phonics-based approach. This issue was resolved through discussion and study of relevant research, and a decision was reached to develop a balanced reading approach that would include both authentic reading and practice with word attack skills.

Teachers decided on the scope and sequence of content topics, which included typical beginning ESL topics (such as school, weather, seasons, clothing, daily activities, family, home) and some content-based topics (such as health, community, the senses, geography). Teachers worked in cross-school district groups to develop thematic units for each topic. These units went through an extensive revision process as teachers and researchers worked together to create a balanced literacy curriculum for an entire school year. The first cohort of teachers developed thematic units for approximately three-quarters of the school year, and the second cohort developed units for the remainder of the year. Table 1 describes the scope of activities included in each thematic unit. In addition to planning the lessons for each unit, teachers and researchers also conducted a comprehensive search for appropriate instructional materials. Most important
was the selection of reading materials for both individual reading and classroom libraries. The final selection included trade books in both English and Spanish, and school district-developed storybooks in English and bilingual (English and Spanish) books. Genres included in the books selected were realistic fiction, folktales and legends, informational texts, and appropriate children’s literature. Students read these materials in class and engaged in a number of reading activities. In addition, the classroom libraries were used for regular periods of sustained silent reading.

Materials used for teaching vocabulary, word attack skills, language patterns, learning strategies, and writing were developed by the teachers and researchers.

Table 2 illustrates the time allotments in each daily 90-minute period in the bilingual and monolingual classrooms.

In the bilingual or native language support condition, the portion of the lesson in Spanish was designed to teach concepts and skills needed for the English part of the lesson. In addition, during the Spanish part of the lesson, students had opportunities to enjoy literature from their own cultural background, to learn about different genres and basic literary analysis, and to compose their own stories and poems. Learning strategies for reading and writing were taught in the Spanish portion of the lesson and reintroduced during the English part for additional practice and to encourage transfer. Grammatical contrasts and similarities between the two languages are also addressed during the Spanish portion of the lesson. After about 30 minutes of instruction in Spanish, the bilingual teacher switched to English and taught the same activities as in the monolingual-English classes, though with less time allocated to some activities (see Table 2).

In the monolingual-English condition, more time was allocated to word attack (5 minutes) and reading in English (5 minutes) than in the bilingual condition. In addition, up to 20 minutes of additional practice activities were available in the English condition. The extra 30 minutes devoted to these types of activities in the English monolingual condition provided for additional explanation, modeling, demonstration, and practice that were deemed necessary when native-language support was not provided.

The monolingual and the bilingual curricula were both implemented by the first-and-second-year cohorts of teachers. Teachers moved through the curricula at different rates that reflected the diverse literacy levels of their students. Classroom observations by researchers were conducted on a regular basis, and teachers met with researchers in a bi-weekly seminar. This seminar served as a vehicle for identifying any difficulties encountered with the curriculum, sharing of information about student progress, and suggesting ideas to be incorporated in future weeks of the curriculum. An issue that concerned both teachers and researchers was the need for each teacher to teach the curriculum as written, rather than to make spur-of-the-moment individual adaptations. In order to make valid comparisons across classrooms, it was necessary to keep the instruction as parallel as possible, so teachers were asked to follow the curriculum lesson plans exactly as they and the researchers had developed them. In order to provide teachers with some flexibility and opportunities for creativity and teachable moments, lessons were planned for only four days in each week. Teachers used the fifth day in any way they wished - for review, Sustained Silent Reading, writing projects, catching up, or additional
practice activities. In addition, any requests by teachers for modifications, substitutions, or additions were noted and will be incorporated into the final revised curriculum.
Table 1. PAL Curriculum Scope and Sequence

<table>
<thead>
<tr>
<th>Lessons address objectives in the following categories</th>
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<tr>
<td><strong>Content</strong> (e.g., school, feelings, weather, foods, geography, science)</td>
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<tr>
<td><strong>Patterns</strong> (e.g., <em>be</em>, pronouns, plurals, <em>a/an</em>, contractions, questions, negations)</td>
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<tr>
<td><strong>Word Attack</strong> (e.g., names and sounds of letters, word families, syllabification, blending sounds, silent &gt;e=)</td>
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<tr>
<td><strong>Writing</strong> (e.g., writing letters of the alphabet, handwriting, punctuation, spelling, clear expression, journals, personal experiences, stories, poems)</td>
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<tr>
<td><strong>Reading Comprehension</strong> (e.g., understanding factual information, identifying elements of a story, finding main idea, identifying fiction and non-fiction, reading for pleasure)</td>
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<tr>
<td><strong>Vocabulary</strong> (e.g. receptive vocabulary development, meaning and spelling of core vocabulary in each content area)</td>
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<tr>
<td><strong>Learning strategies</strong> (e.g., decoding, identifying patterns, using imagery, cooperating with peers, using cognates, predicting, making inferences, planning, revising)</td>
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Table 2. Monolingual and Bilingual Lesson Time Allocations

<table>
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<tr>
<th>Each of 4 weekly 90-minute lessons is organized as follows:</th>
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<tbody>
<tr>
<td><strong>English Monolingual</strong></td>
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<tr>
<td>Warm-up - 5 min.</td>
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<tr>
<td>Content/Patterns - 30 min.</td>
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<tr>
<td>Word Attack - 15 min.</td>
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<tr>
<td>Additional Practice Activities - 20 min.</td>
</tr>
<tr>
<td>Reading/ Writing - 20 min.</td>
</tr>
<tr>
<td><strong>Spanish Support (Bilingual)</strong></td>
</tr>
<tr>
<td>Spanish Patterns/ Word Attack - 15 min.</td>
</tr>
<tr>
<td>Spanish Reading/ Writing - 15 min.</td>
</tr>
<tr>
<td>English Warm-up - 5 min.</td>
</tr>
<tr>
<td>English Content/Patterns - 30 min.</td>
</tr>
<tr>
<td>English Word Attack - 10 min.</td>
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<tr>
<td>English Reading/ Writing - 15 min.</td>
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<tr>
<th>On the fifth day of each week, the 90-minute lesson is structured by the teacher and includes activities such as:</th>
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<tbody>
<tr>
<td><strong>Writing Projects</strong></td>
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<tr>
<td><strong>Review Activities</strong></td>
</tr>
<tr>
<td><strong>Sustained Silent Reading</strong></td>
</tr>
<tr>
<td><strong>Assessment Activities</strong></td>
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</table>

Data Collection

The impact of language-of-instruction on reading and writing in English was measured by (1) the Woodcock Language Proficiency Battery - Revised, English and Spanish Forms, (2) the Language Assessment Scales (Reading and Writing), English and Spanish, (3) an experiment-constructed test on reading in English that measured recall and comprehension (literal, inferential, and critical) in Spanish (administered at post-test only), (4) a Spanish think-aloud interview conducted with students while they read in English that was designed to reveal
their learning strategies (post-test only), (5) a test of phonemic awareness in Spanish and English that included ability to segment, blend, and delete onsets and rhymes in single-syllable words, and (6) writing samples in English and Spanish.

Motivation and feelings of self-efficacy were measured using (1) a translated, modified version of the Pintrich Motivation Strategies Questionnaire (MSQ), and (2) specific direct questions (accompanied by Likert-like scales) about feelings of self-efficacy, motivation to study English, and students’ perceptions of their parents'/guardians’ attitudes about the importance of studying English.

Background information on students was collected at the beginning of each year through individual interviews in Spanish. These included information such as country, age, educational history, interests, hobbies, employment and hours worked, family, family literacy, friends, feelings about moving to the U.S., feelings about school in the U.S., reasons for wanting to read and write in English, attitudes and perception of parents’ attitudes towards native language support in the ESL class, and plans for the future.

Students were also asked about what other classes they were taking, whether any assistance was provided in Spanish to help them understand the content of these classes, and how much they believed they were learning in these classes. This extensive pre-test structured interview provided qualitative information to supplement the quantitative data collected through standardized measures.

End-of-year individual student interviews followed a similar approach. New questions included attitudes towards the PAL curriculum, how much students believed they had learned during the year, and what help they had received in Spanish at school outside of that provided in the bilingual PAL classes. In addition, students were asked how much they believed they had learned from each separate component of the PAL curriculum (e.g. vocabulary, grammatical patterns, word attack, reading, writing). They were also asked about homework and outside reading.

A sample of 10 students from the first cohort (1998-1999) was followed in the next school year (1999-2000) to determine the effects over time of the literacy instruction provided with and without native language support. These follow-up students were shadowed for part of their school day and interviewed about their perceptions of success in these classes. Their teachers were also interviewed and asked to rate the student's level of success in that particular class. This information was used with information gathered the previous year during this cohort’s participation in the PAL curriculum to develop case studies of individual students.

Structured interviews were conducted with all participating teachers each year to record their perceptions of the effectiveness of the language-of-instruction conditions and their evaluations of effectiveness were compared across language-of-instruction conditions. The impact of language-of-instruction on referrals to special education was also evaluated through PAL teacher interviews/questionnaires and through questionnaires to special education teachers at each school.
The analysis of pre- and post-test data from all of these measures and from classroom observations is currently being prepared for publication (Chamot, Keatley, Mazur, & Anstrom, in preparation).

**Spanish Literacy Characteristics of Students at Pre-Test**

We were particularly interested in identifying the characteristics of students, including a better understanding of their literacy level in Spanish, at the onset of the study. Initial literacy level in English was of less interest because we knew that all students were at the very beginning of their English acquisition. The picture that emerged of students’ literacy strengths and weaknesses in Spanish is important to understand because of the role that native language literacy (or lack of it) plays in developing literacy in English. Performance on various subtests of The Woodcock Language Proficiency Battery - Revised: Spanish and English Forms provided important quantitative information that will be enhanced by qualitative information provided by other measures in the final analysis of data (Chamot et al., in preparation).

A wide range of Spanish literacy levels (from mean grade equivalents of second to eleventh grade) for the participating students was evident at the beginning of their schooling in the United States, yet all of these students had been identified by their school district screening procedures as having low literacy in Spanish. It was clear that some of the students were misidentified for this particular class and, in fact, in the course of each school year it became obvious to the teachers that some students were not really at literacy level and they were accordingly moved to a more appropriate class. Such students, therefore, were not included in the final data analysis. However, even without the students who tested at grade level in Spanish literacy, variability in different aspects of Spanish literacy remained large.

In looking at the Woodcock sub-tests on which students performed relatively well on average, and comparing them to those sub-tests on which most students performed considerably below grade level, some conclusions can be drawn about their literacy levels and instructional needs. In general, students scored much higher on mechanical skills than expected, but at expected low levels on vocabulary and reading comprehension.

The sub-test with the highest mean grade equivalent score (mid-eleventh grade) was Letter-Word Identification. In this sub-test, the student has to say the words displayed by the examiner. The sub-test with the second highest mean grade equivalent score (late ninth grade) was Word Attack, in which the student has to pronounce nonsense words. Both of these tests require an ability to match graphemes to their appropriate phonemes, that is, decode. The high mean scores on these two sub-tests show that most students were skillful decoders in Spanish; they could recognize the letters in words and the sounds they stand for. This basic building block of literacy was in place for most students, thus providing them with a necessary foundation for developing full literacy in their native language and in English.

The picture changes, however, when mean grade equivalent scores are examined for the other sub-tests, in which the mean scores were far below the grade level norm. On the Picture Vocabulary sub-test, students’ mean oral Spanish vocabulary scores were equivalent to those of fourth graders. What this means in practical terms is that even when students could decode words
in sentences and paragraphs, they did not necessarily recognize the word decoded. The Reading Vocabulary sub-test, in which students had to read words and then select synonyms or antonyms, had a mean grade score equivalent to mid-second grade, even lower than the oral vocabulary mean scores. A conclusion that can be drawn from this finding is that students have not yet developed the range of vocabulary that is essential for skillful reading comprehension. An examination of the items on the vocabulary sub-tests shows a progression of increasingly academic-related words. Since all students had interrupted prior education, with many having been out of school for a number of years, it is not surprising that they had not had the opportunity to develop the type of vocabulary typically associated with learning in school. This lack of academic vocabulary is likely to be the main reason for the depressed scores on the sub-test Passage Comprehension. In spite of their skill at decoding in Spanish, students encountered new vocabulary words in reading that prevented them from fully comprehending the text.

Another sub-test that likely reflected lack of schooling was Verbal Analogies. Making analogies requires an analytical ability to make comparisons between semantic relationships, a skill that is typically taught in school.

The two sub-tests that measured students’ writing proficiency, Dictation and Writing Samples, indicated that most students were performing at second or third grade level in Spanish at pre-test. Again, this result can be attributed to limited formal schooling. Similar patterns were found in the longer writing samples elicited on the LAS (Spanish). Many students wrote sentences that appeared to be an attempt to write down oral language, displaying limited mechanical skills (word segmentation, spelling, punctuation) and lack of coherence and complexity of ideas.

In summary, students’ performance in Spanish on both reading and writing measures revealed considerable variability that is nevertheless consistent with lack of access to appropriate schooling in their native countries. When all post-test data are analyzed, it will be possible to ascertain achievement gains in both Spanish and English on two standardized measures, the Woodcock Language Proficiency Battery-Revised and the Language Assessment Scales: Reading and Writing. In addition to these measures, quantitative and qualitative information collected at pre-test and/or post-test will provide a more detailed picture of student growth in literacy as well as their motivation, use of learning strategies, and perceptions of the literacy curriculum and instruction condition in which they participated.

**Significance of the PAL Study**

Final results of this study (Chamot et al., in preparation) will provide important information about instruction for low native-language literacy, beginning level ESL students. The study was wide-ranging in the types of measures used to assess student learning and motivation, yet it focused on only one difference in the literacy curriculum implemented: the presence or absence of native language support. The study controlled variability of instruction across classrooms by using a set of detailed lesson plans that were followed by participating teachers.
We expect that the results of this study will not be simple, but that a complex interaction between literacy development and instructional approach will be evident. Even though all teachers were teaching the same core curriculum, considerable variation in teaching style and approach was observed. This was reflected in differing average gain scores in each class. A better understanding of the relationship between language of instruction and special needs students will be another outcome of this study.

The findings of the PAL study will provide the groundwork for future research with low native-language-literacy secondary-school populations, including the role of teacher effectiveness. This study will also have implications for the professional development of ESL and bilingual secondary teachers and for curriculum development at this level.

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References


Prior to 1965, most immigrants to the US were European and Canadian. Sixty-one percent of our first-generation immigrant students were Hispanic and eighteen percent were Asian, which was consistent with the demographic characteristics of immigrants who arrived in the United States in the late 1990s and early 2000s, when many of the immigrants in the PISA sample would have entered the United States as young children. After accounting for the differences in the observed characteristics of schools and students, average achievement was higher in urban public schools. Immigrant adolescents come from a wide range of socioeconomic backgrounds and attend schools with different resources than their third-plus generation peers.