Scaling-up Brief
Leveraging Change in State Education Systems
Dean L. Fixsen, Karen A. Blase, Caryn Ward, Barbara Sims

Introduction

Effective implementation capacity is essential to improving education. The state implementation and scaling up of evidence-based practices center supports education systems in creating implementation capacity for evidence-based practices benefitting students, especially those with disabilities.

Educators are prone to say, "we are unique" meaning that their school, district, region, or state education system is unlike any other. We agree. The State Capacity Assessment and District Capacity Assessment baseline data collected by the SISEP Center support the assertion of uniqueness – the data vary along every dimension. Education units are anything but standard. What is a school – one that has over 4,000 students in Los Angeles or one that has 40 students in Montana? What is a district – one with over 600 schools in Chicago or one with no schools in Oregon (all the Oregon students in that district attend schools in Idaho)?

The uniqueness of education units from states to classrooms presents a challenge for implementation-informed approaches to using effective innovations to produce marked improvements in student outcomes. Education is an interaction-based profession. Education systems produce important outcomes that are the product of teachers interacting with students in education settings. If the adults don't teach, the children don't learn at an acceptable rate.

An implementation-informed approach to dramatically improving student outcomes relies on Implementation Teams (for more information go to https://sisep.fpg.unc.edu and implementation.fpg.unc.edu). Implementation Teams have expertise in implementation science and practice. Implementation Teams are skillful in their approaches to developing implementation capacity in education systems that are highly variable and unique in so many ways.

Leverage for Change

In the 50 United States there are about 14,000 school districts, 98,000 schools, 3 million teachers, and 50 million students. The Table below provides the national averages: there are 280 districts per state, 7 schools per district, 30 teachers per school, and 17 students per teacher. These averages are not represented in any given state, district, school, or classroom but do provide information to illustrate implementation capacity development.

Structure	N=	National Ratio	Implementation Ratio
States	50	50	50
Regional Entities			**14 RITs/ State**
Districts	14,000	**280 districts/ state**	**20 districts/ RIT**
Schools	98,000	7 schools/ district	15 schools/ DIT
Teachers	3,000,000	30 teachers/ school	30 tachers/ BIT
Students	50,000,000	17 students/ teacher	17 students/ teacher

Source: National Center for Education Statistics, http://nces.ed.gov/fastfacts/display.asp?id=372

The information in the **National Ratio** column points to a significant omission in the way education systems are structured. On average, one state education department is being asked to relate to 280 districts in a meaningful way. We have searched the management literature and cannot find any examples where a 1:280 ratio was effective. A typical recommendation (Joss, 2001) is a management ratio of 1:8 (e.g. one unit can effectively manage about 8 other units). The average of 7 schools per district is in this range; the other ratios are not. The ratio of 280 districts per state is the most unmanageable outlier.

Leveraging Improvement

Improvement of student outcomes starts in the classroom. Leveraging improvement in education outcomes begins with supporting effective teacher instruction. On-going support for teachers is arranged by the District Implementation Team (DIT) working with school leadership and with Building Implementation Team (BIT) members.

Notice the multiplier effect (i.e. leverage): one BIT supports excellent instruction for 30 teachers and each teacher impacts 17 students. Thus, one BIT impacts 510 students. The multiplier effect is documented in research (Schoenwald, Sheidow, & Letourneau, 2004). Leverage for improvement is even greater at the district level. One DIT can effectively support implementation capacity in about 15 schools (450 teachers; 7,650 students).   The competence of a DIT is critical to the success of a great many teachers and students. This is where the importance of a regional entity is essential to leveraging improvement in education. DITs need to be developed and sustained.

One statewide group cannot develop 280 DITs and assure their competence. Regional Implementation Teams (RITs) need to be established as a part of the regional Education Service Agency (ESA) supports currently available in many states. For example, Iowa has 9 Area Education Agencies, Michigan has 57 Intermediate School Districts, Texas has 20 Education Service Centers, and Washington has 9 Education Service Districts. E ndsley et al. (2014) report there are 620 regional ESAs that serve about 80% of all schools in the US. Each RIT lodged in an ESA can help develop, support, and sustain about 20 DITs.

With the structure in the **Implementation Ratio** column in mind, the state task is now manageable – develop, support, and sustain 14 RITs (not 280 DITs). The implementation infrastructure shown in the right hand column supports the functions that are essential to achieving greatly improved outcomes in education. In this structure implementation supports are developed, sustained, and improved in service to effective innovations and standard practices in education. The regional structures are a critical component without which islands of excellence have no way to be expanded and improved to benefit students and society.

Summary

Education systems and the units within those systems are highly variable. An implementation infrastructure in the form of Implementation Teams can be developed to account for the variability. Implementation Teams can make use of cutting edge knowledge to conduct implementation-informed work in regions, districts, and schools so that teachers have adequate support for effective instruction when interacting with students in the classroom. Existing unmanageable structures can be modified to produce greatly improved and predictable outcomes for students.

References

Endsley, M., Speth, T., Akey, T., Krasnoff, B., Barton, R., Singh, M., . . . Fantz, T. (2014). Coordination of instructional services by Washington State's Educational Service Districts (REL 2015–041). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest.

Joss, R. L. (2001). Management. Australian Journal of Management (University of New South Wales), 26(2), 89.

Schoenwald, S. K., Sheidow, A. J., & Letourneau, E. J. (2004). Toward effective quality assurance in evidence-based practice: Links between expert consultation, therapist fidelity, and child outcomes. Journal of Clinical Child and Adolescent Psychology, 33(1), 94-104.

About SISEP

Effective implementation capacity is essential to improving education. The State Implementation & Scaling-up of Evidence-based Practices Center supports education systems in creating implementation capacity for evidence-based practices benefitting students, especially those with disabilities. For more Information visit us on the web at: https://sisep.fpg.unc.edu