

Identifying Data-Driven Instructional Systems

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Administrative Leadership

Strong and Engaged Site Leadership

Research Summary

What

This study investigated whether student outcome improvements were linked to the formal and informal systematic use of data.

Who

Four schools (K-6, K-5, K-8, and 7-8) with a total of 1,850 students, located in rural, urban, and suburban settings, participated. Each school had a reputation for utilizing data effectively and a record of increased student achievement scores.

How

This case study used such data sources as interviews, observations, and a collection of artifacts, including school improvement plans, staffing charts, budgetary information, and parent and community handouts. The observations included faculty meetings, professional development sessions, data retreats, and more.

Researchers asked: Did school leaders create (a) practices to collect, acquire, and store data? (b) practices to reflect on data and set goals? (c) interventions based on data? and (d) practices to learn from their interventions? If so, how?

Major Findings

From their findings researchers developed a description of a *Data Driven Instructional Decision System* framework with six functions.

Data acquisition: Effective schools collected data from a variety of sources, not just standardized tests. Systems related to data collection at both district and school levels directly and positively influenced the use of data for instructional change. Data reporting at district and school levels differed: districts queried online data warehouses whereas principals and teachers met to develop reports.

Data reflection: Making sense of data in context was key to success. Forums for reflection included district-led data retreats and local school reflection meetings.

Program alignment: Schools that aligned relevant content and performance standards to the actual content taught in classrooms were more successful. They more easily identified when a current instructional program was not meeting student needs. Alignment also helped schools see how different programs fit together and influenced one another.

Program design: Program design looked at the alignment between student achievement data and the interpretation of those data in relation to the instructional programs. Three areas affected instructional programs: faculty-based programs (e.g., professional development, coaching, evaluation), curriculum-based programs (e.g., programs used for classroom instruction), and student-based programs (i.e., focused on individual student needs versus all students' collective needs).

Formative feedback: Formative feedback was the information generated by teachers and leaders about student and program progress. The schools in this study developed systematic feedback processes that helped educators make sense of formative feedback.

Test preparation: Test preparation includes activities designed to motivate students and develop strategies for improving their performance on state and district assessments. Curriculum-embedded activities, test-taking skills, establishing a positive environment for students during testing, and reaching out to parents and the community were part of successful test preparation.

Conclusion

SWIFT Strong and Engaged Site Leadership emphasizes the use of data to identify strengths, opportunities, and priorities for improvement. This research enables schools and districts to compare their current practices to a Data Driven Instructional Decision System framework as a means to identify system changes that improve student outcomes.

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