

BUILDING SYSTEM CAPACITY FOR SCALE UP: Successes, Challenges, and Lessons Learned

Cheryl King, Tom Haferd, Eliza Fabillar, Maria-Paz Avery

EDUCATION DEVELOPMENT CENTER, INC.

April, 2013

Table of Contents

- Introduction 2
- The Charge 2
- The District Contexts..... 2
- Our Theory of Action 3
- A Nested Learning Community Model..... 6
- A Two-Pronged Learning Agenda 7
- The Broward Context..... 7
- Broward District Innovation Design Team Sessions..... 11
 - ___ *Successes:* 13
 - ___ *Challenges:* 13
 - ___ *Lessons Learned in Broward* 15
- Fort Worth Research Study..... 18
- Fort Worth Innovation Design Team Sessions 21
- References 26

Introduction

The issue of “scale” is a key challenge for school reform, yet it remains under-theorized in the literature (Coburn, 2003). Coburn argues that definitions of scale focusing only on expanding the number of schools reached by a reform conceal the complex challenges associated with developing the depth of change necessary to support and sustain widespread system change. Coburn’s conception of scale as four interrelated dimensions: depth, sustainability, spread, and shift in reform ownership suggest implications of for both reform interventions and research design.

This paper is written for the purpose of sharing successes, challenges, and lessons learned from early phases of our work in two school districts – Broward County Public Schools in Florida, and Fort Worth Independent School District in Texas as part of the National Center on Scaling-Up Effective Schools (NCSU) at Vanderbilt University’s Peabody College. It is written from the perspective of experienced education developers, who have spent the past two and one half years working as part of a multi-disciplinary team of researchers from five different research institutions and school district teachers, principals, and central office staff to identify and understand system needs and together build ownership and commitment for deep system wide change across a diverse range of stakeholders. NCSU is funded with a five-year, \$13.6 million grant from the Institute of Education Sciences – a research arm of the U.S. Department of Education.

The Charge

The work of NCSU focuses on identifying the combinations of practices that appear to make some high schools more effective with low income, minority, and English language learners and distinguishes them from other high schools in the same district. Identified practices are closely studied by teams of researchers, practitioners, and developers to determine contributing factors that seem to explain why practices are effective with these student populations. Teams are then responsible for designing, implementing, and testing innovations that incorporate findings about these contributing factors – paying particular attention to the process for transferring learning from one group to another as well as the approach used in adapting innovations to different high school contexts during implementation. Finally, NCSU will assess the capacity of each district to implement adapted interventions in other low-performing high schools as researchers, and developers gradually withdraw support and disseminate lessons learned about the process with others.

The District Contexts

Florida and Texas were selected for study of scaling up effective practices in high school because they have two of the most comprehensive student-level administrative and

achievement data systems among the 50 states. While NCLB only requires states to test once in the high school grades, both Texas and Florida test English/language arts and mathematics in more than one high school grade, improving the Center's ability to identify effective and ineffective schools. Both states have had data systems in place since at least 2003, allowing NCSU to calculate high school value added models using several years of data. As part of the proposal for the Center, initial analyses using statewide data were conducted in both Florida and Texas. The goal was to identify districts that had both highly effective and low-performing high schools for students in traditionally low performing subpopulations to serve as both sites of research in which to identify effective practices and sites of intervention to which to transfer those practices (Sass T. , 2012).

The Broward County Public Schools (BCPS) district in Florida was chosen both because of the availability of rich individual-level data that link students and teachers over time and because of the diversity of high schools within the district. It is the sixth largest public school system in the United States, the second largest in the state of Florida, and the largest fully accredited K-12 and adult school district in the nation. The District offers a diverse educational environment to over 260,000 students and 175,000 adults in 315 schools, centers, charters and virtual schools.

The Fort Worth Independent School District has over 80,000 students and is one of the fastest growing cities in Texas, with a surging Hispanic population. The district serves large proportions of low-income, minority, and ELL students. The student population during the 2012-2013 school year was 24 percent African American, 60 percent Ethnically Hispanic, 14 percent white, and 2 percent other. In the district, 75 percent of students are eligible for free or reduced - price lunches and 27 percent are classified as ELL.

Our Theory of Action

Educational leaders across the United States recognize that transformation will only come with the enhanced capacity of educators to implement innovative, research-based programs that address their districts' and schools' particular circumstances (O'Day, Goertz, & Floden, 1995). Teachers, schools, and districts are being called on to drastically change the ways they do their work in order to positively impact chronically low performing schools. But if the capacity of the system is insufficient to accomplish such an ambitious goal, do districts have the system wide capacity needed to meet these rigorous demands? What competencies, resources, and structures are required in order to build the required system capacity? Equally, if not more challenging is the task of measuring individual and organizational progress toward reaching capacity for change at scale.

Our multi-dimensional capacity building framework (King, Haferd, Avery, & Fabilar, 2012) includes seven core elements that are interconnected and at the heart of the intervention learning agenda: 1) use of multiple sources of data; 2) system-wide ownership and commitment; 3) innovative intervention designs; 4) learning transfer and adaptation to context;

5) implementation with integrity; 6) assessment of effectiveness; and 7) scale-up of effective interventions – see figure 1. These elements are scaffolded across each learning session through a series of structured learning activities that are designed to increase in complexity across the learning continuum – see figure 1 on page 3.

Elements of the capacity building (CB) framework are interdependent and woven throughout the district and school design teams’ learning agendas. When taken together, these elements are expected to increase both individual and team ability to implement effective practices at scale. What follows is a brief description of each of the seven elements.

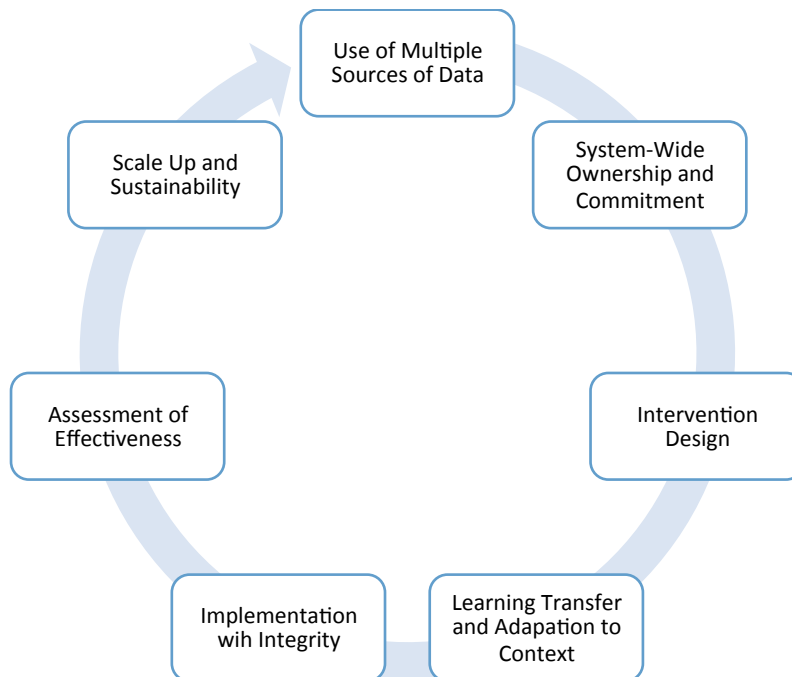


FIGURE 1: CAPACITY BUILDING FRAMEWORK

1. **Use of Multiple Sources of Data.** The first element of the framework seeks to build individual and group capacities to *interpret* and *use* multiple sources of data to better understand effective practices found in district HVA high schools. In addition, emphasis is placed on identifying gaps in the research data that require additional information and using a range of methods to collect from input from multiple stakeholder groups. Finally selected case examples from the broader reform literature are studied for the purpose of examining particular sets of practices being considered as possible interventions. Research and development partners work closely with district and school teams to develop these capacities.

2. ***System-wide Ownership and Commitment.*** The second element of the framework focuses on developing individual and group capacities to build broad ownership and buy-in from multiple stakeholders for reform efforts using high leverage communication and engagement strategies.
3. ***Innovation Design.*** The third element of the framework introduces and develops the principles of design thinking (Brown, 2009) to district and school teams as an essential capacity for creating new and innovative ways of thinking about solutions to persistent problems of practice. Using a series of design charettes, teams are trained to apply design principles in their efforts to generate responsive interventions.
4. ***Learning Transfer and Adaptation to Context.*** Building individual and group capacity to transfer learning and adapt design interventions to context are core elements of our CB framework. Based on the premise that content and processes can be transferred from one group to another, we define all learning as transfer and contend that new learning builds on previous learning (Bransford, Brown, & Cocking, 1999). Moreover, we support researchers' contentions that learning can be transferred by activating what individuals already know and by making their thinking visible (Gott, 1989). Additionally, we define adaptation to context as the ability to appropriately modify an intervention in response to a new setting using a series of structured interactions and feedback protocols. Design teams are trained to transfer learning and to adapt interventions to different contexts.
5. ***Implementation with Integrity.*** As the fifth core element of the CB framework much time and attention is devoted to developing capacity in this area. Only by understanding and measuring whether an intervention has been implemented as intended can researchers and practitioners gain a better understanding of how and why an intervention works, and the extent to which outcomes can be improved.
6. ***Assessment of Effectiveness.*** The sixth element of the CB framework develops the capacity to assess the effectiveness of interventions implemented using reliable measures.
7. ***Scaling Up and Sustaining Interventions.*** Element seven focuses on the matter of scaling-up effective practices beyond the initial point of implementation for the intervention in one school to all high schools throughout the district.

A Nested Community of Learners

Goertz, et. al (1995) argue that the traditional model of professional development that focuses primarily on expanding a teacher's repertoire of effective practice reflects a limited conception of the dimensions of capacity and ignores the other parts of the system that directly impact a teacher's ability to teach. We support the broader view of capacity building that promotes a core infrastructure of knowledgeable professionals working in partnership with reform minded schools, researchers, and developers to create an infrastructure of long-term and sustainable system capacity.

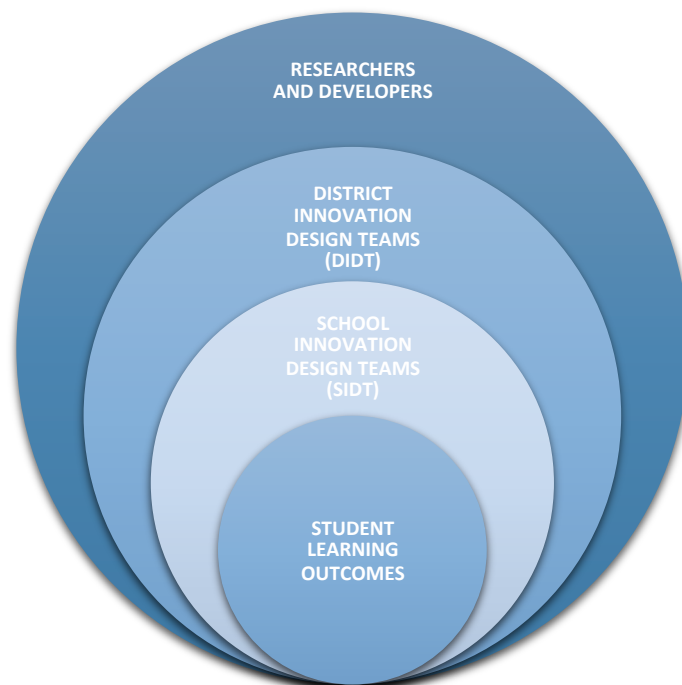


FIGURE 2: NESTED COMMUNITY OF LEARNERS

The central focus of the nested community of learners depicted in figure 2 is on student learning outcomes. It is intended to illustrate the multiple dimensions of capacity building that need to be addressed to establish the interdependent infrastructure of capacity required to implement sustainable, reform initiatives at scale (O'Day, Goertz, & Floden, 1995). Considered as a whole, our model fosters individual school, cross school, and district collaboration with initial strong influence from researchers and developers to build a core of knowledgeable practitioners who have the knowledge, skills, and dispositions needed to broker and facilitate system-wide reform.

A Two-Pronged Learning Agenda

We adopted an approach to system-wide capacity building that has a two-pronged learning agenda that attends to both content and process.

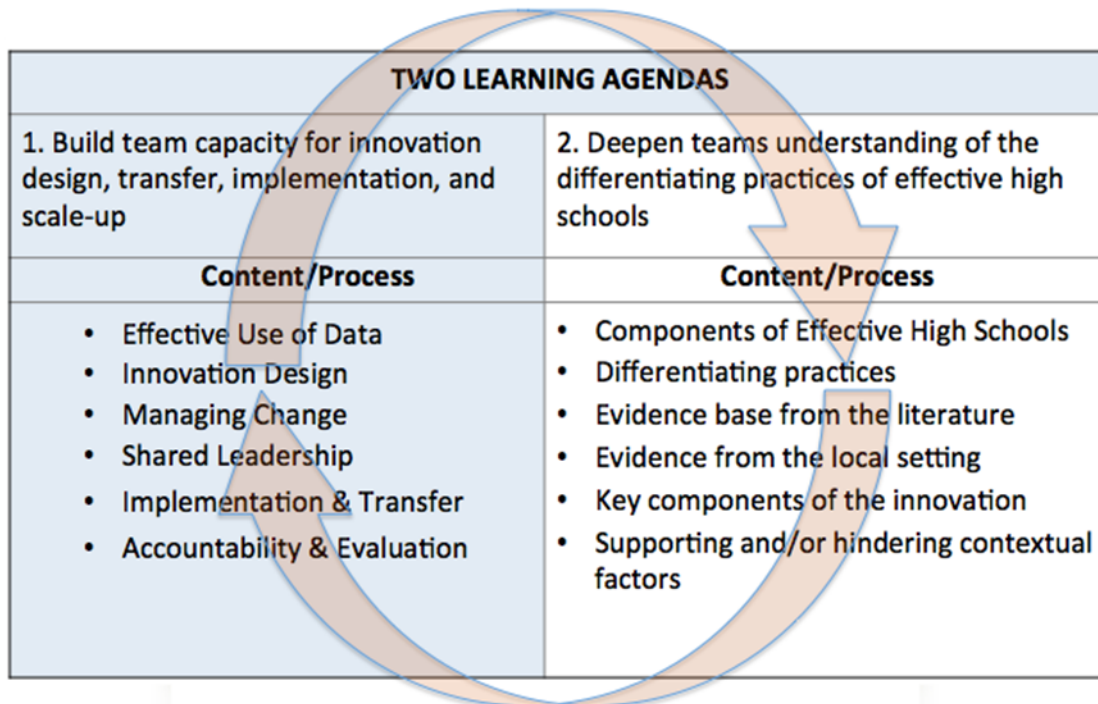


FIGURE 3: TWO LEARNING AGENDAS

In the next section we provide case illustrations of the processes described here being enacted in our two school districts. We wish to draw particular attention to the successes, challenges, and many lessons learned to date in the field. We begin with the Broward County case.

The Broward Context

The sixth largest school district in the country, Broward County Public Schools (BCPS), includes Coral Springs, Ft. Lauderdale, Hollywood, and Plantation, Florida. The district serves large proportions of traditionally underperforming student subgroups, including those who are low-income, minority, and ELL. The student population during the 2012-2013 school year was 40 percent African American, 29 percent Ethnically Hispanic, 51 percent white, and 10 percent other. Students are from 171 different countries and speak 53 different languages. In the district, 48 percent of students are eligible for free or reduced - price lunches and 10 percent are classified as ELL. BCPS has been engaged in a high school reform effort for the past nine

years. High school reform goals include fully integrating an academic system that includes high standards, curriculum, instruction, assessments, and supports.

Specific strategies for improving high schools in BCPS include increasing enrollment in Advanced Placement courses by using data (i.e., PSAT, SAT) to identify students; creating networks that enable schools to share resources (i.e., high - performing teachers sharing best practices across schools); and providing a structure for ongoing professional development (i.e., professional learning communities meeting on a weekly basis). Other strategies include increased monitoring of programs, credit recovery programs, weekend classes, math/reading intensive skills classes, and dual enrollment for students. BCPS has achieved national recognition for its efforts to improve chronically low- performing schools and was a top-five finalist for the Broad Prize for Urban Education in 2008, 2009, and 2011. U.S. News & World Report ranks five BCPS high schools among the best in the nation. The Washington Post named 11 Broward County high schools to its High School Challenge list and Newsweek magazine named four of the District’s high schools to its list of America’s Best High Schools in 2012.

Despite these successes, BCPS has repeatedly failed to meet overall reading proficiency goals and both reading and mathematics proficiency goals for African American, economically disadvantaged, and ELL- eligible students. A new superintendent was appointed to the district in summer of 2012 and has worked with the district leadership and board through an exhaustive strategic planning process, which culminated recently in an aggressive three-year plan for improvement with a particular focus on addressing the inadequate attention to the 47% of students who do not graduate high school college and career ready.

At the school level, teachers and principals in BCPS experience increasing pressure to respond to policy shifts resulting from state and local accountability measures that are designed to improve outcomes for students. The district recently implemented a new teacher evaluation system and teachers must respond to changing standards and corresponding shifts in instruction brought about by the implementation of Common Core State Standards (CCSS). Furthermore, high school master schedules changed across the system at the beginning of the 2012 school year to a uniform seven class schedule from a previous system in which high school schedules accommodated semester-long courses with longer blocks and fewer teaching periods per day.

NCSU Research Study Findings in Broward

NCSU initiated a comparative study of the effective practices of high performing schools during the 2010-11 school year. Researchers conducted a comprehensive case study of four high schools – two higher performing and two lower performing –during three weeklong visits to each school. The study identified one major finding that cut across ten components of effective schools: personalization of academic and social emotional learning (PASL). PASL is defined in the study as:

A systemic, school-wide approach in which schools make deliberate efforts to attend to the academic and socio-emotional needs of students, PASL refers to the ways in which schools actively encourage students to develop a sense of belonging to the school as a whole, as well as meaningful, positive connections with adults and other students. Schools with strong personalization have structures, policies, and practices that promote relationships based on mutual respect, trust, collaboration, and support both at the school and classroom levels. (Rutledge, Cohen-Vogel & Osborne-Lampkin, 2012)

Study findings go on to describe the following things as factors that differentiated the higher performing schools (HPS) from the lower performing schools (LPS):

Higher Performing Schools:

1. Established deliberate and systemic structures to promote strong relationships between adults and students as well as to personalize the learning experience of students
2. Maintained strong and reliable disciplinary systems that, in turn, engendered feelings of caring and, implicitly, trust among both students and teachers
3. Focused attention on instruction through leaders explicit attention to student engagement in classroom walkthroughs as well as in their interactions with students
4. Motivated students by teachers' more likely attention to discussing instructional activities that drew on students' experiences and interests
5. Encouraged stronger linkages with parents

These differentiating characteristics define a personalized approach to academic and social learning that is now referred to as PASL. The next section of this paper describes in more detail the Core Elements of PASL that were used by the District Innovation Design Team (DIDT) during Phase I intervention prototyping¹. Though the conceptual prototype will undoubtedly be revised. The defining core elements are viewed as non-negotiable.

Defining PASL Core Elements

Eleven core elements of PASL were generated in order to focus the DIDT's attention on design specifications deemed essential from research study findings.

Personalization for Academic Learning:

1. High expectations for students' academic learning
2. Educational experiences/instruction that respond to and build on students' experiences, interests, and learning needs

¹ The design principles for intervention prototyping are intended to help design teams conceptualize ambitious interventions that respond to PASL core elements in both design and function. During the intervention prototyping phase of the capacity building process, design teams were expected to move the concept of PASL from an idea to feasible intervention that was ready to be implemented in schools.

3. Instructional practices designed to encourage and support student engagement in their own learning
4. Modeling of academic behaviors and teaching of academic skills by adults that foster academic learning

Personalization for Socio-Emotional Learning:

5. Student opportunities that foster internal capacity to recognize and manage emotions, solve problems, and establish positive and productive relationships with others
6. An ethic of caring that permeates the school culture
7. Student supports that encourage and demonstrate responsibility for their own socio-emotional learning and behavior
8. Modeling of behaviors and teaching of skills by adults in the school that foster socio-emotional growth

A Systemic, Coherent Behavioral Management System (that integrates academic and socio-emotional learning):

9. An approach that promotes critical thinking and positive personal and interpersonal skills
10. Teachers use standardized approaches to managing behaviors in the classroom and within the school that are positive, fair, and consistently applied, before referring for disciplinary action
11. Administrative actions that support teachers in implementing a fair and coherent behavior management system

Establishing the District Innovation Design Team in Broward

Following the report of the findings, a District Innovation Design Team (DIDT), consisting of district and school level practitioners, researchers and developers, launched in September 2012. The design challenge called for an intervention that responded to the core elements of PASL, as described in the research, and could be implemented and studied in three innovation schools the following fall -- with the intention of scaling it to other schools in the district in subsequent years, if it showed evidence of positive outcomes.

The district's PI in the partnership recruited members for the DIDT following guidelines provided by the research and development partners. Members were selected based upon their interest and capacity to be change agents, team players, and to be part of a shared leadership initiative. The content of PASL as integral to the design challenge required that team members also possess knowledge in the area of both academic and social emotional learning. The members selected include six professional educators (administrators, teachers and guidance staff) from three innovation schools, three district level staff and six school-level professional

educators from four other high schools in the district. The complete DIDT also includes two researchers from partner universities and three development specialists.

A formal public event, convened prior to the first design session, introduced the study findings to a broad constituency (e.g. school board members, district level leadership, innovation school leadership teams and design team members) and allowed district leadership to publicly express their commitment to the aims of the partnership. At the event, the research team stressed that their methodology for conducting the case study intentionally sought to find evidence of effective practice within the district. This event, conceived as a critical first step in building ownership and commitment on the part of the faculty and staff of the innovation schools, demonstrated the district's commitment to the project and showcased the thorough and deep research invested in the district by the NCSU partnership.

Broward District Innovation Design Team Sessions

From September through January, DIDT members met each month for two-day design sessions. The objectives for these sessions were designed to deepen team understandings of research findings, explore the broader literature related to PASL, and to further investigate the context of the three innovation schools. Session activities were designed to build DIDT capacity to design interventions that responded to the needs identified in the data.

The sessions were facilitated by NCSU development specialists and guided by the curriculum framework described earlier. As a matter of building ownership and commitment while deepening understanding, the DIDT explored various sources of data related to the NCSU study findings. They then conducted a needs assessment in the three innovation high schools. The needs assessment included reviewing district data from the three schools as well as collecting data from key stakeholders within each school – leadership, faculty, students, etc.

During the fourth design session the DIDT began the disciplined process of brainstorming and evaluating ideas for potential interventions, using criteria-based protocols that incorporated PASL core elements with needs identified in the innovation schools. The process resulted in three preliminary prototypes of innovation designs. The designs were then shared with various stakeholders in the three innovation schools for feedback from leadership teams, targeted school professionals and students during the time between session four and session five. The three prototypes were shared with the district PI and two of the three innovation school principals to determine if there were any immediate concerns regarding the feasibility of the proposed prototypes and to continue to build ownership for the process and for the eventual outcome of the design sessions.

DIDT members analyzed and shared feedback elicited in the schools and from district leadership during the fifth and final design session. The DIDT then refined the design through a consensus building process, which resulted in a consolidated single prototype that addresses school needs and attends to the core elements of PASL (see Figure 3 on page 11).

FIGURE 4: PASL INTERVENTION PROTOTYPE

Sustained Personalization
 Culture of caring that permeates the whole school.

Educator Teams Follow Students	Explicit Teaching & Modeling of Academic, Social, and Emotional Skills & Behaviors	Use of Data in Service of PASL
<p>Educator teams</p> <ul style="list-style-type: none"> • Follows same cohort of students • Use common planning time to discuss students progress and respond to needs • Facilitate informal but regular opportunities for students and teachers to meet with administrators 	<p>Dedicated time for PASL</p> <ul style="list-style-type: none"> • Educator teams model behavior • Student practice and peer sharing • Mentoring and advising • Skills taught will be scaffolded by grade and need <p>Curriculum and toolkit</p> <ul style="list-style-type: none"> • Strategies, resources and tools • School to career and 21st Century skills 	<p>PASL Data System/Tool</p> <ul style="list-style-type: none"> • Tailored for use by students, educators and parents • Archives and assesses student's growth and accomplishments • Highlights areas of academic and social-emotional strength and need • Includes an inventory of both academic and social-emotional activities • Allows educator teams to address programming and intervention needs in a timely manner

PASL: Systemic and School-wide

Reflecting on Broward Successes, Challenges, and Lessons Learned

The following reflections are based on facilitators' reports of experiences in implementing Phase I of the design process in Broward County. There is no denying that the Broward team facilitators/trail blazers traveled an unmarked path through Phase I. The lessons learned from their collective experiences have benefitted the work launched recently in Fort Worth. What follows is a recap of success, challenges, and lessons learned.

Successes:

- The DIDT was able to reach consensus on gaps in each of the three innovation schools with regard to PASL core elements and decided on one intervention prototype (conceptual) during session 5.
- Strong relationships were formed among DIDT members as a result of the design process that appear to be sustainable beyond the design phase of the project.
- Strong ownership and commitment to the concept of PASL as defined by both the DIDT and district officials (including the Superintendent).
- DIDT members, especially school-based members, gradually warmed to the idea that they are being asked to create an innovation for the innovation schools and the district rather than being told what to do.
- On the whole, feedback elicited from end-of-session surveys and cognitive interviews of DIDT members indicates that most of the members learned new concepts and new ways of thinking as a result of both during and between session activities.
- Members mention that they appreciate the hands-on activities and the time spent in the working groups between sessions that provide opportunities to practice skills learned in the design sessions back at school sites.

Challenges:

Partnership Institutional Agreements

- Several delays in putting partnership agreements in place for five institutions significantly delayed the launch of the design phase of the project and as a result, reduced the amount of time available for intervention design.

Data collection, analyses, and translation into core design elements

- The process of translating research study findings into actionable PASL core elements that could be used by the design team to develop a feasible intervention prototype for implementation in the fall of 2013 took far longer than originally expected.
- Collecting and interpreting data from the three innovation schools to identify contextual needs of the schools as they related to PASL consumed the major part of three and a half of five design sessions.

- PASL elements did not easily translate into shelf ready products and services that could be implemented without considerable further development and resources (i.e. curriculum and toolkit development, master scheduling accommodations, ownership and buy-in at the school level).

Trust

- However, there continues to be skepticism about how much say design team members will have in the final design and whether they feel they have the capacity to do this work.
- DIDT members report that they also experience skepticism when they share results of design sessions with principals and school colleagues who were not party to the deep discussions and learning that occurred during the sessions.

Adequate time for design activities

- A frequently voiced concern by DIDT members relates to the amount of time team members are being asked to put into this process.
- Agreements in place with the district covered teachers with substitutes while they were attending sessions. However, the time required to conduct interim design related work at school sites, prepare for and react to being out of the schools for the sessions resulted in considerable stress for all the DIDT members.
- Nevertheless, DIDT members followed through with the between-session assignments and energetically participated during sessions.

General Feedback from DIDT Members

- Feedback elicited from end-of-session surveys also indicated that many members wanted more time in their working groups to plan and prepare for school-based assignments with the guidance of researchers and facilitators as well as more release time in their schools to conduct the assignments.
- Members frequently reported feeling that they do not have the necessary skills to do the design work without considerable help and support from researchers and developers.

Identifying which capacity building skills and knowledge are essential

- Facilitators of design sessions frequently commented that they needed to downsize the prepared activities in order to accommodate the time needed to adequately address issues that emerged in the course of the learning.
- Early in the design sessions, facilitators organized the DIDT into small working groups associated with a particular innovation high school.
- This organization of the work made cross-school analysis of data related to PASL practices difficult.

- Limited available time resulted in much of the data that was collected and analyzed not being used as initially intended.

Level of specificity of the design for consistency of implementation

- In addition to the above process challenges, the design team experienced and continues to experience difficulty in making the design more specific. This lack of specificity in the design made it difficult for design team members to translate their learning into a coherent message to school principals and school colleagues as to concretely what they propose to do as a result of the design.
- There remains an ongoing tension between defining the outcome of the design work in a way that is specific enough to communicate with critical stakeholders while at the same time maintaining integrity to the core elements of the design.
- School people seek to understand the local relevance of the design. They wish to understand how much adaptation to the contexts will be allowed to conform to existing conditions in the three innovation schools.
- Furthermore, the broad scope of the design makes it difficult for the DIDT to build trust in the process with their school colleagues. Trust is often built incrementally through the successful experience of completing a more simple commitment on a small scale.
- The broad scope of the design in combination with its lack of specificity threatens practitioners who prefer a “no surprises” policy when encountering changes.

Lessons Learned in Broward

Ensure commitment and clarity on timeline and benchmarks

- Unanticipated delays in start-up forced the launch of design work to be postponed to September 2012 rather than April 2012. This resulted in the need to scrunch together session plans and take short cuts that impacted intended outcomes.
- Nevertheless, DIDT members demonstrated deep knowledge and understanding about the core elements of PASL and associated needs from the disciplined inquiry of the data, and close contact with researchers.
- Furthermore, collecting and analyzing data from innovation schools validated the research findings for the school-based members who are generally skeptical of research findings.
- These activities also strengthened a broad ownership and commitment to the design process and the resulting prototypes from school-based design team members.
- Transfer of the learning and corresponding commitment and ownership at the innovation schools was much less apparent.

Establish clear criteria for the challenge from the start

- Innovative configurations of practices were designed as a result of using a variety of structured protocols for generating ideas and filtering ideas through established criteria rooted in the core elements of PASL and aligned to the PASL needs identified in the innovation schools.
- Exposure to different innovation school contexts illustrated to design team members the need to adapt a particular innovation to the particular implementation context.
- The development of decision-making criteria for the designers was accelerated with the development of the core PASL elements.
- In this regard, the partnership learned to be more proactive in providing guidance to the DIDT to focus attention on the critical drivers to be investigated in order to establish agreement across schools as to the school based needs that the innovation should seek to address.

Maintain a district focus from the beginning

- In retrospect, while it was important to experience the challenges that different contexts present to the design work, it would be advisable to organize schools into DIDT working groups that are not school based in order to better maintain consistency of inquiry and investigation across different school contexts.
- Furthermore, investigations benefit from defining specific questions to be answered and develop consistent tools and protocols for conducting school-based inquiry and organize data collection around specific elements of the practice being studied.
- To support efforts to provide consistent data collection across schools it is important to engage research partners in the process of preparing tools and protocols early on in the planning process. As such, researchers could be tasked with implementing simple quality control measures to ensure validity of data collection and analysis activities.

Maintain focus on content and process

- Although each session encountered limited time to explicitly teach skills, model their use and provide opportunities to practice, it remains important to ensure that time during sessions is equally focused on both content (PASL) and process as articulated in the curriculum.
- Equally important is to include time for group reflection on both content and process. Furthermore, written feedback reflections, while valuable to facilitators, do not allow for cross-group reflection and sharing of learning.
- There continues to be a need for additional tools to assist with process learning (agenda structures for school meetings, decision making criteria, protocols for sharing results of

investigations across schools, etc.) in order to accelerate the learning of complex processes.

- Likewise, the DIDT needs time and practice with protocols and tools in order to use them effectively. For example, logic modeling with associated tools was particularly difficult to use without further skill development and familiarity with the protocols used to construct logic models.

Building ownership and commitment is more than sharing information

Building ownership and commitment requires more than just sharing of information. It also requires opportunity for dialogue and input into the design process – to let stakeholders (as the people who will be impacted by the design work) have a say. At the same time, this requires that three messages are made clear: a) we are sharing and soliciting input from you that we will bring into our deliberations in order to broaden ownership for what we are doing; 2) soliciting your input does not mean that the decisions we make are going to be what you suggested – what it means is that we will present it and it will be seriously considered; and 3) we will let you know how we considered your input and why the decision that was made was made.

More Lessons Learned from Broward

- Get institutional agreements between partners in place from the beginning
- Allow more time for translating research findings into actionable design specifications
- Build additional time into the process for the development of the actual intervention and not just prototype conceptual designs
- Make capacity building an intentional focus of the DIDT
- Determine in advance the appropriate grain size for the intervention based on the following constraints: scope of work for the project, available time to do the work, and allocated financial resources (from both a project and district perspective).
- In the future, weigh the advantages of holding off on beginning the design phase until the research phase is completed and the design challenge and core elements are determined.

Shifting to Fort Worth: Bags packed with lessons

The next case scenario describes the early stages of an innovation design process for transfer and scale-up of effective practices in high schools in Fort Worth, Texas (FW). As we learned from our work in Broward, the process for scaling up successful practices and programs is not easy. Even though we are equipped with effective tools, strategies, and lessons learned

from earlier work, as we begin to guide the work of the FW District Innovation Design Team (DIDT) we are prepared to face similar capacity constraints related to time, people, and finances.

The Fort Worth Context

Fort Worth is one of the fastest growing cities in Texas, with a surging Hispanic population in the past decade. The Fort Worth Independent School District has over 80,000 students. The district serves large proportions of low-income, minority, and ELL students. The student population during the 2012-2013 school year was 24 percent African American, 60 percent ethnically Hispanic, 14 percent white, and 2 percent other. In the district, 75 percent of students are eligible for free or reduced - price lunches and 27 percent are classified as ELL. FWISD continues to struggle with high dropout rates among high school students, and particularly among African Americans. In addition, a significant percentage of Hispanic, African American, and economically disadvantaged students are performing below proficiency in high school mathematics.

Like many districts across the nation, Fort Worth has had to respond to a number of emerging community needs, policy changes, economic and technological trends, and other issues such as accountability. A new superintendent was appointed to the district in spring 2012. The district has established or implemented new policies and programs as a response to emerging needs, and those practices are still evolving today. For example, the district recently launched a high school redesign program that focuses on college and career pathways to bridge academic learning with real-world experiences. They are placing greater emphasis on building literacy skills in secondary schools in order to meet the demands of a global economy. They are also engaged in efforts to improve teacher professional development and the teacher evaluation system. As developers, the context in which we work inevitably informs and guides the design challenge and the innovation design.

Fort Worth Research Study

Our approach to innovation design emphasizes the need to build a deep understanding of the prevailing district needs. It involves an iterative process of inquiry based on three sources of data: findings from the district research study conducted by NCSU, research from broader scholarly literature, and data from innovation school contexts. Researchers initiated this process; who conducted a comprehensive case study of four high schools—two higher performing and two lower performing, in the 2011-2012 school year.

The study identified one major theme that cut across the ten components of effective school: *increasing student ownership and responsibility for academic learning (SOAR)*. Moreover, study findings showed that the higher performing schools implemented the following strategies

or exhibited the following characteristics that differentiated them from the lower performing schools:

- Teachers and other school personnel have high academic expectations for students.
- Teachers and other school personnel provide instructional supports to help students meet high expectations.
- Teachers and other school personnel provide organizational supports to help students meet high expectations.
- Teachers and other school personnel use techniques to deeply engage students in academic work.

The study found two activities particularly important for increasing student ownership of and responsibility for their academic success: 1) changing beliefs and mindsets of students to increase self-efficacy (that is, an individual’s beliefs about his or her ability to perform behaviors that should lead to expected outcomes); and 2) engaging students to do challenging academic work. Moreover, findings suggest that intermediate outcomes of self-efficacy and engagement reinforce each other in a reciprocal relationship, and ultimately influence student achievement outcomes. Researchers contend that these processes are supported by a set of school-wide facilitating conditions – see figure 4 below.

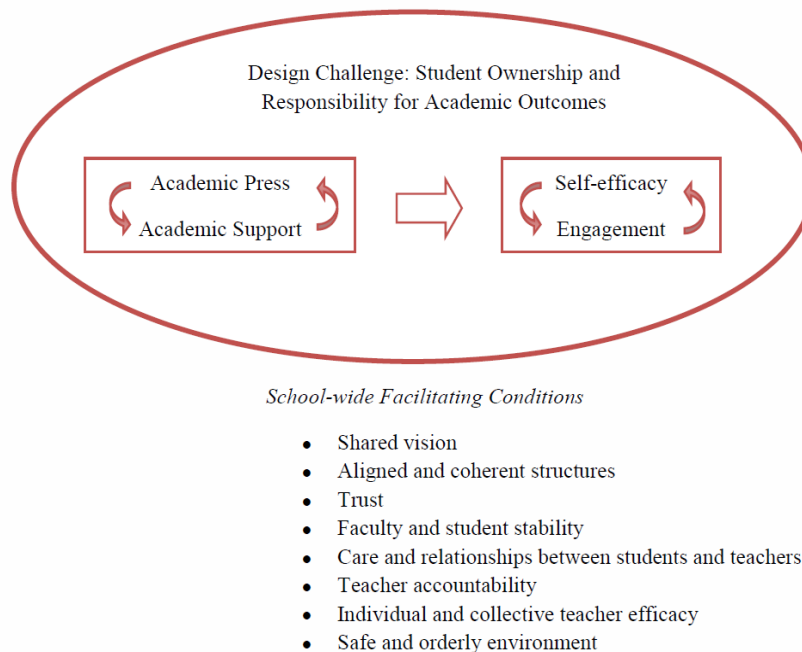


FIGURE 5: DESIGN CHALLENGE: STUDENT OWNERSHIP AND RESPONSIBILITY FOR ACADEMIC OUTCOMES

Fort Worth District Innovation Design Team

The formation of a DIDT that comprises researchers, developers, and practitioners, who bring a wealth of knowledge and experiences, is essential for districts to engage in a disciplined process of inquiry and interpretation of data and in a collaborative solution seeking approach. Bringing together a broad range of expertise is important to bridge research with practice in meaningful ways and to integrate innovation design thinking to solution oriented problem solving for systemic change. Design team members engage in the design challenge by studying, designing, adapting, transferring, and scaling up effective practices associated with increasing student performance. At the same time, capacity building of school and district personnel is needed to take innovations to scale and thus has to be at the core of the work.

The NCSU project and the DIDT were launched in Fort Worth in February 2013. Prior to the launch, Center developers provided guidelines for the district to use in recruiting DIDT members from three innovation sites, at-large schools, and key departments in the district office. Considerations for members included those with interest and capacity to be change agents, team players, to be part of a shared leadership, and open to new ideas and multiple perspectives, as well as representatives from a range of positions and content backgrounds. Initial meetings at the district and with principals of innovation sites provided opportunities to establish common understandings and a common vision for the work ahead. At the same time we observed that it was important for the district leadership to publicly acknowledge and emphasize the NCSU project and DIDT work as supporting and advancing already existing district priorities and initiatives. This process we believe helped to achieve buy-in and ownership, which is one of the key first steps in any education reform effort.

When designing DIDT sessions, there is an ongoing challenge to be able to address big picture objectives while at the same time designing a sequence of two-day sessions, comprised of scaffolded activities that build on each other. One of the desired outcomes of the design work for the DIDT in this first phase of the project is a conceptualization of an innovation prototype, to be accomplished within the parameters of a specific period of time and a specific number of sessions. At the same time, the DIDT are building their knowledge of the design challenge while developing their individual and collective capacities for innovation design. Our original design for Phase 1 included six DIDT sessions. Unanticipated delays in start-up forced the launch of design work to be postponed, and we adapted our design for five sessions. But after further reflection, we recognized the critical need to navigate the challenges and try to return to our original vision of six sessions. As a result, we are exploring the idea of conducting the DIDT Session 6 as part of the August summer institute that also includes the launch of the School Innovation Design Teams (SIDT). We anticipate that this adjustment in plans will better support the transition of the work from the DIDT to the SIDT, the transfer of knowledge

between the DIDT and SIDT, as well as the shift of the role for DIDT members during testing, piloting, and implementation phases.

One other key element of the design sessions is the facilitation of activities and sessions and explicit use of tools. Facilitation can include modeling of processes such as data inquiry and analysis, moderating and facilitating small group discussions, and using tools such as text-based discussion protocols to deepen understanding of content. In our collaboration with researchers, we have made greater efforts to strengthen our partner relationship by engaging in planning meetings to co-construct the agendas, sharing or delegating roles and responsibilities for different parts of the agendas, debriefing after every session, and writing up and sharing session reflections. However, our experiences tell us that providing better guidelines for facilitation, for both small and whole group interactions, is essential in our work as developers and researchers. Discussions can naturally deviate, activity goals can get lost when immersed in a great deal of new content, conversations can involve difficult issues, session objectives may need to be reinforced—these experiences are common in collaborative settings. We are now developing facilitation guidelines, general and ones specific to activities, which we think will support the work of the DIDT and also make more explicit some of the skills and capacities that the DIDT can learn and apply in their work. Looking forward, we will need to explore ways for the DIDT to practice with protocols and tools in order to use them effectively with the SIDT and beyond.

Fort Worth DIDT Sessions: Changes in Content and Delivery Based on Lessons Learned and Early Evidence of Positive Impact

We launched our work in FW In February 2013. To date we have conducted two of six sessions with the District Innovation Design Team. As session planning got underway for FW, there were several clear lessons learned that could not be ignored by our team facilitators. Based on early indicators from our first two sessions, we are cautiously optimistic that some of the changes that we made in response to lessons learned from Broward seem to be having a positive impact on intended outcomes. The following snapshots are provided as illustrations of the more significant changes made and early indicators of impact.

1. District capacity building for change: *Keeping our eyes on the ball*

We learned about the power of design activities on team focus and the ability for the design innovation to distract us from a focus on the process we are trying to impart. We adopted the phrase “keep your eye on the ball” as a reminder to stay focused on knowledge and skill building and transfer of learning for the purpose of building district capacity to scale up. In response to this demand, we implemented several changes to help us keep our focused.

- First, all session agendas are now guided by the CB framework. Activities are scrutinized to ensure that we are clear about the intended purpose of each activity. Intentional

connections to each of the seven elements of the CB framework are consistently made for each session plan.

- DITD members are assigned tasks designed to reinforce the intended purpose for their learning. We are consistently looking for opportunities to have members apply their skills in new contexts and to assume leadership responsibility for the work.
- During the district kick-off event on the evening of our first DITD session, two DITD members were invited to share key learning from their first day session with approximately fifty leadership personnel from the district and other schools. With minor coaching, the two design team members exhibited confidence and enthusiasm as they synthesized and articulated their experiences from the DITD session.
- Similarly, during a site visit meeting with the principal following session 2, several DITD members demonstrated their understanding of the DITD and the design challenge by describing their experiences to their principal and other administrators. These examples of early opportunities for DITD members to apply learning in real contexts and to gradually step into the role of leader and advocate is critically important and underscores the ability for them to demonstrating growing capacity at the onset. It also supports our ongoing efforts to build buy-in and ownership across the district.
- As facilitators, we recognize the need to provide continuous opportunities (time, space, activities, and guidance) for DITD members to apply their new capacities, both as individuals, in small teams, *and* as a collective group.

2. Need for reliable measures to assess growth in capacity for individuals, the DITD, the SIDT, each of the innovation schools, and the district – using the seven CB elements.

There is a clear and pressing need for reliable internal measures to assist in assessing indicators of capacity growth over time, as outlined in our CB framework. We have a strong curriculum framework and a process for scaffolding learning that are designed to increase DITD members knowledge and skills in seven specific areas; however, we do not have a reliable way determine whether or not we are actually increasing individual and collective capacity of the DITD to do this work. Having access to this kind of feedback would enable us to be more responsive to specific needs and to refocus training efforts, based on the data. In response to this demand:

- On the first day of Session 1, DITD members had an opportunity to reflect on their own capacities as described in the seven elements of the CB framework.
- Capacities were arrayed along a developmental continuum and DITD members asked to rate themselves on a capacity continuum ranging from limited to well-developed capacity for each of the CB elements.

- The results of this initial self-report provided baseline information about the DIDT that was useful in understanding how they viewed their individual capacities. It also sheds light on member perceptions of their strengths and areas of need for growth.
- An aggregate report of this data was shared with the group and made transparent the kinds of experiences that DIDT members bring to the table as demonstrations of their capacity. For example, from the self-report data we learned that there is evidence of significant depth of experience in implementing system wide change for some members of DIDT. This will be invaluable to the group as we consider issues related to implementation.

It will be interesting to see how self-reports change over time as *common definitions* for terms like *learning transfer, implementation, intervention design* and *scale* begin to emerge across the group. We have recently engaged in conversations with our NCSU partners about the need for additional measures and expect to see additional attention given to this need going forward.

Need to increase: Buy-in, Ownership, and Develop DIDT Identity

During the first session of the DIDT, it was evident from discussions and activities that having members from a range of positions and backgrounds was important. Members consist of teachers from different disciplines, literacy specialists, a librarian, school administrators, and researchers and a curriculum specialist from the district office. DIDT members bring multiple perspectives to the table and creating safe spaces for dialogue and deep inquiry, through structured activities and protocols, allowed for all voices to be heard. This process helped to develop relationships and build ownership and commitment among DIDT members. At the same time, we recognized the greater need to establish a stronger DIDT collective identity. Logically, their identities reside in the context of their specific work in schools and districts or their positions. As developers, we are working to build a community of practitioners who are empowered to do this work as a result of their training and experiences in working together as a DIDT toward a shared vision for scaling up effective practices in high schools across the district. Recognizing that the need to build DIDT capacity to not only understand that buy-in and ownership are inextricably linked to ability to scale-up, we immediately began to focus on a strategy for messaging and effective communication. In response to this need, the following steps were taken:

- A communication protocol was established during the first session. The group crafted thoughtful messages about their first DIDT meeting. They quickly became engaged in coming up with creative plans for sharing their messages with colleagues at their respective schools.

- It became quickly apparent to the facilitation team that the audience for sharing messages was limited to DIDT members' schools largely because of the way they were grouped -- by school.
- We need them to consider a larger audience of stakeholders and to view them selves as representing the district and not their individual schools.
- During session two, we grouped DIDT members by stakeholder groups (students, parents, teachers, administrators) and observed an immediate shift in perspective. Communication plans were then crafted by stakeholder group rather than by school. This enabled the first moves toward the new identity that we are trying to cultivate.
- DIDT members are embracing their alignments with specific stakeholders and becoming increasingly more aware of the different challenges that each group poses with regard to messaging and communication strategy.
- They will learn important lessons from each other about how best to communicate with key stakeholders and we anticipate strong evidence of growth in this area.

One Final Note...

Partnership Challenges:

The partnership continues to experience the need for communication tools and agreed upon protocols to adequately coordinate the various initiatives that are active across the partnership organizations. These communication tools and protocols are needed much earlier in the process. At a more granular level, getting project participants to use a website to exchange information, resources, and expertise has been elusive. A robust course website was developed to help facilitate sharing information from the design sessions and maintain data resources that supported the work. However, most participants relied upon existing and familiar communication tools, most commonly email, for communication purposes. Few venues currently exist for sharing lessons learned as the project expands to include more players. Also, there are limited opportunities for increasing the number of contributing voices from the research and development teams to regularly engage using intentional methods. Finally, we have yet to find ways to create joint ownership and accountability for the work going on in both districts.

Partnership Lessons Learned:

When partnering with multiple organizations, timely and transparent communication is too important to leave to chance. As the work expands to include a second district, we need intentional processes and protocols to ensure that everyone is on the same page. Lack of clarity about roles and responsibilities continues to be a challenge for this work. Recognizing when you are stuck because you are trying to solve a problem that is the wrong grain size for the work at hand will likely require outside observation and intervention – be open to it.

References

- Bransford, J., Brown, A., & Cocking, R. (1999). *How people learn: brain, mind, experience and school*. Washington, D.C.: National Academy Press.
- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires*. New York: HarperCollins Publishers.
- Coburn, C. (2003, August). Rethinking scale: Moving beyond numbers to deep and lasting change. *Education Researcher*, 32(6), 3-12.
- Gott, S. (1989). Apprenticeship instruction for real-world tasks: The coordination of procedures, mental models, and strategies. *Review of Research in Education*, 15, 97-169.
- Hubbard, L., Mehan, H., & Stein, M. K. (2006). *Reform As Learning: School Reform, Organizational Culture, And Community ...* New York: Routledge, Taylor, & Francis Group.
- King, C. L., Haferd, T., Avery, M.-P., & Fabilar, E. (2012, June). Building Capacity for Scaling-Up Effective Practices: An Emerging Framework . *National Center on Scaling Up Effective Schools*. Waltham: Education Development Center, Inc.
- O'Day, J., Goertz, M., & Floden, J. (1995). *Building Capacity for Education Reform*. Consortium for Policy Research in Education (CPRE).
- Rutledge, S., Cohen-Vogel, L., & Osborne-Lampkin, L. (2012). *Identifying the Characteristics of Effective High Schools: Report from Year One of the National Center on Scaling Up Effective Schools*. Nashville: NCSU.
- Sass, T. (2012). *Selecting High and Low-Performing High Schools in Broward County Florida for Analysis and Treatment*. Nashville: National Center on Scaling Up Effective Schools.
- Taylor Haynes, K. C. (2013). *Reaching for Rigor by Increasing Student Ownership and Responsibility*. Nashville: National Center on Scaling up Effective Schools,.