

Abstract

Education Preparation Programs are under-producing graduates in high-demand subjects, such as mathematics, while prescriptive reform initiatives are ever-forming to improve student achievement. These reform initiatives are attached to allocations of funding involving decreased federal role. States have increased flexibility with low accountability for the disparity of quality in development and implementation of effective plans, such as professional development reform efforts, to improve student outcomes linking student achievement data to teacher performance and school ratings. The purposes of this paper are to (a) determine whether, and to what extent, the District of Columbia's Public School's education reform response relating to professional development influences secondary mathematics teacher instructional practice, and (b) compare the effects of the degree to which teachers received consistent reform-oriented professional development via the district's intended model--LEAP.

Keywords: student achievement, math education, teacher training, teacher quality, and professional development, and LEarning together to Advance our Practice (LEAP).

When Passing the Buck Stops: Investigation of the Role of LEAP on Influencing the Instructional Practice of Secondary Math Teachers in the District of Columbia

RATIONALE

In the wake of attaching allocations of funding to education reform initiatives aimed at improving schools, states vying for federal funding associated with The Elementary and Secondary Education Act of 1965 (ESEA)—regarded as the godfather of education reform enacted in the pursuit of reducing education inequity for low-income students—is not uncommon.

While ESEA is extensive and has framed instructional institutions, Gamson, McDermott, and Reed argued that, "ESEA's low profile stems, in part, from the contemporary fashion of giving legislation catchy titles" (2015). This is unlike the name change in the 2001 reauthorization that brought about the popular title No Child Left Behind Act (NCLB). Gamson et al further noted that the name recognition came with little substance, particularly as it relates to advancing public understanding of the legislation and its effects.

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LITERATURE REVIEW

Undoubtedly, the political environment impacts the leadership and management of mathematics education reform. Furthermore, Eacott and Holmes (2010), specifically conjecture that comparative international tests such as TIMSS and PISA contribute to the performative nature of this policy environment. Consequently, international comparisons of student achievement dictate the foci areas of US educators in addressing the country's needs (Bybee & Stage, 2005).

While it is fair that any country would care about its reputation, especially the United States, Bybee and Stage (2005) claim that "the point is not to win some imaginary math Olympics this year, but to find out which countries are attaining success in educating young people, so that all nations can benefit from what they are doing right and integrate effective practices and policies into their education systems." However, "PISA is not directly tied to the school curriculum [and] was conceived and designed to [solely] assess the practical outcomes of education systems." More often than looking at the system, research leans towards teacher accountability. As a result, a compelling body of research shows that good teaching can improve student achievement (Haskins & Loeb, 2007).

In 2012, the District of Columbia, as did many other states, took advantage of flexibility waivers regarding specific requirements in exchange for comprehensive state plans that address actions from increasing equity to improving the quality of instruction ("Every Student Succeeds Act (ESSA) | U.S. Department of Education," n.d.). States have since enacted comprehensive plans to meet the demands of the latest amendments, inclusive of the state intermediate opt-in, of the 2015 Every Student Succeeds Act (ESSA). The changes come with an inaugural request for high quality assessments, emphasis on college and career readiness, and plans for providing 'high quality' teacher and principal training paired with continued state flexibility in implementation (Gamson, McDermott, & Reed, 2015). As part of the state plan reform initiative, and to 'help teachers become truly expert at teaching the DCPS Common

Core-aligned curriculum,' District of Columbia Public Schools launched LEAP (LEarning together to Advance our Practice).

METHODOLOGY AND DATA ANALYSIS

Based on the reported experience of a combined forty-four general and special education secondary mathematics teachers who participate in LEAP professional development program, many aspects of the intended professional development program occur as intended. The results of various school-based LEAP specific professional development, reported via survey, showed that 71 percent of teachers received common department planning and 91 percent of those teachers had the same evaluator in each observation window. In addition, 87 percent of the teachers who received two 45-minute sessions of LEAP per week noted having the same evaluator during each observation. Majority of participants identified the structure of LEAP as contributing to professional growth and their feelings supported it. Over 68 percent of participants indicated they are somewhat to very likely to implement shared learning, planning, and instructional look-fors following a LEAP session; Majority very likely. Moreover, 20 percent of teachers noted that the structure, alone, contributes to their desire to return to their school the following school year.

Simultaneously, the data also shows that there are situations where teachers are either never receiving touchpoints or are receiving them monthly, compared to teachers who are receiving weekly touchpoints. In addition, the results showed 60-80 percent of LEAP almost equally distributed to opportunities of shared learning, content development, data analysis and reflection. Majority of the touchpoints consisted of co-planning and observations, with 50 percent of participants reported never receiving a modeling touchpoint and over 20 percent never receiving neither a co-planning nor observation. 75 percent of participants reported their teacher effectiveness rating either increased or remained the same, majority the latter, for the past three years.

RECOMMENDATIONS FOR FURTHER STUDY

ESSA extended the last reauthorization requirement for increased accountability on students and teachers to include college and career readiness assessments, implementation of school accountability systems for underachieving schools, and district implementation of teacher and principal evaluation and support systems (Paul, 2018). Overall, the data suggests that LEAP has inconsistencies with implementation district wide and majority participants noted that they would not choose it as their primary source of development. A successful strategy to deal with the professional development problem starts with a review of the program design, training, and implementation. Such a strategy should include improved and ongoing training of LEAP leaders who are Distinguished or Expert Teachers with demonstrated gains by experts in the field of mathematics curriculum and instruction and a comprehensive district analysis of teacher professional development history and performance. Teacher professional development should then be differentiated, grouped, and targeted. It is further recommended that teaching quality is not a direct indicator of teacher quality, especially given programming is neither implemented nor resourced with fidelity at every level. In response to the various other roles and capacity of LEAP leaders identified in the survey, all leaders should have at least 75% dedicated to teacher support. Teacher Leader Innovators, TLIs, with 50% release time should not have a caseload exceeding three, with consideration given to the effectiveness level of teachers on caseload. There needs to be shared accountability among the district and schools with transparent monitoring to fulfill goals pertinent to the state plan. Due to the brief nature of this study, further research is needed.

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