

Promise of Two-Language Education

A 12-year study compares how English language learners fare in English immersion, bilingual, and dual immersion programs.

Ilana M. Umansky, Rachel A. Valentino, and Sean F. Reardon

ne in five school-age children in the United States speaks a language other than English at home (Camarota & Zeigler, 2015). Roughly half of these emerging bilingual students (Garcia, 2009) are classified as English language learners (ELLs) when they enter school, meaning they do not meet state or district criteria for English proficiency (Kena et al., 2015). As the fastest-growing official subgroup of students, ELLs are transforming schools across the country, in cities as well as in suburban and rural communities, in traditional immigrant-receiving areas as well as in new immigrant destinations. These students bring with them important assets that can enrich and strengthen schools (González, Moll, & Amanti, 2013).

But questions persist about how best to ensure

that ELLS can thrive academically, linguistically, and socially. Should ELLs be taught in bilingual classrooms that promote fluency in their home language and ensure access to core academic content while they develop English language skills? Or should they be taught in English immersion classrooms to maximize their exposure to English? How can we ensure that emerging bilingual students develop English proficiency and strong academic skills while they maintain and develop literacy in their home language?

Over the past several years, we've been working closely with staff members in a large California school district to explore these questions. This district uses four different instructional models for English language learners: English immersion, transitional bilingual, maintenance bilingual, and dual immersion. We investigated how ELLs fared



in these four types of programs. In particular, we compared students' progress from kindergarten through middle school as measured by their English proficiency development, their academic growth, and the rates at which they were reclassified from English learner status to fluent English proficient status.

Competing Theories of Instruction for ELLs

Education policymakers have fiercely debated the relative merits of teaching ELLs in English versus teaching them in a bilingual setting. Some of that debate is ideological and provides no useful guidance for educators. But some is grounded in reasonable disagreements about what kinds of learning environments are most effective for children learning English.

Those who favor English immersion instruction assert that English pro-

ficiency is a necessary precursor to learning academic skills and content in U.S. schools. They argue that students need to learn English quickly so they don't fall behind their peers academically—and that English immersion classrooms, because they expose ELLs to continuous English language instruction, are the most efficient way to accomplish this (Rossell, 2005). Some have also argued that bilingual programs can isolate ELLs and segregate them from native-English-speaking peers (Schlossman, 1983); that they are expensive or require specialized teachers and resources that are not always available; and that they are often poorly implemented and supported (Hernandez, 2009).

Those who favor two-language instructional programs present a number of arguments. One argument is based on theories about how

children learn language. Research in cognitive science suggests that because languages share core underlying structures, students who first acquire a strong foundation in one language are better equipped to learn a second language (Cummins, 2000; Genesee, Geva, Dressler, & Kamil, 2008; Goldenberg, 1996, 2008). Thus, ELLs will develop English skills more effectively if they first have the opportunity—in a bilingual classroom, for example—to develop literacy skills in their home language.

Another argument is that ELLs in English immersion programs spend too much time early in their schooling in classrooms where they comprehend little of what goes on (Duff, 2001). Students in two-language classrooms, in contrast, can have full access to the academic curriculum while they're learning English.

A third group of arguments for

bilingual instruction stresses the importance of maintaining students' native languages. They point to research showing that bilingualism generates social benefits like reduced discrimination, improved self-esteem, and stronger cross-group relationships (Cho, 2000; Wright & Tropp, 2005); economic benefits through increased global communication (Callahan & Gándara, 2014); and cognitive health benefits, such as better executive functioning and lower incidences of Alzheimer's disease (Adesope, Lavin, Thompson, & Ungerleider, 2010; Bialystok, 2011; Carlson & Meltzoff, 2008)

Our research did not test all of these hypotheses, but it does provide new and relevant evidence on the mediumterm academic and English proficiency development of students in four distinct ELL programs.

One District, Four Programs

Our research was conducted in a large urban California school district in which English language learners made up roughly 40 percent of each new kindergarten cohort. From 2000 to 2012, the time frame of our study, more than 40,000 new ELLs entered kindergarten in the district. These students came from a range of backgrounds, including large Latino and Chinese-origin populations. As in many districts across the country, the majority of ELLs were born in the United States and lived in households where a language other than English was spoken. The school district offered ELLs four different instructional program options: English immersion, transitional bilingual, maintenance bilingual, and dual immersion.

The largest program in the district was English immersion, serving 55 percent of incoming English language learners. In this program, ELLs were in general education classes, usually with native-English-speaking students, in an all-English setting.

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Teachers used instructional methods designed to help non-proficient English speakers understand curricular content. The specific immersion approach, called Specially Designed Academic Instruction in English (SDAIE), included many supports: multisensory experiences such as labs and demonstrations, comprehensible input through tools like graphic organizers, a focus on academic language, and frequent formative assessment to see how students were faring (Cline & Necochea, 2003). Teachers in the English immersion program had received professional preparation to use these methods.

The other three programs were all different forms of bilingual instruction and were offered in a range of languages, including Spanish, Cantonese, Mandarin, Filipino, and Korean. The first was a transitional bilingual program, which was designed exclusively for emerging bilingual students (those who spoke a language other than English at home). This program, serving 20 percent of incoming ELLs over the time period examined, used instruction in students' home language as a bridge to English acquisition and as a way of making content-area instruction more accessible. It aimed to achieve relatively rapid transition into English instruction, typically by 4th grade.

The second was a maintenance bilingual program, which also exclusively enrolled emerging bilingual students but was longer in duration than the transitional bilingual program (through 5th grade or longer). This program served 17 percent of incoming ELLs. Its goal was full bilingualism and biliteracy in English and the students' home language.

The third approach was a dual immersion program. Unlike the other two, this program targeted enrollment of both ELLs and non-ELLs, typically in a 1:1 or 2:1 ratio. It enrolled 8 percent of incoming ELLs. Like the maintenance program, the district's dual immersion program ran at least through the end of elementary school, in some cases extending into middle and high school. The goal of dual immersion was that both ELLs and native English speakers become bilingual and biliterate in both languages.

How Did the Four Programs Compare?

We analyzed data on eight cohorts of English language learners who were each assigned to one of the four different instructional programs, using up to 10 years of data for each cohort. We compared students in the four programs on three different outcomes: students' English language acquisition (as measured by their performance on the California English Language Development Test); their academic performance and growth (as measured

by their performance on the California Standards Tests in mathematics and English language arts); and their reclassification from English learner status to fluent English proficient status.

English Acquisition

In all programs, more than 80 percent of ELLs were proficient in English by the end of elementary school, and more than 90 percent were proficient by 7th grade. The left panel of Figure 1 shows the cumulative proportion of ELLs who reached English proficiency in each of the four programs by each grade level.

Despite this similarity, ELLs in the four programs reached English proficiency at different rates. In the bilingual and dual immersion models (which we refer to collectively as two-language programs), ELLs took



slightly longer to become proficient in English, on average, than did similar ELLs in English immersion. But by the time students reached 5th grade. English proficiency rates were essentially identical across programs. By 7th grade, slightly more students in the maintenance bilingual (95 percent) and dual immersion (94 percent) programs reached proficiency than did students in the English immersion and transitional bilingual programs (both 92 percent). In this district, therefore, English proficiency develops slightly more slowly in early elementary school among students in two-language programs, but slightly more students in these programs ultimately reach proficiency, particularly in the longer-term two-language programs.

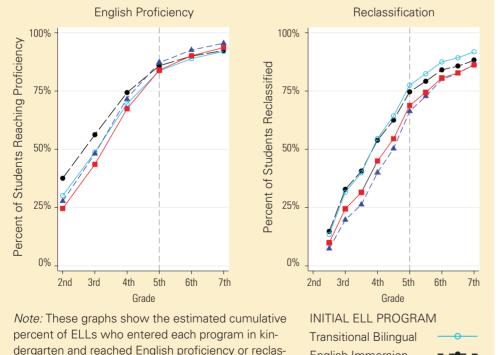
Reclassification Rates

The right panel of Figure 1 shows the cumulative proportion of ELLs who were reclassified out of ELL status, by program and grade. Reclassification is an important milestone for English language learners; reclassified students are no longer a protected class of students and do not receive specialized services. In the district examined here ELLs must meet academic as

> well as English proficiency benchmarks to be reclassified. Because of the academic criteria, reclassification rates are slightly lower than English proficiency rates.

Here again we see that ELLs in the different programs had significantly different reclassification trends. Students in the English immersion and transitional bilingual programs were reclassified at higher rates in elementary school. At 5th grade, however, the pace at which additional students were reclassified slowed in all programs, but most acutely in English immersion, resulting in very similar reclassification rates across all programs by the 7th grade. In that grade, reclassification was highest in the transitional bilingual program (92 percent), followed closely by the other three programs: English immersion





dergarten and reached English proficiency or reclassification at various grade levels. Reclassification out of ELL status required both demonstrating English proficiency and meeting academic benchmarks.

English Immersion Maintenance Bilingual **Dual Immersion**

(88 percent), maintenance bilingual (87 percent), and dual immersion (86 percent).

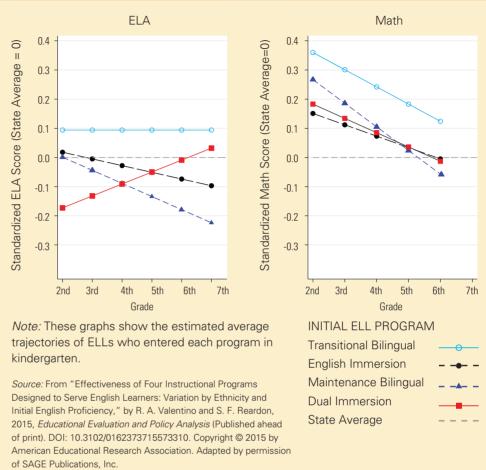
In this district, reclassification rates are highest in elementary school in the programs with more English instruction (English immersion and transitional bilingual), but students in the longer-term two-language programs largely catch up with students in English immersion (but not transitional bilingual) programs in middle school.

Academic Growth in English Language Arts and Mathematics Academic achievement trajectories of ELLs also varied across instructional programs. Figure 2 shows ELLs' average achievement growth in English language arts (ELA) and math (as measured by California's standardized tests) by program, relative to the statewide average growth rate for all students (the plain dashed line at 0). Two patterns are evident.

First, by 2nd grade, ELLs who had been in the transitional bilingual program since kindergarten had higher English language arts and math scores, on average, than their similar peers in other ELL programs. Students in dual immersion programs, in contrast, had scores that were generally lower than their counterparts in other programs. If we cared only about short-term effectiveness, these findings would suggest that transitional bilingual programs are the most effective approach for developing language arts skills, whereas dual immersion programs are the least effective.

However, the second finding evident in Figure 2 is that academic trajectories over the longer term reveal a different pattern. By 7th grade, dual immersion students' scores had

FIGURE 2. English Language Arts and Math Achievement Trajectories of ELLs Relative to the State Average in Four Instructional Programs



surpassed those of students in English immersion and maintenance bilingual programs and were not statistically different from those of students in the transitional bilingual program. In this district then, dual immersion and transitional bilingual programs appear more effective at promoting longer-term development of ELA skills than do English immersion and maintenance bilingual programs.

The longer-term trajectories of average math scores do not differ as much across instructional programs. The math scores of ELLs in maintenance bilingual classrooms grew at a modestly slower pace than those of students in the other three programs. By 6th grade, the math scores of ELLs

in all programs were roughly similar, with the exception of transitional bilingual programs, where students scored moderately higher than similar ELL students in the other programs.

It is worth noting that in 2nd grade, the average math scores of ELLs in all programs were above the state average. Over time, however, the math scores of ELLs in all programs grow more slowly than those of the average student in the state. This is a different pattern than seen in the ELA test score results. Our study was not able to determine why ELL students overall in this district displayed slower relative growth in math skills than in ELA skills; this is an important topic for future research.



Lessons for Schools and DistrictsWhen possible, invest in high-quality two-language programs.

Our findings suggest that two-language programs generally benefit ELLs as much as or more than English immersion programs across academic, English proficiency, and reclassification outcomes by middle school. In some cases the benefits of two-language instruction are small or negligible. In others, they are quite large; for example, ELLs in some two-language programs made academic gains that were as much as 0.3 standard deviations larger from grades 2 through 7 than those of their peers in English immersion.

These benefits of two-language instruction may have important implications for closing the achievement gap between ELLs and non-ELLs. In combination with the evidence of the social, health, and economic benefits of bilingualism, these findings make a compelling argument for investment in high-quality two-language instructional programs.

That said, although there may be a number of benefits to investing in two-language programs, some districts have a small ELL population or have few ELLs who speak a given home language. In such cases, where two-language instructional programs are not feasible, it may be helpful to hire bilingual teacher aides or find other means of supporting ELLs' linguistic and cultural backgrounds in English immersion classrooms.

Choose among two-language programs based on community and stakeholder voice.

Because the number of students in some programs was modest, and because of differences in implementation of programs across schools, our research cannot definitively determine the relative effectiveness of the three types of two-language programs. In the district we studied, each appears to promote at least one type of positive outcome for ELLs. This suggests that schools and districts would benefit from developing two-language

programs that meet the specific needs of their ELLs and the interests of the communities they serve. Some communities and stakeholders may prefer dual immersion programs, which serve both English language learners and Englishproficient students; others may value the in-depth support of ELLs in maintenance bilingual programs or the relatively rapid integration of ELLs in transitional bilingual programs.

gopt for slow and steady.
English language

learners are learning many things at once: academic content, English, and in two-language programs, literacy in their home language. Our findings suggest that ELLs can and do succeed in all three areas, but they need time to do so. Rather than pushing ELLs to reach English language benchmarks rapidly and withholding academic or content instruction until they do, schools should focus on providing high-quality teaching and full, meaningful access to content in all ELL programs, regardless of the language of instruction.

Take the long view.

Schools and districts should avoid evaluating ELL programs by tracking students for only a year or two and only on a single outcome. In our study, a short-term evaluation would have led to the conclusion that the two programs that place more emphasis on maintenance of the students' home language were not as effective as the English immersion and transitional bilingual programs. By middle school,

however, ELLs in these programs generally catch up and perform as well as or better than their peers in English immersion. Evaluations of the effectiveness of ELL instructional programs should track students through elementary and into middle and high school using a variety of outcome measures—and given the value of bilingualism, evaluations, when possible, should also measure students' literacy in their home language.

Looking to the Research

As the population of English language learners in U.S. schools grows, and as we gain more understanding of both these students' rich assets and their struggles in school, it's important that school leaders have access to good information about the most effective instructional programs for ELLs. We hope our research contributes to the body of evidence available to educators. Based on our findings, we suggest that, where possible, states and school districts use their resources to develop and support high-quality twolanguage programs that meet the needs of their students and communities.

¹Additional details about the research and methods used in this study can be found in Umansky & Reardon (2014) and Valentino & Reardon (in press). The results we report here are slightly modified versions of the findings from those papers. Specifically, the findings regarding English proficiency and reclassification are adapted from those in Umansky & Reardon (2014). They differ from that analysis in two ways: they are based on all ELL students (rather than only Latino ELLs) and are based on models that, in addition to controlling for school and student characteristics, statistically control for parental preferences for ELL programs. Academic results are consistent with reporting in the Valentino & Reardon (in press) paper.

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