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### **Limitations to Professional Development Programs**

Despite some improved performances from ELL students in studies, many of the studies are limited. Almost all of the authors note their field work is an isolated moment in time and geography. The improvements from one year may not be sustained as time progresses. This is due to many factors, including changes in the infrastructure in school the educational system, especially budget cuts and politics. For example, in the TPD program, which elevated ELL students’ interests in math and science, one teacher complained that the test results did not reflect the politics of education: one school was shut down, teachers were transferred, and budget cuts increased the burden on teachers and students alike as science programs were slashed (Johnson, Bolshkova, and Waldron, 2016, p.499). In the case of Li and Peter’s (2016) study, the four school districts carried a massive debt of over \$2.124 million (p. 7). The authors argue that these

political and economic factors, outside their study's control, invariably impact the effectiveness of reform no matter how idealized the program is designed.

Indeed, according to Ross (2014), self-efficacy among mathematic teachers who teach ELL students is decreasing. Ross points to three factors: the number of ELL students has risen and professional development programs have not kept pace, budget cuts to professional development training, and the diversity of ELL students' cultural and native-languages are a daunting obstacle for any native-English speaker to surmount—the latter in reference to the growing immigrant populations besides Latinos (which many studies focus on). Ross conducted an online survey of 400 mathematics instructors in a mid-Atlantic state. Her survey extrapolated the demographics from her group to the teaching force in the United States and found that they matched: most of America's teachers are white, speak one language (native English), middleclass, and female (p. 92). Although these teachers can utilize strategies to build English skills in mathematical contexts, as Chval, Pinnow, and Thomas (2015) demonstrated with Courtney, Ross (2014) argues that many of these teachers do not have “pedagogical training that identifies the cultural awareness methodologies they need to be conscious of when interacting with ELLs” (p.88).

As a result, teacher confidence decreases. According to Ross's (2014) survey, even math teachers with many years of experience feel inadequate when addressing ELL students. This becomes a cyclical process: as ELL students increase in number, self-efficacy decreases as math teachers feel that their past experience has not prepared them for the influx of non-native speakers. In addition to the language barrier, teachers feel that they do not have a shared background, culture, and life experiences. Many teachers have also expressed frustration at the lack of available training opportunities to rectify their decreased self-efficacies. Ross (2014)

points out that budget cuts have slashed the number of professional development courses for ELL instructions. Although there are alternative programs, such as from business and corporate programs, university courses, and the community organizations that offer seminars in cultural immersion, up to forty percent of these professional development programs come from the school district (Ross, 2014, p. 94).

On the other hand, local programs, such as the informal video-sharing “clubs” created by one school and observed by Baecher, Rorimer, and Smith (2016), may seem attractive, but they also have limits. These local initiatives are low-cost, in this case, requiring only a video recorder, and the teachers’ time and interest. However, since they occur in an enclosed school environment, there is a lack of framework to implement wide-scale reform. Instead, these casual observational and feedback sessions involve a close-knit network in which the participants know each other, their students, the community, and share the same administration (i.e. the same principal). As a result, what one group learns will remain largely contained within the same environment. The video-sharing intervention can be exported to other schools and other school districts, but the lessons teachers glean from each other may be more limited in scope.

Even then, the lessons from professional development courses, whether formal or informal, are usually strictly voluntary. In the example of “Janice” from Kibler and Roman (2013), personal views about native-language instruction can resist professional development programs. The online program she undertook itself had a small scope, consisting of online videos and course work with no real on-hand classroom experience. It was only after she left the program and the context of her school environment changed that Janice came to realize the advantage of being able to address students in their first language, and she changed her views

accordingly. As a result, Janice may have come to recognize and implement the policies for ELL, but she did not necessarily agree with them.

Gaps also exist in terms of teachers' self-perception of classroom performance.

According to the study by Lewis, Maerten-Rivera, Adamson, and Lee (2011), teachers' self-reporting on their understanding the goals and implementation policies of reform programs may actually differ in their classroom practices. In their study of one southeastern urban school district, 38 third-grade teachers from fifteen schools underwent training in the National Science Education Standards and immersed themselves in the program's emphasis on fostering English skills within a scientific context. However, the teachers' self-reporting of their understanding of the goals and strategies of the reform program did not correlate with outside observation of their actual practices. The authors suggest that one possibility was that the teachers' perception of science content and practices differed from the actual goals of the reform-oriented practices (p. 162). They recommend that future studies concentrate on instructing teachers on "knowledge and practices co-emerge, as related to understanding" how these practices coincide with the larger goals of reform-programs (p.162).

This gap between teacher practice and the intents behind the reform policies also reflects a criticism against standardized test score. Lewis, Maerten-Rivera, Adamson, and Lee suggest that their outsider observation was inadequate to measure the "true" situations that occurred within classrooms. As a result of this incongruity, the standards they applied and held the teachers up to may have been overly strict. The authors admit they limited their time in the classroom to short intervals and were did not consistently attend classes. Thus, they may have missed the day-to-day interactions between teachers who realize that reform policies might not accurately reflect the actual classroom environment. The incongruities between classroom theory

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 American 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 face 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

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.



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