IMPLEMENTATION

Learning builds the bridge between research and practice

By Gene E. Hall and Shirley M. Hord

One indisputable finding from our years of research on what it takes to conduct successful change in schools and colleges is this: Introducing new practices alone seldom results in new practices being incorporated into ongoing classroom practices.

For example, we were dismayed at the recent release of two substantive studies of professional development (to support school improvement in mathematics and reading) that concluded that the professional development in each case was ineffective (Drummond et al., 2011; Randel et al., 2011). However, in both studies, the researchers did not assess implementation. It is hard to imagine how professional development can be judged if its implementation has not been documented. Such work, it would seem, is "the appraisal of a nonevent" (Charters & Jones, 1973).

We are happy to join with Learning Forward in recognizing the imperative of implementation. The Implementation standard states: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.

ASSURING PROFESSIONAL LEARNING

It has only been in the last decade that we have come to understand the reality that change is based on learning. The profession, the press, and the public cry for school improvement, in order that all students learn to high levels. For school improvement to be realized, the first task is to identify and delete those programs and practices that are not supporting students in learning well. The next step is to find the best solution having the potential to promote quality teaching and successful student learning. After specify-

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ing the new practice(s), teachers and administrators must learn what the new practices are and how to use them, and transfer the new way into classroom practice. See diagram on p. 55.

"Change is learning. It's as simple and complex as that." This is the first principle in our beliefs and assumptions about change (Hall & Hord, 2011, p. 6). Change cannot occur without professional learning. When educators adopt new and more effective practices, the next step is to develop new understandings and acquire new skills. These new practices, in turn, enable students to reach high levels of successful learning. The seven Standards for Professional Learning are intended make high-quality professional learning a reality.

APPLYING CHANGE PROCESS RESEARCH

Within the Implementation standard is the explicit acknowledgement that findings from change research, including its constructs and measures, can inform efforts to implement the standards. The explicit purpose of the Implementation standard is to ensure that educators address implementation and apply evidence-based strategies. Change research constructs and measures can be used to develop implementation strategies and assess progress.

In many ways, today's innovations and initiatives represent major change. These changes are complex, subtle, and more sophisticated than we think. Symbolically, it is as if implementers were expected to back up, get a running start, and leap across the Grand Canyon. What is needed is an Implementation Bridge (Hall,1999; Hall & Hord, 2011). See diagram on p. 57.

As with real bridges, different change efforts require varying lengths, degrees of stability, and combinations of supports. It takes time to move across a bridge. By assessing how far across the bridge each participant, group, and school has progressed, formative evaluations can inform change leaders of participants' needs. Formative evaluations are important for assessing progress. Summative evaluations, which assess the effectiveness of the innovation, should only include those participants who have made it all the way across the bridge.

When change is assumed to be an event, there is no bridge. Implicitly, adopters of the new approach are expected to make a giant leap across a chasm. With today's complex innovations, the chasms are likely to be deep and wide. Attempting to jump across these chasms is most likely to result in injury and failure. This is true for individuals, schools, school districts, and larger systems.

The diagram on p. 57 presents the Implementation Bridge, a metaphor for moving from the earlier or less advanced stages to the later or more advanced stages of the three diagnostic dimensions of the Concerns-Based Adoption Model (CBAM): Stages of Concern, Levels of Use, and Innovation Configurations. Each of these CBAM elements is an evidence-based construct with related measuring tools that can be used to assess how far across the bridge each individual, school and/or district has progressed. Each can be used alone or in various combinations to measure imple-

The key to progress is to stay focused

By Raymond Aguilera and Olivia Zepeda
As told to Valerie von Frank

Our district is committed to supporting teachers with ongoing professional development to enable them to become more effective in the classroom. We provide early release time on Wednesdays to enable teachers to meet in learning teams, but the power is in the classroom in job-embedded learning because the classroom is where we can identify teachers' needs and give teachers assistance during instruction.

We monitor instruction closely and analyze data. We give districtwide benchmark assessments four times a year, along with weekly formative assessments. As we monitor data, we have immediate intervention if we do not see student growth. Every year, we get better. With assistance from SEDL, we use the Concerns-Based Adoption Model to determine how well teachers are implementing new practices in teaching reading and writing.

Consultants and administrators meet monthly to discuss teachers' levels of use of the new practices. This approach helps us to differentiate professional development. After they determine teachers' levels of use, we create individualized plans for teachers' learning. Consultants and coaches work with teachers in their classrooms, providing feedback, coaching, and modeling lessons.

At our annual data summit, about 100 teachers and administrators reviewed and analyzed student achievement data and developed formal plans for achieving academic goals. We provide three days before the beginning of the school year for teachers to attend district professional development based on individualized plans. The professional learning is supported in a variety of ways, from having a master teacher go into a classroom to help the teacher with materials to having master teachers model lessons.

Aguilera

Zepeda

The National Association for the Education of Young Children has accredited San Luis Preschool and created a video showing the school as a model for the nation. The district has worked hard to demonstrate how preschool teachers can incorporate a research-based curriculum into a play-based philosophy while taking into account factors such as English language learners and children with special needs.

One of our primary areas of focus has been English language learning. We are proud that, over the last two years, more than 1,800 students learning English were reclassified as English-fluent. Over the last 10 years, the percentage of ELL students has decreased in the district from 99% to 50% of our student body. The keys to our progress are job-embedded professional development and our focus. It's critical to stay focused on a few initiatives. The district administration's role is to provide stability.

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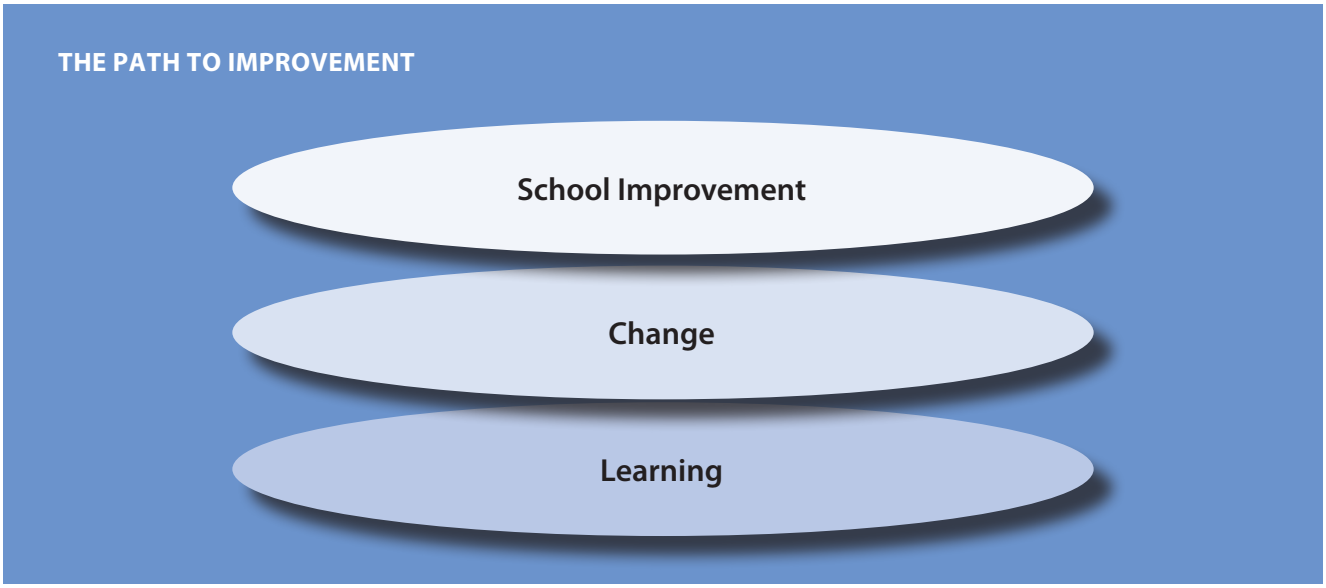
Gadsden Elementary School District #32
San Luis, Ariz.
Number of schools: **9**
Enrollment: **5,000**
Staff: **260**
Racial/ethnic mix:

White:	**0%**
Black:	**0%**
Hispanic:	**99%**
Asian/Pacific Islander:	**0%**
Native American:	**0%**
Other:	**1%**

Limited English proficient: **50%**
Free/reduced lunch: **97%**
Contact: **Raymond Aguilera, superintendent**
Email: **agui2400@yahoo.com**



mentation progress and as diagnostic information for planning next action steps to facilitate moving further across the bridge. Each also is important in summative evaluations. These three tools, individually and collectively, can be applied to implementation of the Standards for Professional Learning.

The following are brief descriptions of each of these diagnostic dimensions. More can be learned through the study of key texts (Hall & Hord, 2011), various technical documents, and related training resources.

Stages of Concern addresses the personal/affective aspects of change. There is an array of feelings, perceptions, worries, preoccupations and moments of satisfaction for those engaged with implementing new approaches. This personal side of change is important to understand because failing to address concerns can lead to resistance and even rejection of the new way. A set of categories, or "stages," of concern has been identified. As a change process unfolds, these different Stages of Concern can increase and decrease in intensity.

At the very beginning of a change, most participants will be **unconcerned**. Their attention will be on getting through the school year and planning for summer. These participants are not on the bridge. They may be aware that they are approaching a bridge — "I heard something about some sort of new standards, but I am really concerned about …" — but it is not something that needs to be thought about currently. However, the change process leaders should be doing things to address this concerns stage — for example, providing general information about what will be happening.

As participants begin to step out on to the Implementation Bridge, **self** concerns become more intense. "What do these new standards mean for me?" This, too, is a time when more information should be provided. It also is important to be reassuring: "You can do this. We are here to support you."

As implementers move fully onto the bridge, **task** concerns become most intense: "I am spending all my time organizing materials and trying to schedule everything." These concerns should be anticipated and addressed in the implementation plan. How-to supports, including coaching and timeline projections, should reflect the understanding that these concerns can last several years.

When implementers make it across the bridge, self and task concerns should decrease while impact concerns should increase.

When implementers make it across the bridge, self and task concerns should decrease while **impact** concerns should increase. "I am seeing how my use of the these standards is making a big difference in the knowledge and skills of teachers and school leaders. You can now see the results in what students are doing." How leaders address the potential arousal of impact concerns can make all the difference in ultimate implementation success and effectiveness.

There are two other CBAM constructs and measures that can be applied with the Implementation Bridge metaphor.

Innovation Configurations (IC) address the well-documented fact that each implementer does not necessarily use the same operational form of the change. Those involved may say they are using "it," but what is in operation within each classroom and school can be significantly different. In our first study of this phenomenon, teachers in different states claimed that they were team teaching. But the configurations of teaming were quite different. The number of teachers (two to six), the

grouping of students (fixed, heterogeneous, homogenous), and what teachers taught (all subjects, one subject) were components that varied. Each combination of these variations results in a different Innovation Configuration — what the innovation looks like in practice — with different teachers and in different schools.

In recent years researchers have become very interested in fidelity of implementation. Innovation Configurations is a way to describe and contrast different implemented forms of an innovation. With the Implementation Bridge metaphor, there should be increasing fidelity in terms of Innovation Configurations as implementers move further across.

Levels of Use is the third construct from change research to consider. Traditional research and program evaluation designs assume a dichotomous population: treatment group and control group, or users and nonusers. Levels of Use describes a set of behavioral profiles that distinguish different approaches to using an innovation. Three different nonuser profiles have been described and five different user profiles. Each of these has been defined in terms of behaviors and each has implications for how to facilitate change and for evaluating change success and effectiveness.

We know a lot through research, practice, and theory about how to launch a change process, facilitate movement across an Implementation Bridge, and assess implementation progress and evaluate innovations. What we know less about are the essential elements and processes that are necessary to sustain long-term use of an innovation.

For example, educators at **Level 0 Nonuse** are not doing anything related to the change, in this case the new professional learning standards. They don't talk about it, they don't check it out on the web, and they do not attend an introductory meeting. This behavioral profile is different from the person at **Level I Orientation**, who asks questions, attends the introductory meeting, and considers use of the innovation. Both of these levels represent people who are not using the change. However, in terms of facilitating a change process, the interventions that should be emphasized for each are quite different.

Among the Levels of Use, one that is particularly important is **Level III Mechanical Use**. This is an approach where the implementer is disjointed in what he or she is doing. Implementers at this level continually check back to the user manual, their scheduling is inefficient, they can't plan beyond tomorrow, or anticipate what will happen next week. We know from research that most first-time implementers will be at Level III Mechanical Use. We also know that many will continue to be at this level through the first two or three years of implementation. If the inefficiencies of Level III use are not addressed, then the Implementation Bridge can become very long, and some implementers will jump off.

Providing feedback about how the change process is unfolding is important. Each of the CBAM diagnostic dimensions described here can be used to measure how far across the Implementation Bridge each teacher, school, or district has progressed. The same constructs and data should be used as feedback to leaders and implementers. These data can be used to plan next steps.

There are many implications of Level III Mechanical Use. One that will be particularly important with the new standards is deciding when and with whom summative evaluation studies should be conducted. Change research has clearly documented that most first-time users will be at Level III Mechanical Use. These are not the implementers who should be included in a summative evaluation study. They are inefficient and have not reached full understanding of how to use the new way. Summative evaluation samples should be comprised of implementers who have made it across the bridge. They have established routines and can predict what will happen next. This behavioral profile is **Level IV-A Routine**. When summative evaluations include many first-time users, it is not surprising that there are no significant differences in outputs.

PROVIDING FEEDBACK

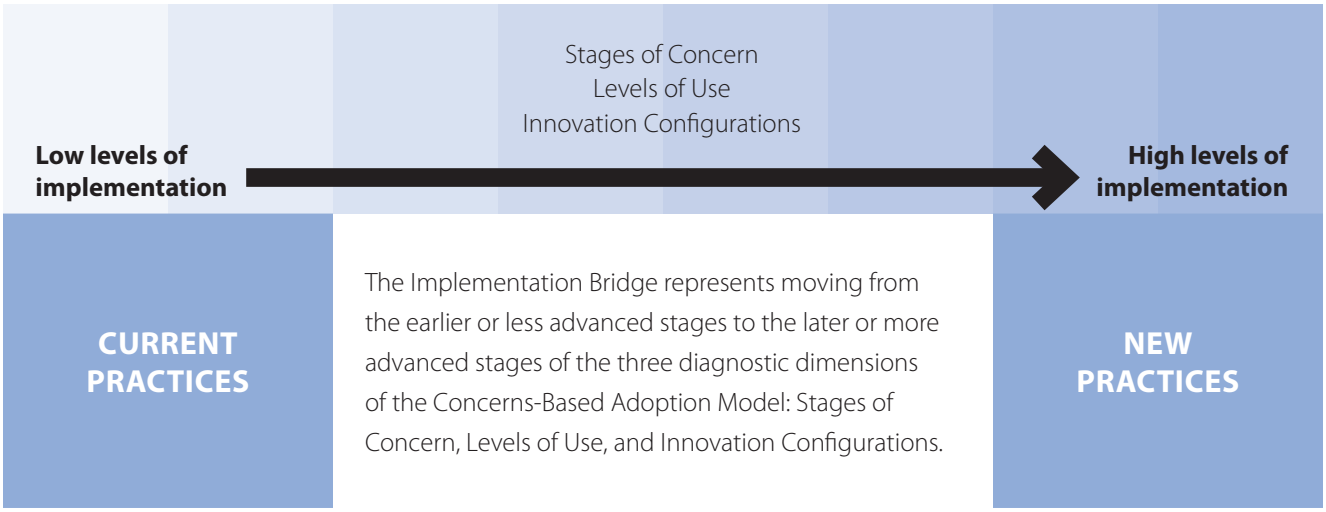
Another key theme in the Implementation standard is providing constructive feedback. Providing feedback about how the change process is unfolding is important. Each of the CBAM diagnostic dimensions described here can be used to measure how far across the Implementation Bridge each teacher, school, or district has progressed. The same constructs and data should be used as feedback to leaders and implementers. These data can be used to plan next steps for making further implementation progress. These data also can be used in reports about implementation progress. In addition, these same data can be used in summative evaluations that relate the extent of implementation to outcomes.

Assessing implementation at regular intervals and providing feedback to all participants are important keys to implementation success.

SUSTAINING CHANGE BEYOND IMPLEMENTATION

We know a lot through research, practice, and theory about how to launch a change process, facilitate movement across an Implementation Bridge, and assess implementation progress and evaluate innovations. What we know less about are the essential elements and processes that are necessary to sustain long-term use of an innovation. Getting across the bridge is necessary, but what are the processes and structures that assure

IMPLEMENTATION BRIDGE



continuing use of high-fidelity configurations, in this case, of the standards? How do we prevent abandonment? Addressing the sustainability challenges of the latest standards will need special attention.

One indicator of sustainability will be when the implemented Standards for Professional Learning have a line item in the school or district budget. Another will be when it becomes regular practice for new staff to have access to learning and development. Still another important indicator will be that the process and criteria for succession of principals and relevant staff at the district office includes evidence of their understanding and interest in supporting professional learning through the standards. Above all, school and district leadership will provide continuous attention and direct the attention of others to the standards' value. These leaders become the internal and external champions for sustaining the standards and a continued focus on professional learning.

Supporting and celebrating the standards and their practices are keys to the standards' robust sustainability and the capacity to contribute richly to the ultimate goal — student learning success.

We see this standard as uniquely significant in that the standards revision architects explicitly identified the importance of addressing implementation. A strength of the Implementation standard is its reference to change process research that can be applied to assessing and guiding the implementation of professional learning. Understanding that change begins with the learning of educational professionals is crucial. Only through increasing adult learning will we increase student learning.

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