Closing Intraschool Achievement Gaps: A Mixed Methods Pilot Study

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Purpose

This pilot project was designed to explore the degree to which educators closed identified intraschool achievement gaps (i.e. gaps occurring between sub-groups of students in the same school.), as well as to explore leaders, teachers, and staff perspectives on the ways their beliefs, assumptions and practices shifted while engaging in the effort to close the gaps.

Background

The Principal Residency Network’s (PRN) mission is to prepare aspiring leaders to champion educational equity through a research-based (Braun, Billups, & Gable, 2013) authentic learning process. A cornerstone of the program is an intensive residency during which aspiring principals learn to close an intraschool achievement gap. By drawing attention to current inequitable outcomes for specific subgroups of students in a school (compared to their peers in the same school), school leaders can lead school communities through a process that will challenge systemic inequities occurring in the school, and change the communities’ beliefs about the ability of all students. If a school community focuses only on general school improvement or on improving performance of subgroups compared to peers outside the school, they may not develop the necessary shift in community perception and beliefs that are needed to implement high expectations for all students. This shift is necessary to accomplish the goal of equitable outcomes for all students (Campbell Jones, Campbell Jones, & Lindsey, 2010; Johnson & Avelar La Salle, 2010; Love, 2009; Skrla, McKenzie, & Scheurich, 2009; Talbert, Mileva, Chen, Ken Cor, & McLaughlin, 2010). When a school community believes in their ability to impact the learning of all students, they are more willing to take responsibility for all students. The resulting
high level of internal accountability leads to an ability to meet external measures of accountability (Elmore, 2007) as learning communities focus on eliminating inequitable outcomes in their schools.

While literature supports the leadership practices that the PRN teaches aspiring leaders (Campbell Jones et al., 2010; Johnson & Avelar La Salle, 2010; Love, 2009; Skrla et al., 2009; Talbert et al., 2010), there is minimal research that links the principal/teacher perception data with the degree to which the intraschool gaps are closing.

Methods

This convergent parallel mixed methods study combined quantitative analysis of existing student achievement data and qualitative data from interviews and focus groups. With a focus on complementarity, mixing data at the data interpretation stage supported the common research purpose (Greene, 2007; Hesse-Biber, 2010). In the final phase of the study, aligning pre/post scores with emergent themes created a profile of the transformative effect of principal leadership on teacher beliefs and practices to close achievement gaps.

Participants and Sites

Purposefully selected participants included PRN program graduates (N=2) serving as principals at public schools who agreed to identify a gap they were working to close, provide pre- and post- student achievement data, participate in 1:1 interviews, and organize staff to attend focus groups at the two sites (FG #1 N=7, FG #2 N=5). Individuals were selected based on their ‘information rich’ potential (Patton, 2002).

Data Collection and Instruments

Principals at each site provided researchers with pre-post student achievement data for the students receiving the interventions and for their peers. Interview protocols and focus group
moderator guides were used for the qualitative phases. Data collection spanned the period from fall of 2012 to summer 2013.

**Data Analysis**

Preliminary data analyses involved quantitative data analysis using SPSS software, presented in tables; qualitative data were analyzed thematically (Patton, 2002). Final mixing of data involved three strategies suggested by Onwuegbuzie and Teddlie (2003): 1) data comparison, 2) data consolidation, and 3) data display. Data were compared to identify new issues generated by the comparisons. Figure 1 illustrates these new perspectives created by this analysis.
Figure 1. Data Analysis Typology for QN and QL Results
Summary and Conclusions

This mixed methods pilot study was designed to explore the ways in which principals and teachers developed and implemented gap-closing strategies in their schools. While one aspect of the analysis focused on the commonalities between the two schools, attention was also focused on the differences in school context and the principals’ leadership practices that may have influenced behaviors, attitudes, and perceptions. Converged data analyses identified factors that explained or hinted at the variations in teacher perceptions of leadership, relative to their activities in gap-closing efforts. Gaps were apparently closing at both sites, and findings revealed shifts in teacher practices and beliefs influenced by the effort to close the gap. As the principals and school staff embarked on the year-long process to close the gaps, they enacted the core practices articulated in the qualitative results: setting direction; monitoring progress; building capacity to teach, collaborate and lead; and reorganizing systems. While the gaps between the intervention groups and their peers were detected as closing, significant differences ($p<.05$) between some of the intervention groups and their peers still remained at the end of the year. Focus group results show that the process of attempting to both improve learning for all and specifically for a group of students whom the school was not serving well, impacted the transformative practices, beliefs and motivations of principals and teachers involved in the work.

Some of the intervention groups were small, which limited quantitative analysis. Future phases will involve additional schools that are working to close a gap between larger subpopulations and their peers. Also, the one-year window of time may not be enough to actually close the gap between the groups. Both pilot study schools have been invited to provide the researchers with data on their second year of implementation of the work described in this study.
to see if their articulated gaps are closing. The next phase of this research intends to extend this study to a larger group of school sites and participants. This work may inform preparation programs and school and district leadership practices on the specific ways that efforts to close intraschool achievement gaps impact educators’ practices and beliefs, as well as equitable achievement outcomes for all students.
References


