

# Research shows that bilingualism not only boosts individuals' academic and social achievement, but also strengthens the workforce. So why don't schools foster this strength? 

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t's one of the ironies of U.S. culture: We love our history as "a nation of immigrants," but at the same time, we're conflicted about immigration and the changes it brings. One of those changes is our shifting linguistic landscape. The U.S. Census Bureau reports that in the last three decades, the number of speakers of languages other than English has grown from about 23 million to more than 60 million. Today, one in five people in the nation speaks a language other than English (most of these individuals also speak English); and the United States has become a great repository of the three most widely spoken world languages: English, Spanish, and Chinese (Ryan, 2013).

This language diversity is a potential asset for the nation. But schools are not doing their part to nurture that asset. Over the last three decades, bilingual instruction that would enable students to retain and develop home languages other than English has declined. The last time the federal government commissioned a study of instructional practices for English learners across the United States, the researchers found that instruction that incorporated the home language at least 25 percent of the time had fallen precipitously (from 37 percent to 17 percent); and maintenance bilingual programs were rare (Zehler et al., 2003). No wonder researcher Rubén Rumbaut (2014) refers to the United States as "a graveyard for languages" (p. 183).

## Cognitive Advantages: The Evidence Grows

A growing body of research has demonstrated the advantages of bilingualism. As early as 1962, Elizabeth Peal and Wallace Lambert found that French-English elementaryage bilingual children had an intellectual advantage over their monolingual peers. After half a century of U.S. studies that had seemed to show cognitive deficits for

bilingual students (see, for example, Darcy, 1946; Saunders, 1988), this research unleashed an explosion of studies on bilingualism around the world that overwhelmingly confirmed Peal and Lambert's findings.

Researchers have now identified cognitive advantages for bilingual children that include enhanced executive function of the brain, resulting in better focus and attention (Bialystok, 2001; Diaz \& Klinger, 1991); increased short-term memory (Morales, Calvo, \& Bialystok, 2013); and enhanced problemsolving skills (Lauchlan, Parisi, \& Fadda, 2013). These advantages are explained in part by the bilingual brain's greater flexibility and ability to exclude competing stimuli as a result of having to constantly distinguish between two or more languages. Bilingualism also offers social and psychological benefits. For example, some studies have found that bilingual students have larger social networks that can help them navigate both school and community contexts (Zhou \& Bankston, 1998). Others have shown that preserving the home language reduces cultural dissonance between children and parents, reinforcing parental authority and thus reducing behavior problems (Portes \& Hao, 2002; Portes \& Rumbaut, 2001). Maintaining the home language also appears to strengthen students' sense of self and to increase educational motivation among adolescents (Lee, 2008; Zárate, Bhimji, \& Reese, 2005).

Finally, recent research has demonstrated that bilingual and two-way dual language instruction ${ }^{1}$ produce significant academic achievement advantages. For some time, small-scale studies had shown the advantages of dual language programs (Genesee, Lindholm-Leary, Saunders, \& Christian, 2006). But just recently, reliable long-term data became available when Umansky and Reardon (2014) followed children assigned to English-only, bilingual, and two-way dual language programs in a large western district from kindergarten to high school. Students who remained

in bilingual and two-way dual language programs began to overtake students in English-only programs at about the 5th grade; by high school, they were outperforming the English-only students on all academic outcomes measured, including English language arts scores and reclassification to English-proficient status. Valentino and Reardon (2014) reported similar findings. In both cases, the researchers were able to control for student background variables, including socioeconomic status, ethnicity, and English proficiency outside school.

Perhaps because many monolingual English-speaking parents have become aware of the growing evidence that bilingualism encourages academic achievement, dual language immersion programs are rapidly increasing across the United States (Center for Applied Linguistics, 2014; Yang Su, 2012).

## Labor Market Advantages: The Picture Becomes Clearer

Many English-speaking parents also believe their children stand to benefit career-wise from bilingual education. As one North Carolina mother said in a recent newspaper account of

Cumberland County dual-immersion schools, "For me, it was about setting my child up for success. All I could think about was his having a greatpaying job after finishing school" (Jenkins, 2013).

Yet, until recently, research had not shown a labor market advantage for bilingual people with respect to earnings. Hiring practices have even appeared to be biased against SpanishEnglish bilingual people in many jobs. In fact, bilingual speakers in the U.S. labor market were routinely found to suffer something of an earnings penalty (for example, see Chiswick \& Miller, 2007).
The counterintuitiveness of this finding in a globalizing economy, in which one would think that being bilingual would confer labor market advantages, motivated my colleagues and me to dig deeper and ask whether prior researchers had been wrong. We invited some researchers to conduct a series of studies that were published in The Bilingual Advantage: Language, Literacy, and the U.S. Labor Market (Multilingual Matters, 2014). A few of the major findings are described here.

One question we considered was
whether a more well-defined picture of socioeconomic factors, such as literacy level and degree of bilingual competence, would make a difference. Many prior studies that had found no labor market advantage for bilingual people had used data from the U.S. Census Bureau's American Community Survey, in which "bilingual" is a vague category that could encompass a wide range of linguistic skills. Our researchers turned to different data sets that enabled them to construct more accurate measures of balanced bilingualism. They also looked at longitudinal data for young people entering the labor market in recent years, following students from high school through postsecondary education and first jobs. The findings were astoundingly different.
Lucrecia Santibañez and Maria Estela Zárate (2014), for example, compared Asian and Latino students who self-reported that they were moderately bilingual or "high-use bilinguals" with those who called themselves "mostly monolingual." Using a national data set that began in 2002 with 10th graders, the researchers controlled for all observable measures that could influence high school graduation and college attendance (for example, socioeconomic status and immigrant status) and found that the bilingual students from both groups were more likely to graduate from high school and go to college. Among Latinos, high-use bilingual students were also significantly more likely to go directly to four-year colleges than those who were monolingual.
Because Latinos in general are the least likely of all subgroups to go directly to a four-year college and to get a college degree, the significance of this finding is difficult to overstate. Of course, those who do graduate from college will earn more money, pay more taxes, and be more civically involved (Baum, Ma, \& Payea, 2013)—all important benefits for
society as well as the individual.
Another study examined the effects of bilingualism on more than 6,000 young people in their mid to late 20s. In this study, Rubén Rumbaut (2014) distinguished among limited, moderate, and fluent bilingual and non-bilingual people across a range of ethnicities. He found that bilingualism reduced dropout rates, raised occupational status (that is, individuals achieved higher ranks in their jobs), and increased earnings. As the level of bilingualism increased, the benefits also increased, but even limited bilingualism produced a significant wage premium.

A study conducted by Diana A. Porras, Jungyeon Ee, and myself (2014) surveyed almost 300 large, medium, and small businesses in California, across all sectors of the economy, asking employers whether they had a preference for hiring bilingual employees and, if so, whether they compensated them for their language skills. Across all labor sectors, two-thirds of employers responded that they preferred bilingual employees if their skills were comparable to those of monolingual employees. In such areas as hospitality, transportation, and management services, the percentage of employers who preferred bilingual employees rose to between 80 and 100 percent. Although fewer employers were willing to pay for these skills directly, bilingual people whom we interviewed felt that their skills enabled them to advance more rapidly and enjoy greater job security. These findings confirmed that, at least in the highly multilingual state of California, bilingual employees are in high demand and have a hiring advantage over those who are monolingual.

## How Schools Can Foster Bilingualism

Maintenance bilingual programs (which promote literacy in two or more languages for English learners) and two-way dual language programs
(which have the same goal but incorporate in their student body native speakers of both languages) are the primary types of programs that families and schools can participate in to foster bilingualism. Two-way dual language programs have an added advantage: They can help break down the segregation of English learners that can be harmful to their achievement. Research shows that these programs, when well implemented, also promote better intergroup relations and respect for other cultures and languages (Genesee \& Gándara, 1999).

## Maintaining the home

 language appears to strengthen students' sense of self and to increase educational motivation among adolescents.Even schools that are unable to mount full-blown bilingual or two-way dual language programs can offer enrichment classes either during or after school that incorporate other-than-English speakers as language models and that help these students maintain and develop their home languages. Schools also can encourage parents to participate in these programs and to read to their children in their home language; make reading materials in home languages available to parents to take home; and encourage parents to continue supporting the development of their children's home language. Too many educators have advised the opposite.

At the high school level, two underused approaches are International Baccalaureate (IB) programs and advanced placement (AP) courses. The International Baccalaureate is a
rigorous, prestigious program of study most often found in schools serving affluent students. However, it is an ideal program for students who are heritage language speakers because the IB diploma requires competency in two languages but does not privilege any language. In other words, a student whose stronger language is Spanish or Chinese can take rigorous, collegepreparatory courses in that language while continuing to develop English proficiency. Too often, secondary students who are not proficient in English are relegated to weak, watered-down classes that do not prepare them for college. Aldana and Mayer (2014) report on creative ways that some schools across the United States are using IB programs to provide rigorous instruction to these students.
Similarly, AP courses are generally reserved for students at the top of their class, but AP language courses are an excellent way to enable bilingual students to develop their home language skills and to gain motivation to go to college because they are likely to be surrounded by other students who are college bound. The fact that these courses often confer college credit is an additional plus.

Finally, the Seal of Biliteracy (http:// sealofbiliteracy.org), which recognizes students at high school graduation for meeting high standards of proficiency in English and another language, can motivate both faculty and students to pursue strong bilingual skills. The seal is now awarded in eight states (as of November 2014, California, Washington, New Mexico, Texas, Louisiana, Minnesota, Illinois, and New York), with several others pending. Our own research (Porras, Ee, \& Gándara, 2014) shows that employers are likely to consider this credential in hiring decisions.

## The Bottom Line

Over the last half century, a growing body of research has reached a consensus that there are many
cognitive, academic, social, and psychological reasons to nurture bilingualism for all children—and especially for those who begin school with another language. Now, new research is showing that bilingualism also produces significant labor market advantages.

It is a truism that money talks in U.S. society, and it turns out that the biggest payoff for society comes not from English-only instruction or transitional bilingual education, but from bilingual and dual language programs that foster literacy in two or more languages. Perhaps those educators and policymakers who have been slow to acknowledge the academic and social advantages of bilingual education will now be more willing to treat multilingualism as a rich national resource to be nurtured, rather than a problem to be fixed. ㄴ
${ }^{1}$ Two-way dual language programs enroll children both from the majority language (in this case, English) and a second language and teach in both languages. Bilingual programs generally use two languages with only one group of students, usually English learners.

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