EXECUTIVE SUMMARY

Since December 2000, the Southwest Educational Development Laboratory (SEDL) has developed and refined a systemic model to improve student achievement in reading or mathematics in sites composed of low-performing districts and schools (Southwest Educational Development Laboratory, 2000). The Charles A. Dana Center at the University of Texas at Austin partnered with SEDL on this work, with support from American Indian Research and Development.[1] Funding was provided through a 5-year research and development (R&D) contract awarded by the U.S. Department of Education.

This report describes the *Working Systemically* model developed under this contract, presenting analyses of data related to its impact in 12 sites distributed across SEDL's five-state region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas). It focuses on the final 2 years of the project (2003–2004 and 2004–2005), documenting the sites' progress in developing systemic work and improving student achievement.

Research Questions

The goal of the final report is to describe the progress of SEDL's sites in working systemically as conceived by the model and to explore the degree to which this work is related to student achievement. Specifically, the report addresses the following three research questions:

- What strategies did SEDL field staff use to build the capacity of low-performing districts and schools to work systemically?
- To what extent did low-performing districts and schools increase their capacity to work systemically?
- Did student achievement increase as districts and schools increased their capacity to work systemically?

[1] Throughout the remainder of this report, "SEDL" is used to designate the partnership of organizations that are actively involved in this work.

Data and Analysis

To gather data on the intensive site work undertaken by field staff and on the progress of the sites to build capacity to work systemically and improve student achievement, the research team

- interviewed a sample of educators at each site in the fall and spring;
- administered a paper-and-pencil survey at each site;
- examined site contact records maintained by field staff; and
- analyzed state-mandated achievement test results.

For data describing the field staff strategies, research staff analyzed field staff's site contact records and reviewed exit interviews conducted in Spring 2005 to triangulate these analyses. For outcome data regarding capacity for systemic work, the study included surveys of site educators from 2003, 2004, and 2005 (conducted in the spring semesters), and fall interviews from 2003 and 2004. Student achievement data for 2003 and 2004 were collected for schools across sites. When possible, data were also obtained for 2005. In addition, demographic and achievement variables were used to develop matched comparison groups for each grade-level analysis of achievement.

Findings

The question of whether systemic work is linked to increased student achievement highlights the multiple demands intrinsic to systemic reform, particularly in low-performing districts. Fundamentally, districts must know how to recognize critical needs (e.g., improving achievement) and be able to devise and implement plans to meet those needs. A tacit assumption of this process, however, is that all stakeholders have the capacity to be fully engaged. The wide variation in our results suggests that low-performing districts require more assistance to support their efforts toward building coherence.

Field Staff Strategies Focused on Instructional Leadership

Field staff strategies to develop educators' capacity for systemic work were examined, with particular focus on those designed to have the most direct impact on the classroom. Three core strategies were central. One was to work with site staff to finalize written action plans and ensure that all initiatives in the site were coherent with its goals. A second was to build educators' capacities. To develop site leaders' capacity, field staff relied primarily on collaborative work within structured leadership team meetings. They also offered leaders informal coaching. To strengthen classroom- level capacity, field staff engaged educators in the Professional Teaching and Learning Cycle (PTLC), a collaborative approach to classroom practice that catalyzes the alignment of instruction with curriculum, assessment, and state standards. A third core strategy was to help leaders in the sites to monitor two areas: activities related to the PTLC and progress on related goals at the district level. Despite the emphasis these three core strategies placed on classroom-level practice, all of them stressed the importance of instructional leadership. The accountability of educators to the levels above their own proved crucial to conducting the work supported by the field staff.

Limited Growth in Systemic Work

Sites made progress in working systemically. They developed skills and practices that enable them to integrate and direct the various facets of their school systems toward achieving student learning goals. Important practices in which improvements were made included focusing district priorities and expectations of teachers on improving student achievement, aligning curriculum with state standards, supporting collaboration among teachers on curriculum and instruction, and engaging in high-quality professional development focused on student learning needs. However, the amount of growth found was generally small, and there was variation in outcomes among sites and among groups of respondents. Teachers and administrators diverged on many measures, including the extent to which student learning was made a priority and the quality of professional development in their districts. Differences in patterns of participation in

SEDL's work and knowledge of new initiatives resulting from the work most likely contributed to these differences. Whatever the reason, these disparities among educators in the sites made it less likely that they would be able to exhibit more dramatic growth in systemic work.

Mixed Student Achievement Patterns

The limited gains in working systemically may have affected student outcomes as well. Overall, grade-level achievement results did not indicate a pattern of significant change among schools participating in the project. Thus, the initiative did not provide compelling evidence of impacts on long-term criterion-referenced indicators of academic achievement. However, significant correlations between working systemically measures and academic achievement, particularly for alignment, provide non-definitive but encouraging evidence that progress on these short-term outcomes may be important in regard to academic achievement.

Recommendations for Systemic Reform

The process of systemic reform is two-fold. First, reform efforts have to focus on increasing school and district capacity, including the ability to recognize critical needs (e.g., improving achievement) and to devise and implement plans to meet those needs. Second, program personnel have to help educators utilize capacity coherently and effectively at various system levels. In particular, improvement initiatives need to focus explicitly on skills related to classroom instruction and developing school and district infrastructures to support and sustain coherence in instructional programs.

Increasing School and District Capacity

Both field staff and educators in the sites reported that they believed more time to develop systemic work would be necessary in order to affect student achievement. Our analyses suggest that one reason may be that the implementation of improvement initiatives requires knowledge, skills, and resources that schools and districts do not always have.

- A variety of resources are necessary to support systemic reform. Among these is ensuring sufficient time for establishing processes that contribute to strengthening an educational system. Such processes include collaborative planning and decision making, as well as ongoing professional development.

- Many sites lacked instructional materials that were aligned with their states' standards. Textbooks, planning guides, and other curricular materials should be aligned to and focused on state standards in order to be useful in creating coherence in a district's instructional program.

- Some school principals also found it challenging to incorporate practices related to instructional leadership alongside their operational and managerial responsibilities.

Helping Educators Utilize Capacity

Educators benefit from ongoing coaching as they implement systemic reform efforts. Growth in capacity should be focused on supporting initiatives to align curriculum, instruction, and assessment to state standards, with particular emphasis on instruction.

- In putting the *Working Systemically* model into practice, field staff focused on systemic processes such as collecting data, setting goals and objectives, and planning initiatives. Many educators, however, had had little experience in working collaboratively and needed training on how to use their planning time productively to achieve explicit goals. Field staff therefore emphasized coaching and modeling in their work to build educators' capacity while implementing new programs and initiatives being developed through districts' work with the *Working Systemically* model.

- Alignment was positively and consistently related to improved achievement. Directly addressing curriculum and instruction may lead to improved student learning since

alignment was the area of practice most directly related conceptually to teaching and learning.

- As the *Working Systemically* model suggests, improvements to curriculum and instruction do not occur in isolation from other school and district practices. Other areas of the system must support such improvements and should be directed toward improved teaching and learning. Staffing practices, for example, must focus on recruiting and retaining teachers who have the content and pedagogical knowledge to implement instructional strategies that meet students' needs. Administrators also need to be able to evaluate the quality of instruction and to support teachers in improvement efforts.

Recommendations for Research

The recommendations for research that follow relate both to content and methodological concerns. Generally, they suggest that researchers have yet to address adequately the capacity issues that emerged in this work. Following a list of three suggested topics for future research are some methodological recommendations regarding research in low-performing educational systems.

Areas for Further Research

Future research on systemic reform should focus on designing dual-focused technical assistance, determining specific impacts of alignment on student achievement, and doing more systematic classroom observations.

- Because systemic reform is by its nature multilevel, it calls for a dual focus in the kinds of technical assistance provided. Some teachers and school-level administrators, however, reported feeling peripheral to SEDL's work until it more directly engaged issues of instruction. Researchers need to examine more

systematically what types of technical assistance will support administrators' leadership capacity as it simultaneously improves instruction.

- Curriculum and state standards, as well as state-mandated assessments, are all explicitly connected. The "black box" in the alignment process is instruction. Future research should elaborate upon exactly why alignment might boost student achievement (Newmann et al., 2001).

- Future research needs to emphasize more formal observations of classroom practice that will systemically document which instructional strategies convey a standards-based curriculum in ways that will improve students' performance on aligned assessments. Researchers can also focus on how best to ensure that teachers know how to implement these strategies.

Methodological Considerations

The majority of sites participating in this work were selected due to low performance on state standards-based achievement tests. However, this focus introduced other issues particularly endemic to these environments: limited knowledge of what engagement in a research project entails, concurrent school improvement programs, and administrator turnover.

- Knowledge of what participation in a research project entails is generally limited to scholars. Any school improvement intervention to be evaluated scientifically must therefore incorporate strong incentives for participants, leaders especially, to ensure continued commitment to it. This process of recruitment has to be ongoing.

- Particular attention needs to be paid to the external environment in which work in low-performing districts and schools is conducted. These systems often utilize a number of school improvement programs in efforts to improve student achievement within the context of high-stakes accountability. Educators and field staff in this

project often had to negotiate among the demands of several of these programs. Such negotiations can lead to variations in the ways programs are implemented, which must be documented and accounted for in evaluations and research.

- Changes in leadership can greatly influence the direction of a reform process positively or negatively. In either case, a period of adjustment necessarily follows. Ideally, fostering an awareness among leaders of the role they play in the success of research interventions would be part of the coaching mentioned above.

Implications

The question of whether systemic work is linked to increased student achievement highlights the multiple demands intrinsic to systemic reform, particularly in low-performing districts. If systemic work is a goal for substantially low-performing districts, the initial phase of the program must focus resources toward helping educators at all levels attain a threshold of competency in needed areas. Long-term success is largely dictated by how well all the parts of the educational system work toward a common goal. Continued improvement is only possible when educators at all levels have the capacity to engage effectively in the reform process.