

UC Berkeley

Policy Reports

Title

How Long Does It Take English Learners to Attain Proficiency

Permalink

<https://escholarship.org/uc/item/13w7m06g>

Author

Hakuta, Kenji

Publication Date

2000

Peer reviewed

UC LMRI

How Long Does It Take English Learners to Attain Proficiency?

Kenji Hakuta, Yuko Goto Butler and Daria Witt

University of California

**LINGUISTIC MINORITY
RESEARCH INSTITUTE**



**How Long Does It Take English
Learners to Attain Proficiency?**

Kenji Hakuta, Yuko Goto Butler
and Daria Witt

Stanford University

January 2000

The University of California Linguistic Minority Research Institute
Policy Report 2000-1

Preparation of this paper, including the data collection, was supported, in part, by a grant from the Spencer Foundation through a Senior Scholar Fellowship to the first author. We are grateful to Laura Alvarez, Michael Broom, Camille Esch, and Marianna Sanchez for assistance in data collection, and to the district staff in Districts A and B who remain anonymous, following agreements prior to data collection. We thank Russell Rumberger of the UC LMRI and three anonymous reviewers for their helpful critiques.

Abstract

One of the most commonly asked questions about the education of language minority students is how long they need special services, such as English-as-a-Second-Language (ESL) and bilingual education. Under the U. S. Supreme Court's interpretation of the Civil Rights Act in *Lau v. Nichols* (1974), local school districts and states have an obligation to provide appropriate services to limited-English-proficient students (in California now referred to as EL or English learner students), but policymakers have long debated setting time limits for students to receive such services.

The purpose of this paper is to pull together findings that directly address this question. This study reports on data from four different school districts to draw conclusions on how long it takes students to develop oral and academic English proficiency. Academic English proficiency refers to the ability to use language in academic contexts, which is particularly important for long-term success in school. Two of the data sets are from two school districts in the San Francisco Bay Area and the other two are based on summary data from reports by researchers in Canada. The data were used to analyze various forms of English proficiency as a function of length of exposure to English.

The clear conclusion emerging from these data sets is that even in two California districts that are considered the most successful in teaching English to LEP students, oral proficiency takes 3 to 5 years to develop, and academic English proficiency can take 4 to 7 years. The data from the two school districts in Canada offer corroboration. Indeed, these estimates of the time it takes may be underestimates, because only students who remained the same district since kindergarten were included. While critics of bilingual education have claimed that use of the native language delays the acquisition of English (a claim that is without foundation in the academic literature on bilingualism), it is worth noting that only one of the three districts offered bilingual education.

The analysis also revealed continuing and widening gap between EL students and native English speakers. The gap illustrates the daunting task facing these students, who not only have to acquire oral and academic English, but also have to keep pace with native English speakers, who continue to develop their language skills. It may simply not be possible, within the constraints of the time available in regular formal school hours, to offer efficient instruction that would enable the EL students to catch up with the rest. Alternatives such as special summer and after-school programs may be needed.

The results suggest that policies that assume rapid acquisition of English – the extreme case being Proposition 227 that explicitly calls for “sheltered English immersion during a temporary transition period not normally intended to exceed one year” – are wildly unrealistic. A much more sensible policy would be one that sets aside the entire spectrum of the elementary grades as the realistic range within which English acquisition is accomplished, and plans a balanced curriculum that pays attention not just to English, but to the full array of academic needs of the students.

One of the most commonly asked questions about the education of language minority students is how long they need special language services, such as English-as-a-Second-Language (ESL) and bilingual education. Under the U. S. Supreme Court's interpretation of the Civil Rights Act in *Lau v. Nichols* (1974), local school districts and states have an obligation to provide appropriate services to limited-English-proficient students (LEP, also referred to English language-learners and in California as English learners or ELs), but policymakers have long debated setting time limits for students to receive such services. For example, the question of imposing time limits on services funded through Title VII (Bilingual Education) of the Elementary and Secondary Education Act has been a recurring and passionately debated issue in each reauthorization (Crawford, 1999). The *Washington Post* columnist Noel Epstein (1977) boldly framed his assumptions about this most important question as follows:

Actually, it can take anywhere from a matter of weeks to six years for a student in a bilingual program to acquire a basic proficiency in English. This depends largely on whether English is introduced slowly or quickly (p. 25).

The purpose of this paper is to bring together some analyses and present new data that directly address the length of time it takes for English learners to attain proficiency in English.

This paper follows on precedent-setting research by Collier (1987, 1995), Cummins (1981), and Mitchell, Destino and Karam (1997) who report estimates of up to 10 years before students are fully proficient in English, i.e., are fully competitive in the academic uses of English with their age-equivalent, native English-speaking peers. Our paper builds on these findings by reporting data that graphically display English proficiency development as a function of time of exposure to English.

What is Meant by Language Proficiency?

An early characterization of second language acquisition was that it was a recapitulation of first language acquisition (Dulay and Burt, 1973). Because first language acquisition takes

place at such an early age and usually in the naturalistic context of the home, such a view would emphasize conversational language in settings quite different from formal schooling, and it would look at language development in terms of its fundamental properties (domains that linguists refer to as phonology, morphology, syntax, semantics, and pragmatics).

A large part of the literature on second language acquisition based in this tradition is comprised of case studies of individual children and adults who are immersed in another language. This follows on the successful research paradigm of first language acquisition that productively built on a cumulative base of diaries and records of small numbers of children followed in great detail (Brown, 1973). Many of the second language studies are of children from privileged backgrounds, such as the daughter of a Japanese visiting scholar to Harvard that the first author documented in the early 70's (Hakuta, 1976). Such studies, most recently summarized by van Lier (1998) in a paper commissioned by the U. S. Department of Education, provide important milestones from which to assess the course of second language acquisition.

After reviewing the case studies, Van Lier observed:

Many of the early case studies of young children emphasized the successes of the L2 acquisition process. The researchers often marveled at the rapidity with which these young children learned to converse in the second language, sometimes in a matter of months. These findings concur with the opinions of the general population that learning languages is an easy and natural task for young children. They just 'pick them up,' as it were. However, when we look a little more closely at the details of language use as reported in these case studies, we can see a few general patterns emerge. In none of the case studies, whether of young children, adolescents or adults, are any significant developments of complex grammar reported within the first year, or even in the second year. Rather, all studies speak of formulaic utterances, conversational strategies, and a highly simple code. This simple code is sufficient for everyday social contact, and often gives the impression of amazing conversational fluency in these contexts, but it is not the elaborate, syntactically and lexically complex code of the proficient language user.

The case studies remind us that linguistic competence is complex, and that even the most privileged second language learners take a significant amount of time to attain mastery, especially for the level of language required for school success.

The complexity of language, especially when one has to use it for learning complex academic subjects, has long been recognized by researchers concerned with the education of language minority students (Cummins, 1981a; Snow, 1987; Collier, 1995). Of particular interest has been the ability to use language in school subject matter learning, contrasted with what Cummins called “Basic Interpersonal Communicative Skills” (BICS), characterizing more conversational language that is cognitively undemanding and embedded in context. Educators have thus come to distinguish between oral English proficiency and academic English proficiency, and these terms have entered the common parlance of most professional educators and policy makers.

Oral English proficiency is determined through standardized proficiency tests. Table 1 shows an illustrative example of proficiency levels from a commonly used test, the *Idea Proficiency Test* or IPT (proficiency levels are designated as A through F, with F being considered “Fluent”). Other commonly used tests of oral English proficiency used in California are the *Language Assessment Scales* (LAS) and the *Bilingual Syntax Measure* (BSM). Once students attain mastery of the test, they are classified as fluent English speaking. But they are not reclassified from Limited English Proficient (LEP) to Fluent English Proficient (FEP) until they have also scored above a designated level on an academic achievement test.

The academic English criterion is more complicated, and is usually measured with a standardized English reading achievement test, such as the SAT-9 or CTBS. These tests are norm-referenced to a national sample of largely English speakers, and typically, a criterion

around the 36th percentile rank is used for redesignation as R-FEP, a status taken to indicate that the student is no longer in need of special language support services. Critics have rallied around both sides of this criterion. Opponents of bilingual education say that this is a meaningless criterion because even in a native English population, 36 percent of the students by definition would never be able to meet the criterion for redesignation. Advocates for language minority students claim that it is better to err on the side of caution, and that even the 36th percent is holding students to low expectations.

There is, of course, no way of getting around the simple fact that using a criterion based on a norm-referenced test developed for a different population is arbitrary. The important point is that some criterion other than oral English proficiency be considered, in light of the complexity of language proficiency. In California, the State's English Language Development Standards is a landmark effort to establish English learner performance standards that ramp up to the State's English Language Arts standards (designed for all students), and as such, envelop both oral and academic English proficiencies. A test is currently being developed to measure these performance standards (the latest timeline is for development by the end of 2000), and this should in turn move us a long way toward establishing meaningful benchmarks in the development of English learners.

This paper will simply adopt the rough distinction between *oral English proficiency* and *academic English proficiency*, well aware of the fact that this presents a rather crude simplification of the theory of language proficiency. The defense of this simplifying procedure is two-fold. First, the quantitative measurement instruments available for English language proficiency can still only be sensibly divided into these rough categories; and second, this distinction makes sense in the current California policy context where very basic issues of

English development still need to be resolved (for example, defining “good working knowledge of English” or coming to agreement about reclassification criteria) before we can get to a higher level of policy discussion.

The Study

This study reports on data from four different school districts to draw conclusions on how long it takes students to develop oral and academic English proficiency. Two of the data sets are from school districts in the San Francisco Bay Area, which will be referred to as Districts A and B. These data are reported here for the first time. The other two are based on summary data from reports by researchers in Canada (Wright and Ramsey, 1970 and Klesmer, 1993). The choice of these samples was determined by availability and access, rather than by any systematic intention to compare populations, district policies, or countries.

District A, San Francisco Bay Area

This school district in the Bay Area has a significant number of EL students, but with relatively low poverty rates when compared to other districts with high concentrations of EL students. Total enrollment of the district is over 11,000, of whom approximately 3,400 were EL. Vietnamese was the predominant language (spoken by over 1,200 students) and Spanish was second (spoken by 1,100 students). The district has been on a state waiver from bilingual education, and has never provided systematic instruction through the native language. Free or reduced lunch rate is at about 35 percent district-wide, and AFDC at about 12 percent. The annual redesignation rate from LEP to FEP in District A is high, at approximately 4 times the state average. Our sample consisted of all 1,872 students in Grades 1-6 in the district in Spring, 1998 who met two criteria: (i) they had been in the district since Kindergarten, (ii) they were classified as EL when they were in Kindergarten. Students are given an oral English assessment

annually using the IPT until they attain the mastery level. In addition, students are given a reading and writing assessment. These results, in combination with teacher recommendation, lead to the redesignation of the student as FEP.

District B, San Francisco Bay Area

We collected data from a second school district in the Bay Area that is heavily impacted by EL students and poverty. District B has a total enrollment of about 16,000, of whom 7,000 were EL. Spanish is the predominant language. The rate of free or reduced lunch is 74 percent district-wide, and AFDC is at 28 percent. The sample consisted of 122 students of Spanish-speaking background in Grades 1, 3, and 5 during the Spring of 1998, randomly selected from the universe of students who met three criteria: (1) they had been in the district since Kindergarten, (2) they were classified as EL when they were in Kindergarten, and (3) they attend high poverty schools with more than 70 percent free and reduced lunch. Each student in our random sample was individually administered the *Woodcock Language Proficiency Battery (Revised)*, a standardized measure that yields age-equivalent norms against native-English-speaking children on a variety of language skills, including oral language, reading, and writing. This test was developed for use with native speakers of English, and so even the subpart of the test called “oral language” is demanding and academically oriented rather than conversational. The measure was selected because it was felt to be the best measure available to indicate the student’s academic competitiveness with English-speaking peers.

Toronto

Wright and Ramsey (1970) report data from approximately 1,200 immigrant students in Toronto learning English as a second language. The data were from a survey of 25% of the Toronto system’s Grade 5, 7, and 9 classrooms. These data can be disaggregated by Length of

Residence in Canada (LOR), ranging from 1 to 11 years. The students were given a Picture Vocabulary Test and a test of English grammar, and the data are reported with respect to their deficit in English compared to the norm for students in the Toronto system as a whole. The data have been analyzed and published by Jim Cummins (1981b), and the data reported by Cummins was further re-formatted to the framework of the present paper based on the Cummins report.

North York, Ontario

Klesmer (1993) conducted a study for the North York Board of Education (near Toronto), using a randomly selected sample of 285 ESL students and 43 native English-speaking students as controls. All students were 12 years old, mostly in the 7th grade. The ESL students were furthermore selected to represent length of residence ranging from 6 months to 71 months. The students were given a large battery of English proficiency measures, as well as a test of nonverbal ability. The results on these tests were transformed into deficits with respect to the English-speaking controls, expressed in standard deviation units.

How to Interpret the Data

The data are reported graphically, all in the same format, for English proficiency as a function of length of exposure to English. However, a word about the limitations of the data is in order, because the analysis may underestimate the rate at which students acquire English, i.e., the actual rate may be slower than what is estimated in the analyses presented.

The ideal data base to make determinations about the effects of length of residence is through a longitudinal study of students from the point of immigration until mastery of English, much like the case studies mentioned at the beginning of this paper, but with a systematically selected sample that is also much larger in size. The available data bases fall short of this, and are cross-sectional in nature. The data from Toronto and North York take students at fixed grade

levels, but who differ in their length of residence. This means that students who differ in their length of residence also differ in their age of immigration, as reflected in the mathematical expression:

$$\textit{Present Age} = \textit{Age of Immigration} + \textit{Length of Residence}.$$

Thus, if English proficiency is plotted as a function of length of residence, the longer the residence, the younger the age of immigration of the students. The question of the ultimate effects of age of immigration on second language acquisition is beyond the scope of this paper (see Collier, 1988, Hakuta, 1999, for a discussion of this), but to the extent that “the younger the better” is true, it would have the effect of exaggerating the steepness of the learning curve. The reason that the curve would be less steep in reality is that obviously, those who immigrated at a younger age have been learning English longer, and those who immigrated at an older age have been learning English for a shorter time. The possible distortion from “reality” caused by this confound of length of residence with age of immigration is depicted in Figure 1(a), and applies to interpreting the data from Toronto and North York.

The design of the study from District A and B looks at English proficiency as a function of their current grade level. Unlike the data sets from Canada, the length of residence is not confounded with age of immigration, and the data look more like the idealized longitudinal data sets, since all subjects have been in the district since Kindergarten, and at that point were classified as EL. If we were to continue to observe this sample longitudinally, the 1st graders in the sample, two years later, would be comparable to the 3rd graders in the sample at present, and so forth. The main caveat here is that the sampling gets more selective as the grades go higher, because students move away from the district. Using the criterion of “having been classified as EL in Kindergarten” selects similar students. For example, the 1st grade sample does not contain

students who moved away from the district after their Kindergarten year, and the 3rd grade sample does not contain students who moved away after K, 1, or 2. So the older the grade level, the more selective the sample. This, again, may exaggerate the effects of length of residence on the higher end, because that sample would have eliminated the more mobile segment of the population, assuming that that segment learns English more slowly. This possible distortion of the sample from “reality” is depicted in Figure 1(b).

With these caveats in mind, we now report our findings for oral and academic English proficiency.

Oral English Proficiency

The results of our analysis of oral English proficiency using the IPT in District A are presented in Figure 2. The data show the mean score in attaining mastery up through Level F of the IPT, with a score of 1.0 representing full mastery. As can be readily seen, by the end of fourth grade, after 5 full academic years in school, over 90 percent of the students who had entered Kindergarten as EL attained proficiency in English using this measure. Summarizing the graph, one might say that for most of the students in this school district who enter as EL, it takes between 2 to 5 years to acquire oral English.

The data from the Toronto study are displayed in Figures 3 thru 5. These data are displayed as deficits with respect to the Toronto student norm. Figure 3 shows the phonological measures: intonation, sound recognition, and sound discrimination. For all three grade levels (5, 7, and 9), it takes up to 5 years before the deficit approaches zero. Figure 4 shows idioms and function words, and Figure 5 shows vocabulary. In both cases, there is steep growth up to 5 years, after which the growth tapers out. Unlike the phonological measures, even after 5 years, these measures are not at full parity with the Toronto norm, and it is only in the groups that have

been in Canada for 9 to 11 years that are in parity – these students, by definition, have spent all of their schooling in Toronto schools.

Finally, the North York study included several measures of oral language proficiency: oral expression, listening comprehension, and complex vocabulary. These data are shown in Figure 6. The measures each show a steep rise thru 2 years of residence, and then rise more gradually thru 4 years, and an unexplained slight drop in the 5th year. Overall, the immigrant students come closer to native English speaker performance in listening comprehension than in complex vocabulary or oral expression. Listening comprehension, as in the case of oral expression, remain about .75 standard deviation units below native speaker performance even after 5 years.

Academic English Proficiency

In addition to IPT, District A gives the *MacMillan Informal Reading Inventory* and a district-developed writing assessment to inform the student redesignation. These are considered by the district personnel to signal academic competitiveness with native English speakers. The rates at which students at the different grades attain criterion on these two measures are shown in Figure 7. As can be readily seen, the majority of the students attain the criterion at the end of 4th grade, with almost 90 percent of the students attaining criterion by the end of 6th grade. Figure 8 superimposes these data with those for oral proficiency. In addition, Figure 8 shows the redesignation rates, which combines these objective assessments with the professional judgment of the teacher and district staff. These data show clearly that academic English proficiency takes longer to develop than oral English proficiency, and that the range for academic English proficiency development, by these measures, takes between 4 to 7 years.

The measures we used in District B are academically demanding, in that performance is based on native English-speaking norms. The Woodcock Language Battery gives an age-equivalent score in 8 areas based on composites of 12 different subtests. They are: Oral English, Broad English, Basic Reading, Reading Comprehension, Broad Reading, Basic Writing, Written Expression, and Broad Writing. Figures 9 thru 11 show the results. The scores of our subjects are shown by the dark portion of the bars, while the white unshaded portions represent what would be an age-equivalent performance for these same subjects. Several patterns can be seen. First, one can note that there is definitely progress in all areas of academic English proficiency across grades. However, there is a considerable gap between their performance and what would be required for age-equivalent performance (the “white space”). Of greatest concern is that the gap markedly widens in the 5th grade. This is most readily seen in Figure 10, where the 1st and 3rd graders are just one year behind native English speakers in basic reading, reading comprehension and broad reading, but at 5th grade, they are about 2 full years behind.

The apparent differences between Districts A and B are probably due to a number of factors. As mentioned earlier, the districts differ radically in the student poverty level and concentrations of EL students. As a consequence, the programs are also different, with respect to the use of native language instruction (separate analysis of students in District B who were in bilingual v. English-only programs showed no significant differences in the outcomes reported here). More importantly, the measures used for District A are referenced to a district criterion, a threshold performance above which students are considered FEP. On the other hand, we used the Woodcock in District B in order to compare the academic competitiveness of these students with native English speakers. Since native English speakers continue to learn and develop their

academic English skills as well, EL students not only have to learn the fundamentals of English, but also catch up with a student group that continues to develop.

The final analysis for academic English comes from North York, in which the Degrees of Reading Power Test was administered. As can be seen in Figure 12, over the course of 5 years, the students gain from 1.5 standard deviation units below native English speakers after 1 year to about 1 standard deviation units below after 2 to 4 years, and .5 standard deviation units behind after 5 years.

Socioeconomic Effects on Learning

The Canadian reports did not analyze the data separately by socioeconomic status. We were able to conduct a limited amount of analyses, however, in our data from Districts A and B.

For District A, we separated students by the poverty level of the schools they attended: those with approximately 10%, 25%, 50%, and 70% free lunch. District A has uniform policies for ESL instruction across its schools. Figure 13 disaggregates the attainment of oral proficiency, reading, writing, and district redesignation by school poverty level. As can be clearly seen, there are distinct differences with respect to school poverty level, with the students in the 70 percent poverty category lagging behind the other three groups. Factors associated with school poverty level include parent education level and other home and family characteristics associated with student achievement (Mitchell & Mitchell, 1999; Moss & Puma, 1995).

For District B, we were able to request self-reported information from parents on their years of formal education. These were divided into: less than high school; some high school; high school diploma or GED; or beyond high school. Figures 14 and 15 display performance on the various Woodcock subscores by these SES levels. The correlation with SES is again quite

clear, with the group from homes where the parents with the highest educational level considerably ahead of the other groups.

The fact that these socioeconomic effects are so readily evident, in spite of the crude ways in which we measured poverty level in District A and educational level in District B, suggests the importance of this variable in determining the rate of English acquisition. We have known that SES is a powerful factor in predicting student achievement in traditional content areas, such as reading and math, regardless of whether they are language minority or native speakers of English (Moss and Puma, 1995). It now appears certain that SES is powerful in predicting rate of English acquisition.

Conclusions and Policy Implications

The overriding conclusion emerging from these data sets is that even in districts that are considered the most successful in teaching English to EL students, oral proficiency takes 3 to 5 years to develop, and academic English proficiency can take 4 to 7 years. The data from the two school districts in Canada offer corroboration. Indeed, these estimates of the time it takes may be underestimates due to the possible sampling caveats shown in Figure 1. While critics of bilingual education such as Rossell and Ross (1986) have claimed that use of the native language delays the acquisition of English (a claim that is without foundation in the academic literature on bilingualism – see Romaine, 1995), it is worth noting that neither District A, Toronto, nor North York offer bilingual education.

The data would suggest that policies that assume rapid acquisition of English – the extreme case being Proposition 227 that explicitly calls for “sheltered English immersion during a temporary transition period not normally intended to exceed one year” – are wildly unrealistic.

A much more sensible policy would be one that sets aside the entire spectrum of the elementary grades as the realistic range within which English acquisition is accomplished, and plans a balanced curriculum that pays attention not just to English, but to the full array of academic needs of the students.

The findings on the effects of socioeconomic factors on the rate of English acquisition have important implications for policies that set time limits on how long students can receive services, such as Title VII of ESEA. Poverty and level of parent education are not factors that are under control of individual EL students. Students from lower socioeconomic status are the ones who on average are learning English more slowly, and thus would be most affected by time limits. These students seem to be precisely the ones who need special help the most, and yet they would be most adversely affected by a time limit policy, whether it be one, two, three years or more. That is bad policy. Some might argue that the intent of the policy is to “send a message” about the value of English, but this argument fails to be supported by a large body of research on bilingual students and families – such studies hardly depict an immigrant population resisting the acquisition of English (for example, see Suarez-Orozco and Suarez-Orozco, 1995; Veltman, 1983).

The continuing and widening gap between EL students and native English speakers found in District B – the “white space” – should be cause for considerable concern. It illustrates the daunting task facing these students, who not only have to acquire oral and academic English, but also have to keep pace with native English speakers, who continue to develop their language skills. It may simply not be possible, within the constraints of the time available in regular formal school hours, to offer efficient instruction that would enable the EL students to catch up

with the rest. Alternatives such as special summer and after-school programs may need to be considered seriously.

It would be appropriate to consider the findings from the perspective of policy-relevant research most needed in this area. We have addressed the question of how long it takes in a rather crude way, roughly dividing between oral English and academic English, and assuming that they have a bearing on the student's opportunity to learn in an all-English environment and to perform academically. Refined, the central questions are:

1. How long does it take EL students to learn basic oral English skills?
2. How long does it take EL students to learn academic English skills to no longer be handicapped in their opportunity to learn in instructional settings that do not accommodate to their language needs?
3. How long does it take EL students to learn academic English skills to no longer be handicapped when they take high-stakes assessments such as STAR, state grade promotion requirements, access to gifted and talented programs, and graduation requirements?

Answering these questions would require accurate alignment of our measures of English proficiency to a task analysis of oral proficiency, classroom instruction, and student assessment. Each of these questions, in turn, can be further broken down, such as by the types of instructional environments (e.g., those that heavily rely on classroom discussions) and different subject areas (e.g., English language arts, math, social studies, science). A variety of promising factors for effective instruction have been identified by the National Research Council study that reviewed the literature (August & Hakuta, 1997). The emerging English Language Development (ELD) Standards should be helpful in guiding the effort here by offering an empirical measure that,

through research, can be linked to the ability of EL students to perform academically in different kinds of academic tasks and environments.

A final policy implication of this paper is the importance of getting reliable normative data on the developmental course of EL students. The National Center for Education Statistics is about to begin data collection on the Early Childhood Longitudinal Study (ECLS), a nationally representative sample of students about to enter Kindergarten, and who will be followed over a 5-year period. There are currently plans to oversample a group of Spanish-speaking students, but unfortunately, the realities of the study are such that the information on their English acquisition will be limited. The State of California should embark on such a longitudinal survey to track the normative development of EL students, with assessments that correspond to the three questions above. Although costly, such normative data would provide important baseline data and ground the policy debates on the education of EL students on a more realistic set of assumptions.

References

- August, D. & Hakuta, K. (Eds.). (1997). Improving schooling for language-minority children: A research agenda. Washington, DC: National Academy Press.
- Brown, R. (1973). A first language: The early stages. Cambridge, MA: Harvard University Press.
- Collier, V. (1987). Age and rate of acquisition of second language for academic purposes. TESOL Quarterly, 21: 617-641.
- Collier, V. (1988). The effect of age on acquisition of a second language for school. New Focus: Occasional Papers in Bilingual Education, No. 2. Washington, DC: The National Clearinghouse for Bilingual Education. Available on the World Wide Web: <http://www.ncbe.gwu.edu/ncbepubs/classics/focus/02aage.htm>
- Collier, V. (1995). Acquiring a second language for school. Directions in Language and Education, 1:4. Washington, DC: The National Clearinghouse for Bilingual Education. Available on the World Wide Web: <http://www.ncbe.gwu.edu/ncbepubs/directions/04.htm>
- Crawford, J. (1999). Bilingual education: History, politics, theory, and practice. 4th edition. Los Angeles: Bilingual Education Services.
- Cummins, J. (1981a). The role of primary language development in promoting educational success for language minority students. In Schooling and language minority students: A theoretical framework (pp. 3-49). California State Department of Education.
- Cummins, J. (1981b), Immigrant second language learning. Applied Linguistics, 11, 132-149.
- Dulay, H. & Burt, H. (1973). Should we teach children syntax? Language Learning 23: 245-258.

- Epstein, N. (1977). Language, ethnicity, and the schools: Policy alternatives for bilingual-bicultural education. Washington, D.C.: Institute for Educational Leadership, George Washington University.
- Hakuta, K. (1976). A case study of a Japanese child learning English. Language Learning, 26, 321-351.
- Hakuta, K. (1986). Mirror of language: The debate on bilingualism. New York: Basic Books.
- Hakuta, K. (1999). A critical period for second language acquisition? A status review. Paper written for the National Center for Early Development and Learning (University of North Carolina, Chapel Hill). To be published in proceedings. Draft available on the World Wide Web: <http://www.stanford.edu/~hakuta/Docs/CriticalPeriod.PDF>
- Klesmer, H. (1993). E.S.L. achievement project: Development of English as a second language achievement criteria as a function of age and length of residence in Canada. North York Board of Education.
- Mitchell, D., Destino, T. & Karam, R. (1997). Evaluation of English language development programs in the Santa Ana Unified School District: A report on data system reliability and statistical modelling of program impacts. University of California, Riverside: California Educational Research Cooperative. Available on the World Wide Web: <http://cerc.ucr.edu/publications>
- Mitchell, D. & Mitchell, R. (1999). The impact of California's class size reduction initiative on student achievement: Detailed findings from eight school districts. University of California, Riverside: California Educational Research Cooperative. Available on the World Wide Web: <http://cerc.ucr.edu/publications>

- Moss, M. & Puma, M. (1995). Prospects: The congressionally mandated study of educational growth and opportunity. Cambridge, MA: Abt Associates.
- Romaine, S. (1995). Bilingualism. 2nd edition. Oxford: Blackwell.
- Rossell, C. & Ross, J. M. (1986). The social science evidence on bilingual education. Journal of Law and Education, 15, 385-419.
- Snow, C. E. (1987). Beyond conversation: Second language learners' acquisition of description and explanation. In J. P. Lantolf & A. Labarca (Eds.), Research in second language learning: Focus on the classroom (pp. 3-16). Norwood, NJ: Ablex.
- Suarez-Orozco, C. & Suarez-Orozco, M. (1995). Transformations: Migration, family life, and achievement motivation among Latino and White adolescents. Stanford, CA: Stanford University Press.
- Van Lier, L (1999). Second language acquisition: What we know from case studies of structural development. Paper prepared for the Office of Bilingual Education and Minority Languages Affairs (OBEMLA), U. S. Department of Education. (Available at: <http://www.stanford.edu/~hakuta/Docs/VanLier.htm>)
- Veltman, C. (1983). Language shift in the United States. The Hague and New York: Mouton.
- Wright, E. N. & Ramsey, C. (1970). Students of non-Canadian origin: Age on arrival, academic achievement and ability. Research Report #88, Toronto Board of Education. Re-analyzed and reported by Cummins, J. (1981b).

Table 1. IPT (Idea Proficiency Test) Proficiency Levels.

Probable IPT level	Sample oral language skills at this level
A (non English speaking)	Fewer than half the skills in level "B"
B (non English speaking)	Tell name and age; identify family and common school personnel, classroom objects, basic body parts, common pets; use present tense verb "to be"; use regular plurals; answer simple "yes/no" questions; follow simple directions involving basic positions in space.
C (non English speaking)	Identify common occupations, clothing, farm animals, foods; express self using the present progressive tense (he or she <u>is</u> working); use negatives and subject pronouns; use mass nouns (<u>some</u> glue, not <u>a</u> glue); follow directions related to identifying positions on a page; repeat simple sentences; comprehend, remember major facts of a simple story
D (limited English speaking)	Identify modes of transportation and household items; name the days of the week; describe common weather conditions; use possessive pronouns; ask simple future tense questions; understand, express comparative and quantitative concepts; repeat complex sentences; express creative thoughts in complete sentences
E (limited English speaking)	Identify content area vocabulary; use superlatives and past tense; understand and name opposites; ask past tense questions; discriminate differences in closely paired words; describe and organize the main properties of common objects
F (fluent English speaking)	Use conditional tense verbs; discriminate fine differences in closely paired words; comprehend and predict the outcome of a story; recall and retell the main facts of a story; share meaningful personal experiences

Figure 1. Possible biases in sample due to characteristics of the study design.

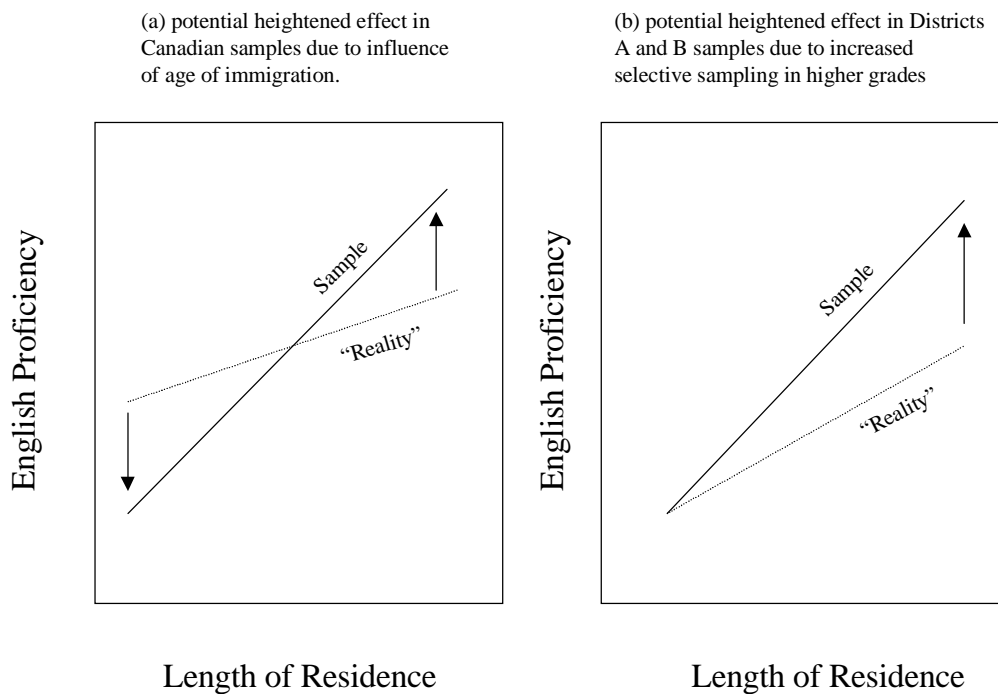


Figure 2. Performance on IPT (IDEA Proficiency Test) as a function of grade level, District A. The sample consisted of 1,872 students in Grades 1-6 who had been in the school district since Kindergarten, and were classified as LEP in Kindergarten.

Oral English Proficiency, District A

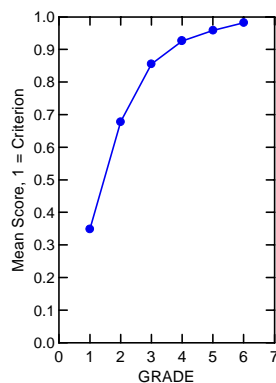


Figure 3. Phonological development as a function of Length of Residence. Toronto sample of 5th, 7th, and 9th graders.

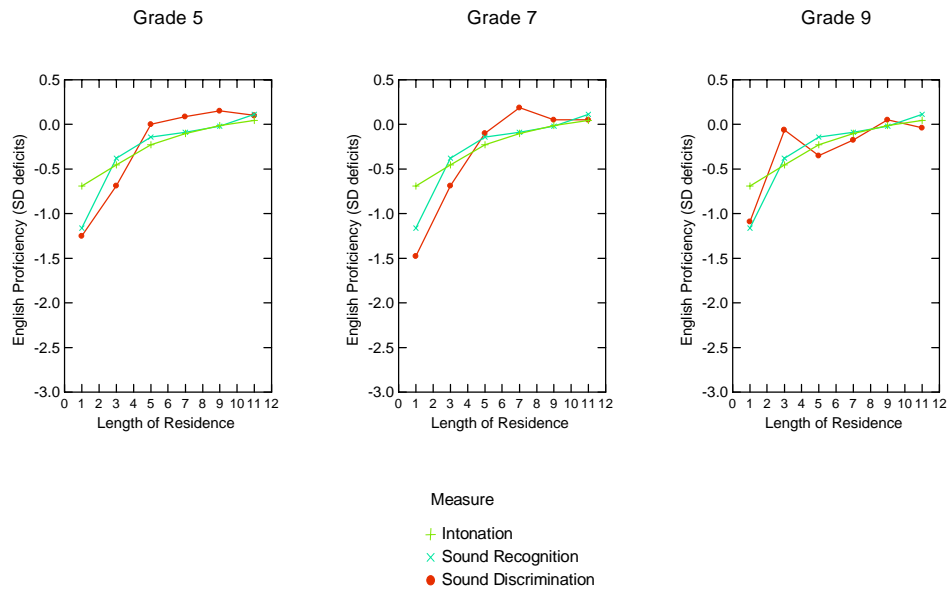


Figure 4. Development of idioms and function words as a function of Length of Residence. Toronto sample of 5th, 7th, and 9th graders. .

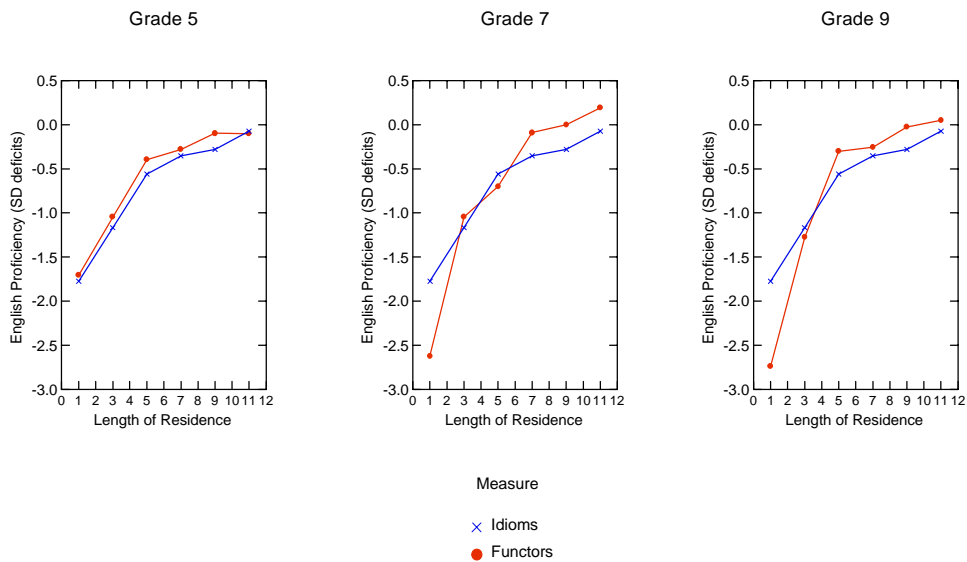


Figure 5. Vocabulary development as a function of Length of Residence. Toronto sample of 5th, 7th, and 9th graders.

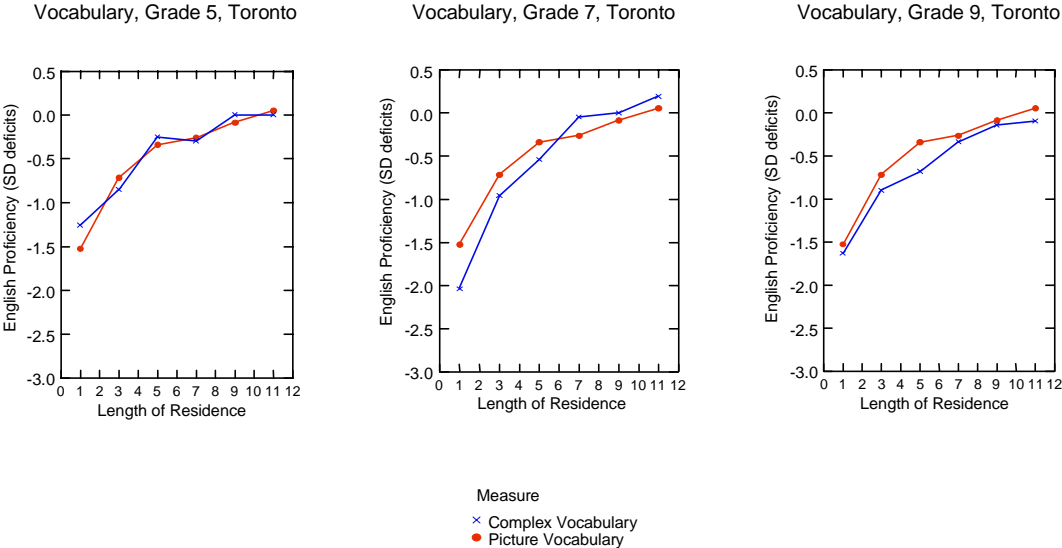


Figure 6. Oral expression, listening comprehension, and complex vocabulary as a function of length of residence.

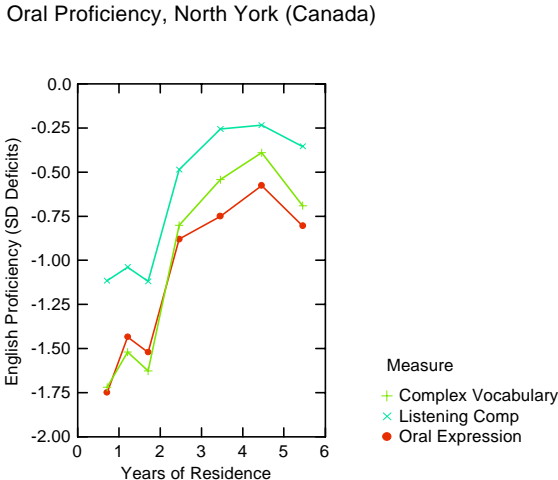


Figure 7. Reading and Writing Tests, District A. Performance on the MacMillan informal Reading Inventory and the school district’s own writing assessment, as a function of length of residence.

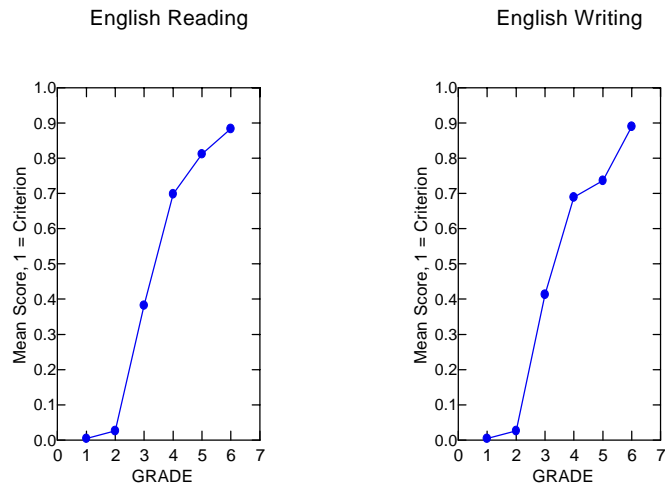


Figure 8. English oral proficiency, reading and writing development and redesignation probability from LEP to FEP as a function of grade level. District A.

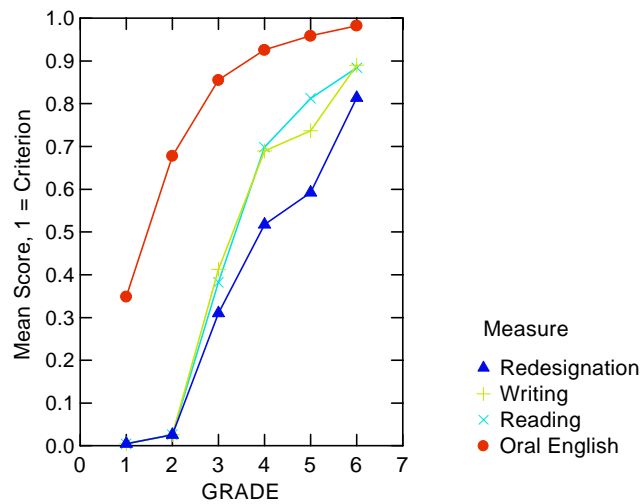


Figure 9. Norm-referenced English proficiency, District B. LEP student mean age equivalent score is represented by the shaded portion of the bar; the white unshaded portion shows the expected age-equivalent for the norming population.

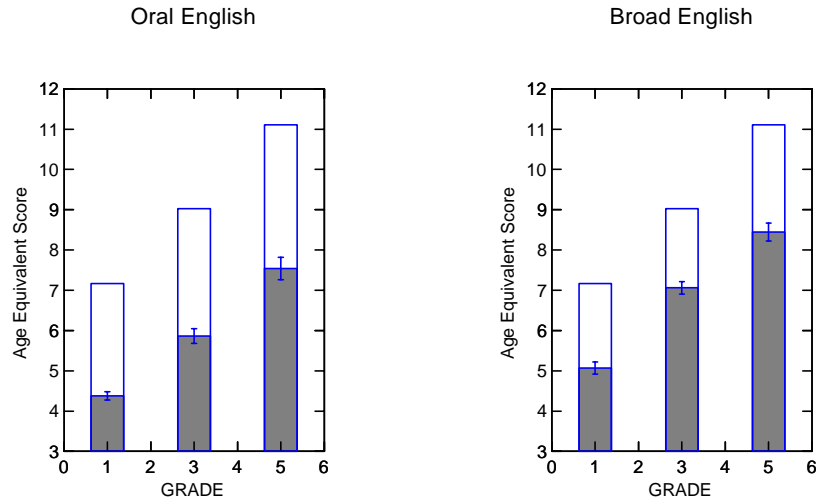


Figure 10. Norm-referenced English reading scores, District B. LEP student mean age equivalent score is represented by the shaded portion of the bar; the white unshaded portion shows the expected age-equivalent for the norming population.

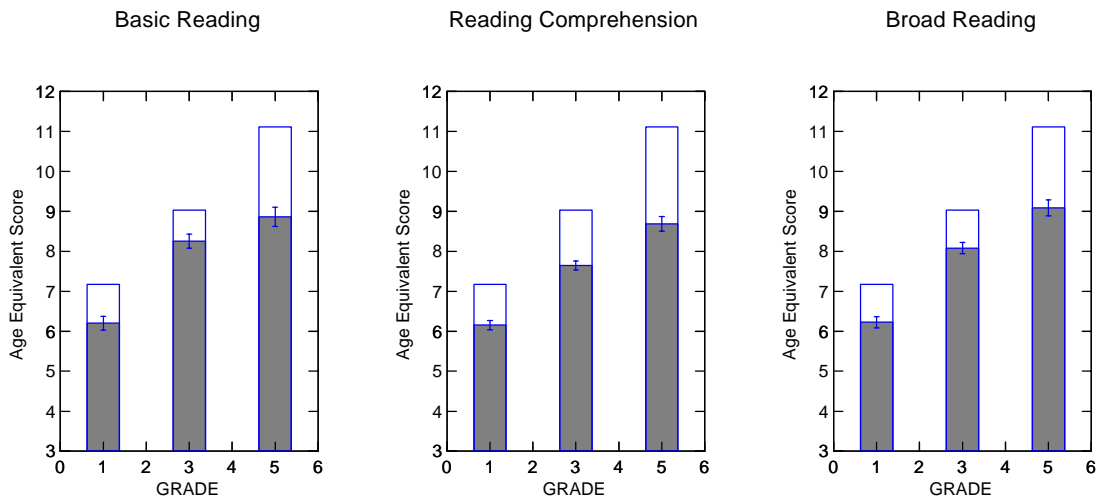


Figure 11. Norm-referenced English writing scores, District B. LEP student mean age equivalent score is represented by the shaded portion of the bar; the white unshaded portion shows the expected age-equivalent for the norming population.

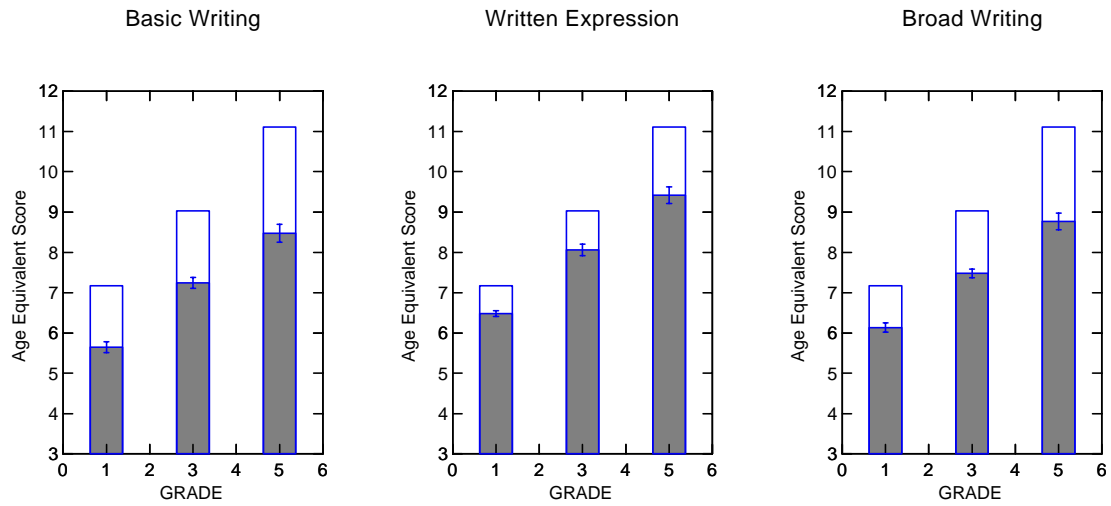


Figure 12. Reading Performance, North York Student performance on a standardized test of reading achievement, the Degrees of Reading Power Test, plotted as a function of length of residence.

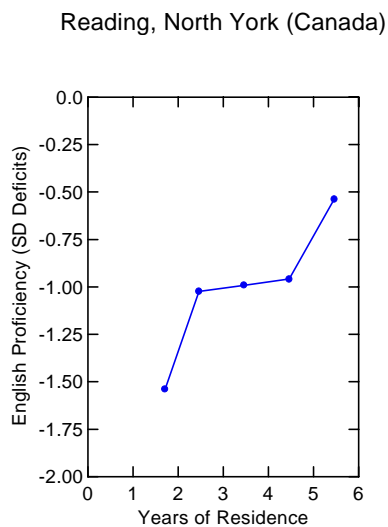


Figure 13. English proficiency attainment as a function of grade level, separately by school poverty level.

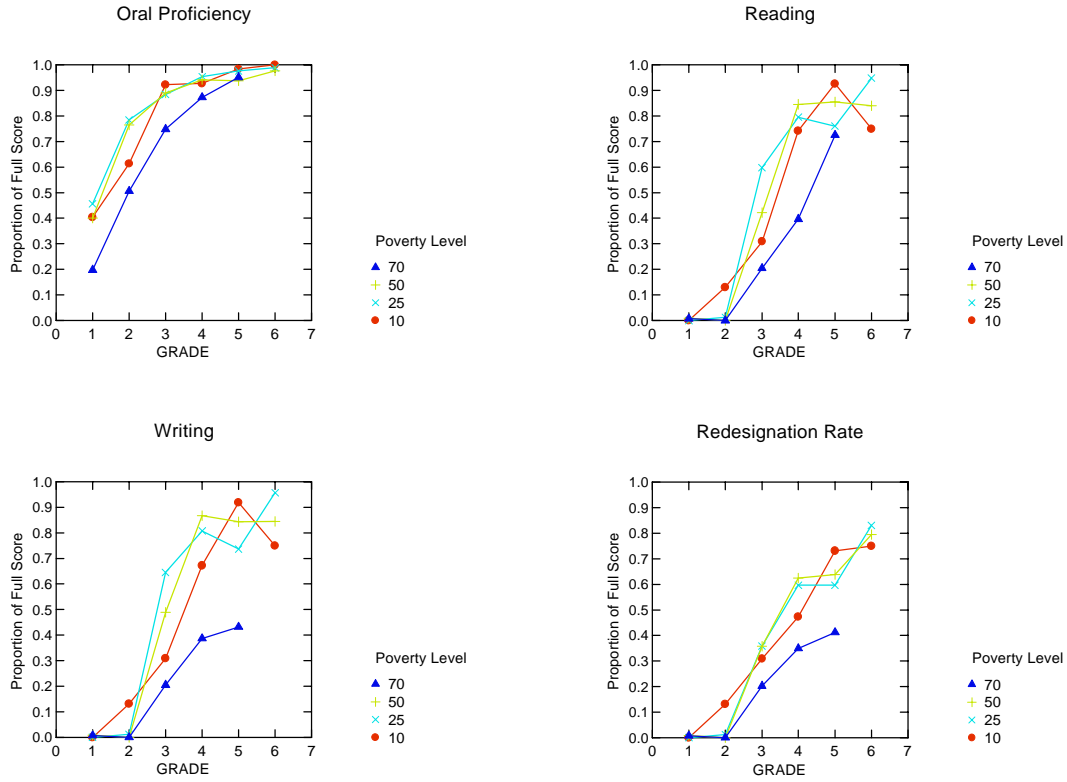


Figure 14. Norm-referenced English scores by parent educational level, District B. LEP student mean age equivalent score is represented by the colored portions of the bar; the white unshaded portion shows the expected age-equivalent for the norming population.

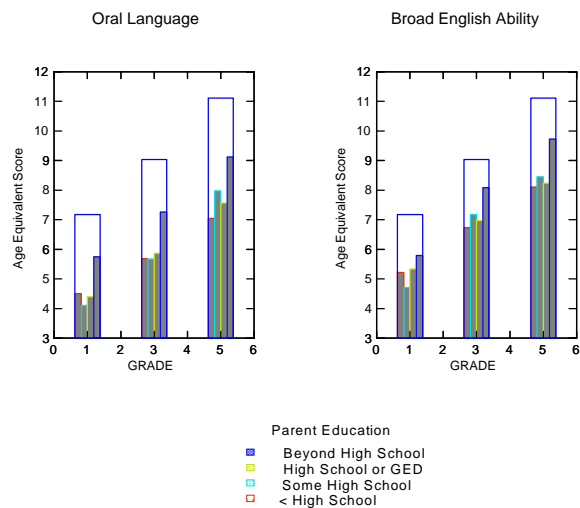


Figure 15. Norm-referenced English writing scores by parent educational level, District B. LEP student mean age equivalent score is represented by the colored portions of the bar; the white unshaded portion shows the expected age-equivalent for the norming population.

