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COMMENTARY

Effectiveness of Four Instructional Programs Designed to Serve English Learners

Variation by Ethnicity and Initial English Proficiency

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On average, English learners (ELs) perform far worse than non-ELs on academic tests. More specifically, the math and reading gap between ELs and non-ELs is roughly one standard deviation. There has been a long-running debate over whether bilingual education is more beneficial than English-only instruction for ELs' academic development. While there is slightly more empirical support suggesting that bilingual education is superior to English-only instruction for ELs, prior to this study, little of the research had come from randomized experiments or rigorous quasi-experiments, most had looked at short-term rather than long-term outcomes, and few had rigorously compared different types of bilingual instruction.

In this study, we addressed gaps in the literature by using longitudinal student-level data from a large school district and more rigorous methods to address two main research questions: (1) What are the differential effects of four EL instructional programs (transitional bilingual, developmental bilingual, dual immersion, English immersion) on ELs' academic achievement trajectories in English Language Arts (ELA) and math through middle school? and (2) Do these growth effects by program vary by the ethnicity or initial English proficiency of the EL student?

The data used in the current study come from a large urban district that serves a sizable EL population. Our analytic sample follows 13,750 EL students who entered the district in kindergarten between the 2001–2002 and 2009–2010 academic years. Approximately 1,500 ELs enter our sample each year, about 45% of which are Chinese ELs, 35% of which are Latino ELs and 20% of which are ELs of other language backgrounds.

To answer our research questions of interest we estimated a series of random coefficient student growth models which adjusted for student controls, school fixed effects, and importantly, parent preference fixed effects. We were able to adjust for parent preferences because the district of study implements a choice model for school selection, where families rank program preferences. Students are then assigned to schools by a complex algorithm, which attempts to give applicants their highest possible choice, but uses random assignment to break ties to determine who gets into programs that have more applicants than slots. By controlling for program preference fixed effects, we were able to compare students who had the same school-by-program preferences, but attended different programs and/or schools due to the use of tie-breakers.

Our results showed that the ELA test scores of ELs in all bilingual programs grow at least as fast as, if not faster than, those in English immersion, the largest effect sizes of which accrue to students attending dual immersion programs. The same is generally true of math, with the exception of developmental bilingual programs, where average student scores grow more slowly than those of students in English immersion. Further, Latino ELs perform better longitudinally in both subjects when in bilingual programs than their Chinese EL counterparts. We find no differences in program effectiveness by ELs' initial English proficiency.

In a policy context where a number of states have effectively banned bilingual education in public schools, our findings suggest that states and districts would, at a minimum, benefit from developing bilingual programs that meet the unique needs of ELs and the communities they serve. Our findings show that bilingual models have great potential to accelerate the long-term academic achievement of ELs—Latino ELs in particular.

The full study can be found in Rachel Valentino and Sean Reardon, "Effectiveness of Four Instructional Programs Designed to Serve English Learners Variation by Ethnicity and Initial English Proficiency," Educational Evaluation and Policy Analysis December 2015 vol. 37 no. 4 612-637.

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