and actual education practice may also have been shaped by teachers' nervousness and uncertainty in implementing these policies. As Hart and Lee (2003) point out, many teachers may also feel intimidated by the scope of ELL instruction. Many teachers do broaden their understanding of the word "literacy" to mean more than reading and writing. However, at the same time, many instructors felt "less assured" they had the skills and knowledge to execute this larger challenge (Hart and Lee, 2003, p. 493).

In addition, specific tests also had challenges that limited their outcomes. The study by Kim et.al. (2011) on the Pathway Project, for instance, suggests mixed success on CST test scores were due to a variety of factors. ELL students, in general, grow up in homes where English is a minority language and students reaching secondary grade levels (6-12) may require "multiple linguistic resources" before they can tackle challenging texts that CST and CEDLT uses (p.250). In this context, even greater immersion, conducted at an early age, would help these students close the gap before they reach the secondary education stages. In addition, both Pathway and control teachers utilize the same testing criteria to instruct their pupils in order to achieve the higher scores. While Pathway techniques and resources may help ELL students, control teachers tend to use those same strategies in their daily class room settings as well, simply because they lead to higher test results. As a result, Kim et.al (2011) are uncertain if the Pathway Project is a cost-effective program when compared to other reading-writing improvement programs that are designed for slower-learning students, but not specifically for ELL students.

Lee et.al. (2008) briefly mention one other major factor that plays into a child's education. They note that many schools that perform poorly in tests are largely in "urban" areas (Lee et.al. 2008, 61). These studies should reflect that urban environment, and at least point to

the sociological factors that often impact a child's performance, especially one from a presumably immigrant household in which English is a second language. Many students acknowledge that underachieving school are situated in urban contexts, but these studies do not touch upon the sociological background of these children. Given that many of these ELL children come from financially-disadvantaged households (as evidenced by most of the studies noting these child subjects were dependent on school lunch programs), their economic and familial backgrounds surely impacted their ability to learn and to succeed in an unfriendly environment that is far removed from their cultural native homes. These studies would do well to interact within an interdisciplinary field, such as urban studies, in order to create a more complete background to contextualize their studies.

The differences in economic and political backgrounds are tangentially noted in several studies. Unfortunately, a nuanced reading suggests that the teachers themselves can be partly to blame for their lack of engagement with ELLs, although no study states this outright. However, it is clear that some teachers are unwilling to engage with students outside their jobs as educators in classroom settings. This can create disconnect between the students' backgrounds and those of their teachers—which professional development courses are supposed to address. In Kibler's and Roman's (2013) study, they describe Janice's experience with a professional development program and note that the program did not change her mind regarding the integration of native-languages in a classroom setting. Chval, Pinnow, and Thomas (2015) touch upon the dual nature of ELL students. They learn conversational English language on the streets and a more formal language in the classroom (p. 105). However, Chavl, Pinnow, and Thomas (2015) do not venture outside the classroom; they contain their study within the academic setting.

Ross (2014) perhaps gives the most critical reading of teacher reluctance to embrace ELL learners, although she does not concentrate on the point. From her survey, she observes that the over eighty percent of teacher knew that ESL/ELL programs were offered by their school district during the past three years, but over half chose not to take advantage of them (p.95). In addition, of those who did attend, many opted for a one-time seminar, which was judged as the "least effective for changing teachers' long-term instructional practices, behaviors, and attitudes" (Ross, 2014, p.95). This clinging, or even resistance, to an increasing immigrant population, and ELL students in particular, hints to a latent racism. Indeed, that majority of Ameican school teachers are white and do not speak another language other than English suggests a defensiveness in not wanting to engage in ELL intervention strategies. The study by Li and Peters (2016) also points to the lack of ethnically diverse teachers in the United States as a major contributor to the ELL crisis, which, in turn, points to a larger political and economic issue that may be relevant, but one which none of the authors are unwilling to contend with. It is perhaps outside the scope of their work, but given the topic of education reform does not rest solely upon the educational system, but on environmental factors, family situations as well as community demographics, future studies might integrate their work within a larger socio-economic backdrop.

ELL students and their teachers face many obstacles. In addition to the political and economic backdrop, largely unexplored in these studies, teachers and school districts fade the challenge of developing professional programs in the face of budget cuts, while trying to address the many criticisms directed toward standardized testing. Many of the studies affirm the general consensus that Ell student numbers are rising and that professional development courses in English literacy is needed to close the gap between underperforming ELLs and the rest of the

18

student body. These studies also agree that many of these programs are effective, whether they are large school-sponsored programs, such as Project Pathway or TLC, local video "clubs" to provide feedback and share tips, or Courtney's individual approach. Many strategies are in place to address the increasing gap between ELL students and the national average, but the studies all agree there remains much more work to be done.



## References

- Baecher, L., Rorimer, S., & Smith, L. (2012). Video-mediated teacher collaborative inquiry: Focus on English language learners. *The High School Journal 95*(3), pp. 49-61.
- Carrejo, D.J., & Reinhartz, J. (2014). Teachers fostering the co-development o science literacy and language lieracy with English language learners. *Teacher Development 18*(3), pp. 334-348.
- Chval, K.B., Pinnow, R.J. & Thomas, A. (2015). Learning how to focus on language while teaching mathematics to English language learners: A case study of Courtney. *Math Education Resources Journal* 27, pp.103-127.
- Hart, J.E. & Lee, O. (2003). Teacher professional development to improve the science and literacy achievement of English language learners. *Bilingual Research Journal* 27(3), pp. 475-501.
- Johnson, C.C., Bolshkova, V.L.J., & Waldron, T. (2014). When good intentions and reality meet: Large-scale reform of science teaching in urban schools with predominately Latino ELL students. *Urban Education* 5(5), pp. 476-513.
- Kibler, A.K. & Roman, D. (2013). Insights into professional development for teachers of English language learners: A focus on using students'; native languages in the classrooms.

  \*Bilingual Research Journal 36(2), pp. 187-207.
- Kim, J.S., Olson, C.B., Scarcella, R., Kramer, J., Pearons, M. van Dyk, D., Collins, P., & Land, R.E. (2011). A randomized experiment of a cognitive strategies approach to text-based analytical writing for mainstreamed Latino English language learners in grades 6 to 12.

  \*\*Journal of Research on Educational Effectiveness 4 pp. 231-263.\*\*

- 20
- Lee, O., Adamson, K., Maerten-Rivera, J.C., & LeRoy, K. (2008). Teachers' perspectives on a professional development intervention to improve science instruction among English language learners. Journal of Science Teacher Education 19(1), pp. 41-67.
- Lewis, S., Maerten-Riveria, J.K., Adamson K., & Lee, O. (2011). Urban third grade teachers' practices and perceptions in science instruction with English language. School Science and Mathematics 1114), 156-163.
- Li, N. & Peters, A.W. (2016). Preparing K-12 teachers for ELLs: Improving teachers' L2 knowledge and strategies through innovative professional development. Urban Education 0042085916656902. pp.1-18.
- Ross, K.E. (2014). Professional development for practicing mathematics teachers: A critical connection to English language learner students in mainstream USA classrooms. Journal of Mathematics Teacher Education 17(1), pp.85-100.