



Strengthening principal leadership is only one piece of the puzzle

WHAT THE STUDY SAYS

The study, conducted between 2009 and 2011 in rural schools in northern Michigan, finds positive, statistically significant impacts on variables related to principal self-efficacy beliefs, principal leadership practices, and instructional climate, yet finds no statistically significant changes in student achievement or in teachers' perception of leadership practices.

Study description

Researchers designed and implemented a randomized control study of McREL's Balanced Leadership program implemented in rural schools in northern Michigan. Funding came from the Institute of Education Sciences through the U.S. Department of Education. The study measured the impact on principal and teacher perceptions, beliefs, practices, and student achievement using data collected from both principals and teachers in their schools.

Control group principals received only the routine professional development offered through their

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At a glance

Principal leadership development in rural schools leads to a variety of positive changes related to principal and teacher turnover, principal efficacy, leadership, and principal perception of collaboration among staff, and stronger norms for differentiating instruction, although not student achievement.

THE STUDY

Jacob, R., Goddard, R., Kim, M., Miller, R., & Goddard, Y. (2015, September). Exploring the causal impact of the McREL Balanced Leadership program on leadership, principal efficacy, instructional climate, educator turnover, and student achievement. *Educational Evaluation and Policy Analysis*, 37(3), 314-332.

districts, other regional offerings, or state programs. Treatment group principals participated in McREL's Balanced Leadership professional development program. The program, taught by trainers approved and prepared by McREL, took place over two years and included 10 two-day, cohort-based sessions between January 2009 and November 2010.

The program's content addressed the development of 21 leadership skills associated with increased student achievement. The skills are aligned with Interstate School Leaders Licensure Consortium standards and other research findings on leadership practices.

Questions

The study focused on four research questions assessing the impact of the Balanced Leadership program on:

1. Principals' leadership practices and

- the school's instructional climate (i.e. school climate, norms for teacher collaboration, norms for differentiated instruction);
2. Principals' efficacy beliefs;
 3. Teacher and principal turnover; and
 4. Student achievement.

Methodology

Researchers recruited principals from rural school districts in northern Michigan with superintendent approval. Once identified, 126 principals of public schools serving grades 3-5 inclusively were randomly assigned to a treatment or control group based on a stratified sampling framework that balanced geographical type, size, and socioeconomic status.

Preliminary analyses suggest no differences between treatment and control schools before treatment. The schools were mostly small, serving

WHAT THIS MEANS FOR PRACTITIONERS

This study highlights the complexity of change in schools. Strengthening leadership practices of principals alone is unlikely to produce sweeping changes in teacher practice or student achievement. It also raises questions about the program design, the time restrictions of funded studies, and data use.

Several features of the program align with the Standards for Professional Learning, yet attention to all the standards is unknown. For example, the Balanced Leadership program content aligned with core practices of principals, standards of performance used in many school systems and states, and confirmed in the research (**Outcomes** standard), yet it is unclear how well the content aligned with the specific performance expectations for principals of the schools selected and the needs of the school systems, teachers, students, and communities.

The program engages participants in cohorts (**Learning Designs**), yet it is unknown how often participants actively engaged in the learning and whether the learning designs emphasized behavioral rehearsals to accelerate application.

While the program was free to participants (**Resources** standard), it is unknown if participants perceived a need for change in their leadership practice (**Data** standard), received implementation support and feedback throughout the program (**Implementation** standard), or if their supervisors advocated changes in their practice and provided the appropriate conditions and culture for success (**Leadership** standard).

It is also unclear if the participants and their supervisors were

committed to continuous improvement, collective responsibility, and alignment of expectations and accountability for success with program participation (**Learning Communities** standard).

The timeline for change in this research study raises questions about time for implementation and impact to occur before collecting completion data. Unreasonable timelines such as the one in this study are often the result of strict time restrictions for funded studies.

This study is a good example of the long journey of change and the intensity of reform required to generate results for students. It describes a program designed to develop principal capacity. It is one aspect of what must become a multilayered change program, one that includes efforts to improve the efficacy beliefs and practices of principals as well as teachers and school system staff.

It also requires reprioritizing commitments, expectations, and resources to generate high-leverage changes in instruction, curriculum, assessment, and professional learning. Had this program been folded into a comprehensive reform effort with opportunities to develop all staff, provide adequate resources and support for implementation of new learning, and accountability for results, the results might have been different.

Overall, while the study measures the impact of the Balanced Leadership program and provides a solid investigation design for assessing the impact of professional development, its design isolates a small number of factors from the complex constellation of factors that contribute to change in schools and student achievement.

about 300 students who were poor (47% eligible for free or reduced-price lunch) and mostly white (more than 90%). The study examines professional development for rural school principals, a little-served population.

The study's proposed causal model, supported by a review of the literature, suggests that the Balanced Leadership program leads to increased principal self-efficacy and improved principal leadership and instructional climate. Principal self-efficacy leads to reduced principal and teacher turnover. Reduction in staff turnover and improved principal leadership and instructional climate lead to increased student achievement.

The study examined attrition carefully through a series of statistical

analyses. From the 126 schools initially selected and assigned to treatment and control groups, 91 completed the study. Principal unwillingness to continue as a control school or lack of student, teacher, or principal survey data were primary reasons for attrition. The attrition rate was 28% with a differential attrition rate of 12%. Statistical analyses between attriters and nonattriters yielded no statistically significant differences.

Analysis

Researchers collected survey data from both principals and teachers in control and treatment schools. Researchers administered surveys to both principals and teachers as a baseline before and three months

after completing the professional development program. Surveys included parallel questions for principals and teachers, allowing for comparison of responses. Response rates on both the baseline and outcome surveys for principals and teachers exceeded 90%.

Researchers initially identified 18 separate factors, yet aggregated factors as they loaded onto three measures: principal leadership, schoolwide collaboration for instruction, and school climate. Factor analysis did not support the inclusion of two additional factors that were retained separately: principal efficacy and school norms for differentiated instruction.

Data regarding staff turnover and student achievement were drawn from

Michigan Department of Education. Researchers used fall scaled scores in math and reading on the Michigan Educational Assessment Program (MEAP) between 2008 and 2011 to measure student achievement.

Results

At the end of the program, statistically significant differences between the control and treatment group principals occurred in the factors of principal efficacy, principal leadership, collaboration among staff, school climate, and norms for differentiated instruction. There were no statistically significant differences between treatment and control schools regarding how teachers assessed principal leadership, teacher collaboration, school climate, or norms for differentiated instruction.

There were statistically significant differences between control and treatment schools in principal and teacher turnover, with a reduction of 16 percentage points for principals and 5 percentage points for teachers in turnover. For example, 28 principals in the control schools compared to 14 in the treatment schools turned over during the time of the study.

Researchers applied statistical analyses to examine the unbiased estimates of the “intent to treat” and the impact of program participation to determine the impact on participating principals. These analyses provide estimates on the effect of the “treatment

on the treated.” Overall participation in the program was about 74% for treatment principals, and more than half attended 90% of the program. Researchers noted the challenges attendance created for principals and their superintendents because of principal absence from their schools.

There were no statistically significant differences in student achievement between the control and treatment schools.

Researchers offer several potential explanations for the results, including that the program did not teach the skills associated with increases in teacher perception of leadership or student achievement; treatment principals made small changes in their practices resulting in minimal impact; principal changes alone are insufficient to produce perceived change in instructional climate and student achievement; the unit of study is the school, with the modal district having only one school involved in the program; and 12% of control group principals participated in a program with similar content to *Balanced Leadership* and 79% had read the book by the authors of the original *Balanced Leadership* study describing the 21 behaviors, suggesting that control group principals had some exposure to the treatment content, although not with the same intensity.

Limitations

Researchers acknowledge several

limitations to the study, including the handling of data in schools where there were changes in principals and staff. Because the school is the unit of analysis, those schools continued to be included in the study, and data from new teachers and principals were included in the data set if they returned surveys. This led to some instances of comparing baseline and outcome scores for two different principals.

The tension between competing commitments about continued participation in the program and expectations for principals to be present in school was exacerbated by the fact that most participating treatment schools were singletons from their districts. As a result, some principals may not have received district support for application of and participation in their ongoing learning.

Another limitation is the placement of the outcomes data. The final session of the training was in November 2010, and the student achievement data for the final year was collected the same fall. Final outcome survey data were collected in January and February 2011, also after the final student achievement data were collected.

Neither the research design nor researchers illuminate how the social, policy, and economic landscape in which this initiative was implemented affected the participants. The years during which the study occurred are marked with significant economic and education policy changes. ■

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