Language education has been an aspect of American education for at least half a century. Language instruction was established as a priority in the International Education Act of 1966 as a means to build bridges between the U.S. and other countries, as the U.S. became more aware of the increasingly global landscape post-World War II. Today, there is a growing trend towards developing skills in additional languages through immersion programs starting in early elementary or even preschool. These programs have been shown to have a host of positive effects on academic and social-emotional skills, but over the last decade and a half, the advocacy rhetoric for policies has focused these on global competitiveness of the U.S.'s future workforce. While these programs are generally too new to demonstrate impacts on employability or workforce development, represent thev а promising strategy for both.

Language immersion programs are designed to develop fluency in an initially unknown language through content-based teaching in that language, teaching not only language-focused instruction in the second language, but also non-language related subjects such as math and science (Swain & Lapkin, 2005). Immersion programs can be utilized for students for whom the dominant language of their country of residence is not the student's primary language as well as for students who speak the dominant language to acquire an additional language. Immersion programs are different from bilingual programs in that all or almost all subjects are taught in the target language whereas in bilingual (or partial) immersion programs roughly half of instruction is in the target language.

Immersion Education and Competitiveness

Language immersion programs began in the United States in the 1970s (Lenker & Rhodes, 2007). Language immersion programs have seen significant growth in recent years, showing a roughly 64% increase between 1999 and 2011 (Center for Applied Linguistics, 2011). That growth has continued since as more states adopt policies to encourage additional language immersion options in their K-12 systems. While immersion programs are often adopted at the local district level, Utah was a pioneer in adopting statewide goals for language immersion education in 2008 (Utah State Board of Education, 2018). Since then, Oregon, Minnesota, Massachusetts, Delaware, California, North Carolina and Montana have all integrated state-level language immersion programs. The Federal government has also made language immersion programs a priority with its 1 Million Strong initiative, which seeks "to grow the next generation of leaders who have a deeper understand of China by creating a pipeline of China-savvy employees in a range of critical industries..." (US-China Strong Foundation, 2019). While improved academic achievement, critical thinking skills, and cultural competency are important justifications for these policies, competitiveness tends to be chief among the justifications touted by states when adopting or seeking resources for integration of language immersion programs.

The incorporation of competitiveness can take a variety of forms. Utah's State Board of Education includes in its list of proven benefits: "Immersion students are better prepared for the global community and job markets where a second language is an asset" (Utah State Board of Education, 2019). The Missoula County Public School District in Montana notes "language proficiency beyond English is, and will increasingly be. an important tool in communication in the educational, political, cultural, and economic affairs of our society" in the description of their language immersion program (University of Montana, 2019). The North Carolina State Board of Education's Task Force on Global Education, whose goal was "to assess the state's effort to produce 'globally competitive' graduates ready to live, work, and contribute in an interconnected world," states that "in order to maintain and increase our competitive advantage, North Carolina public schools must graduate students with advanced cultural and language skills" (North Carolina State Board of Education, 2013).

Language immersion education as a strategy to improve competitiveness is based on two premises. First, supporters point to the fact that most top-performing countries on academic achievement exams and the U.S.'s primary international competitors have all integrated English language instruction from an early age (typically between the ages of five and 11 years old), along with instruction in their native language and sometimes a third language (Wiley, Moore, & Fee, 2012). U.S. public schools, by contrast, typically don't integrate any language instruction until high school, well beyond the point at which children are most able to integrate a new language, and language instruction is typically comparatively basic since students often receive only a few hours of instruction in the acquired language for fewer than four years (Wiley, Moore, & Fee, 2012). This leads to the second premise - that integrating language immersion programs in the languages of the U.S.'s closest global economic competitors, positions those students to be more competitive as future employees to domestic and international companies, but also positions the states that invest in these programs as potential locations for international companies to invest domestically (Anderson, 2015).

Surveys of U.S. companies back up the claims that improved language skills potentially make American students, as a future workforce, more economically competitive. According to the Council on Foreign Relations, one study conducted in 2002, when exports were less critical for the U.S. economy than they are now, found that "30 percent of large U.S. corporations stated that personnel with insufficient international skills prevented their companies from fully exploiting business opportunities" and "80 percent believed their sales would increase if they had more internationally competent staff" (Wiley, Moore, & Fee, 2012). Furthermore, the Council on Foreign Relations cites a 2011 survey of more than one hundred executives of large U.S. companies in which "three-quarters (of respondents) agreed that language skills made it easier for foreign nationals to work in the United States than for U.S. nationals to work oversees" (Wiley, Moore, & Fee, 2012).

Alternative Policy Approaches

The supporters of language immersion programs benefit from a lack of alternative approaches to effective language acquisition. The primary alternative for language acquisition is through single-subject language instruction, such as providing one class period per day in a language other than English. While these programs certainly do introduce students to a new language, they are not effective in developing language fluency the way language immersion programs do, even when taken over several years. In fact, research has shown that language instruction provided through total or near total (90%) immersion programs demonstrates higher levels of language proficiency than partial (50% or less) programs (Asia Society, 2012). The likelihood, thus. participants receiving of language instruction a few hours a week achieving proficiency in that language is minimal.

Another alternative to language immersion education in U.S. public schools could be international exchange programs. These programs provide an immersive cultural and language experience for students in a concentrated period of time. The benefit of these programs over domestic language immersion programs is that they have the added benefit of cultural immersion in addition to language acquisition. These programs also achieve fluency for students in a relatively short period of time (six to 12 months) compared to several years of schooling for integrated domestic immersion programs. The drawback of this approach, however, is that it would be challenging to incorporate any exchange program on a significant scale, in part due to the logistics of trying to coordinate exchange programs as well as the obvious significant resource requirements to institute international exchange programs on a massive scale.

Policy Outcomes

It's hard to tell at this point whether language immersion education has in fact impacted the employment prospects of students or the competitiveness of the municipalities or states that have invested in language education. This is primarily because many of the policies were adopted in the mid- to late-2000s, which means that students in those earliest cohorts are just beginning to enter post-secondary education. Additionally, there has been little investment to date in major longitudinal research to confirm whether students knowing a second language fluently has an impact on their employment prospects. Similarly, there has been little investment in determining whether a pool of bilingual students in a geographic region serves as a magnet for foreign investment nor is there an understanding of whether certain languages have a greater impact on individual or regional competitiveness.

While there may not be much research on the impact of language immersion education on workforce competitiveness, the primary driver for the implementation of such programs, there are a variety of studies that suggest positive outcomes for academic performance, performance on standardized tests, and on social-emotional factors, all of which can indirectly impact competitiveness (American Council on Foreign Languages, 2019). More specifically, several studies have demonstrated impacts on problem solving abilities, cognitive flexibility, divergent thinking, and pattern recognition (Asia Society, 2012).

There is also some research to suggest interesting, unexpected impacts on students of color. One study in the Portland Public Schools, showed possible trends that suggest that participation in language immersion programs may have a more significant impact on students of color than their white peers (Slater, et al, 2017). The effects in the study were not statistically significant and may be limited to the sample parameters of the study (e.g., small to medium-sized urban public schools), but the study authors suggest that these results should prompt additional research on differential effects on demographic groups (Slater, et al, 2017).

Despite these potentially promising findings, research also suggests that students of color and students in lower income schools tend to have fewer opportunities to access language immersion programs. These issues of access are the result of two separate issues. In some cases, immersion programs are used as magnet programs in underresourced schools or communities. The programs may be based at an under-resourced school, but made available to all families in the district. perhaps with priority registration for families for whom it would be their neighborhood school. This has the benefit of making the programs available to students who might not otherwise have access to the programs and bring much needed resources to the school through program-specific funding and family support from better resourced families. However, this approach can also lead to better

resourced families becoming the majority of the students in the immersion program and creating a school-within-a-school. In some cases, the schoolwithin-a-school ultimately becomes a separate school in the district, even co-located with the original host school, creating a segregated school – upper-income families in their own immersion school, lower-income families in a regular nonimmersion school.

The second circumstance which effectively closes off language immersion for lower-income students is the fact that many programs tend to receive their initial advocacy from the community level and it is often affluent parents who are advocating for immersion programs. This may be because affluent communities are more informed about the potential benefits of language immersion education, because affluent parents have more access to (or willingness to utilize) advocacy tools such as attending school board meetings or meeting with district administrators, because lower-income families are focused on different aspects of their children's educational experience. or some combination of all of these. Whatever the reasons, there is research to suggest that certain demographic groups are not accessing language immersion programs to the degree they could. For example, African-American students in Portland Public Schools represent about 11 percent of the district's student population, but only about 2 percent of its dual language immersion program population is African-American (Dungca, 2013).

Last, but not least, it has been found that language immersion programs do require additional financial resources, though they are primarily concentrated at the district level. One study found that an immersion program required an additional \$100 per student, a nominal increase over the standard program (Colon, 2018). That study also found, however, that the immersion program required a notable increase in resources at the district level to account for the additional professional development needs of teachers, additional support for human resources to hire appropriate teachers, and additional support for curriculum development (Colon, 2018).

Conclusion

On balance, language immersion programs represent a high leverage strategy to potentially improve long-term employment prospects of students and create local domestic markets of multi-lingual employees to attract international companies. While it is too early to determine the impacts on global competitiveness of language immersion programs, now is the time to invest in research to this effect to bolster the already strong research demonstrating a variety of academic and social-emotional benefits. As more districts and states implement immersion programs, however, it will be critical to ensure that *all* students, regardless of ethnicity or socio-economic status have access to these high value programs.

References

- American Council on Foreign Languages. (2019). *What the research shows*. Retrieved February 26, 2019, from <u>https://www.actfl.org/advocacy/what-the-research-shows</u>
- Anderson, M. D. (2015, November 10). The Economic Imperative of Bilingual Education. *The Atlantic*. Retrieved February 17, 2019, from <u>https://www.theatlantic.com/education/archive/2015/11/bilingual-education-movement-</u> mainstream/414912/
- Center for Applied Linguistics. (2011). *Directory of foreign language immersion programs in U.S. schools*. Retrieved February 17, 2019, from <u>http://webapp.cal.org/Immersion/</u>.
- *Chinese language learning in the early grades: A handbook of resources and best practices for Mandarin immersion.* (2012). United States: Asia Society.
- Colon, I. T. (2018, September 28). New Study Examines Costs of Dual Language Immersion Programs [Web log post]. Retrieved February 17, 2019, from <u>https://www.newamerica.org/education-policy/edcentral/new-study-examines-costs-dual-language-immersion-programs/</u>
- Dungca, N. (2013, September). Portland Public Schools could see multiple new language immersion programs by fall of 2014. *The Oregonian*. Retrieved February 26, 2019, from <u>https://www.oregonlive.com/portland/2013/09/portland_public_schools_could_2.html</u>
- Lenker, A. & Rhodes, N. (2007). Foreign Language Immersion Programs: Features and Trends Over 35 Years. Washington, DC: Center for Applied Linguistics.
- Preparing Students for the World: Final Report of the State Board of Education's Task Force on Global Education. (Rep.). (2013). Raleigh, NC: North Carolina State Board of Education.
- Steele, J. L., Slater, R. O., Zamarro, G., Miller, T., Li, J., Burkhauser, S., & Bacon, M. (2017). Effects of Dual-Language Immersion Programs on Student Achievement. *American Educational Research Journal*,54(1_suppl), 282-306. doi:10.3102/0002831216634463
- Swain, M., & Lapkin, S. (2005). The evolving sociopolitical context of immersion education in Canada: Some implications for program development1. *International Journal of Applied Linguistics*,*15*(2), 169-186. doi:10.1111/j.1473-4192.2005.00086.x
- University of Montana. (2019). *SHAPE 2.0*. Retrieved February 18, 2019, from <u>https://coehs.umt.edu/about/SHAPE 2.0/Initiatives/Dual Language Immersion.php</u>
- US-China Strong Foundation. (2019, January 14). *About Us*. Retrieved February 19, 2019, from <u>https://www.100kstrong.org/about-us/</u>
- Utah State Board of Education. (2018). *Why Immersion?* Retrieved February 26, 2019, from <u>http://utahdli.org/whyimmersion.html</u>
- Utah State Board of Education. (2019). *Teaching and Learning*. Retrieved February 19, 2019, from <u>https://www.schools.utah.gov/curr/dualimmersion</u>
- Wiley, T. G., Moore, S. C., & Fee, M. S. (2012, June 26). A "Languages for Jobs" Initiative [Web log post]. Retrieved February 17, 2019, from https://www.cfr.org/report/languages-jobs-initiative