

# Beyond Barriers:

Encouraging
Teacher Use
of Feedback
Resources

A report from The Teacher Feedback Resources Project





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What leads teachers to use new technology products or services to improve their practice? Is it a mandate from a supervisor? A recommendation from a trusted peer? Learning about the rigorous evidence base for a product or service? Learning Forward's study, *The Teacher Feedback Resources* project, funded by the Bill & Melinda Gates Foundation, investigated factors that drive teachers to embrace or challenge the use of technology-based products and services designed to support improvements in practice. Technology-based resources addressed in the study fell into several categories identified by the Foundation, including products designed for recording and sharing video observations, peer feedback and collaboration, online professional learning, and learning-management platforms. The results of this study can assist education leaders and vendors in addressing issues of implementation and scale.

Continuous improvement of practice is a hallmark and requirement of any profession. For educators, and especially teachers, the commitment to and participation in ongoing professional learning are essential to increasing their effectiveness and improving student success. In the last decade, educators, researchers, vendors, and public and private foundations have collaborated in a series of efforts to improve student academic achievement by codifying, measuring, spreading, and scaling the elements of effective teaching (Bill & Melinda Gates Foundation, 2010; Kane, McCaffrey, Miller, & Staiger, 2012; Kane, Staiger et al., 2012; Pianta & Hambre, 2009). These efforts led to improvements in human capital and teacher performance systems, yet according to a study by the Bill & Melinda Gates Foundation (2014), the improvements insufficiently addressed teachers' desire for continuous, non-evaluative feedback and support to strengthen their teaching. The study found that teachers demand more professional learning and feedback on their practice. They indicated a desire for more collaborative professional learning, curriculum and instructional materials, classroom-based support, as well as near real-time or frequent feedback.

Many of the products included in this study offer teachers access to real-time data about their current teaching practice and opportunities and support to increase their efficacy, efficiency, and effectiveness. Yet, despite the effort and investment to design, test, and implement these products and services as well as their wide availability, educator adoption and use falls below education leader and vendor expectations.

For educators, their opportunities for easy-to-use, timely, informative resources to guide their improvement efforts depend on access to these products and services within their schools and districts. For vendors, many of whom are small or emerging companies competing for exposure and limited fiscal resources in the education arena, their very livelihoods depend on finding effective ways to address utilization and scale. This study was undertaken to shed new light on these issues.

This report describes the perceived barriers that districts and vendors face in scaling up the use of technology products and services to improve teacher practice. It then explores approaches to implementing new products and services, considerations for application of the findings from this study, and recommendations for overcoming barriers to implementation and full-scale use. Recommendations delve into the role of leaders' decision making about scaling product use, and ways to leverage change management strategies to support broad-based use of technology products that give teachers support for their continuous professional learning and student success.

# Methodology

The Bill & Melinda Gates Foundation commissioned Learning Forward to conduct a small-scale study of implementation and factors driving wide-scale use of teacher feedback tools. Research questions covered the types and frequency of products used; barriers to use; how professional learning addressed barriers; and variations in participant perceptions by their role in education. The study occurred over 11 months, beginning in December 2016 and ending in October 2017, and included three phases. The first phase was an exploratory, qualitative study involving a series of focus groups with educators and interviews with educators and vendors. The second phase included a survey of educators, and the third phase involved the development of case studies of school and school system implementation and use of specific products and services.

### **Phase One**

The first phase was an exploratory, qualitative study involving a series of focus groups with educators and interviews with educators and vendors.

### **Phase Two**

The second phase included a survey of educators; 1,641 responded.

### **Phase Three**

The third phase involved the development of case studies of school and school system implementation and use of specific products and services.

The purpose of Phase One was to develop initial hypotheses about potential barriers to scaling use of technology-based products and services for improving teacher practice. Researchers engaged more than 100 teachers and teacher leaders in 30 school districts in the U.S. and Canada as volunteers who participated in focus groups and interviews. Researchers also interviewed representative executives from vendor companies in each product and service category to triangulate focus group findings. Researchers summarized findings to examine processes within school systems beyond the product selection phase. Specifically, those processes focused on launching and implementing use and sustaining and scaling use of the selected products and services rather than sales and marketing interactions with vendors that led to product selection.

In Phase Two, researchers used first-phase findings to design a survey of educators and additional user interviews to explore barriers to scaling the use of technology-based products and services for teacher feedback. Based on findings from Phase One, the

survey and additional interviews focused on common issues regarding implementation and scaling use. Using Learning Forward's communication channels, researchers invited volunteers to respond to the online survey in spring, 2017; 1,641 educators responded. In Phase Three, representatives from school districts and vendors participated in additional interviews to offer deeper insight into the challenges, approaches, and recommendations. Additional qualitative research conduct-ed during Phase Three examined more deeply the same three issues related to leadership and change management for product categories where the survey response rate was low, including video observation and student surveys. Notably, such product categories have historical ties to teacher evaluation; therefore, they may require different approaches to implementation and scaling use. Future phases of work might address more deeply issues that were restricted by response rates and sample size limitations as described below.



# **Findings**

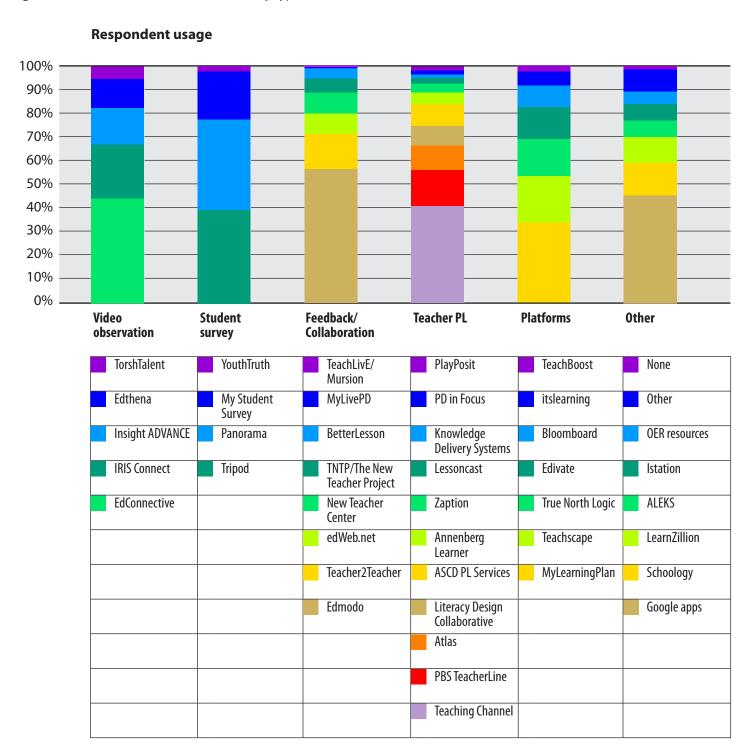
Slightly more than one half of survey respondents were school-based staff including teachers/teacher leaders, instructional coaches, and principals/assistant principals. The majority (86%) work in public, non-charter schools, with slightly more than a third each in urban and suburban schools and 20% in rural schools. Teacher respondents included pre-kindergarten through 5th grade (18%); 6th through 8th-grade (8%); and high school (11%) and one third have 15 or more years of experience. More than three fourths of respondents indicated that their proficiency with using technology to improve classroom practice is average or somewhat above average. The survey response rate was 11% and may reflect, among many reasons, the time of year when the survey was administered, the voluntary nature of the survey, the lack of local advocacy for the study, or the lack of interest in or familiarity with the study and its purpose.

After identifying all the products and services available in their district or school, respondents, as requested, selected a single technology product or service they used and based their remaining responses on that specific product or service. Notably, products included both ones that respondents used by mandate and ones they used by choice. The most frequently cited product category was learning platforms and the least cited product categories were video observation and student surveys.

From a list of 40 products included in the survey, respondents indicated which products or services were known to be in use in their systems. The list of products had been generated from consultation with the funder, Learning Forward staff, the results of Phase One, and additional market research. The number of respondents indicating familiarity with the 40 identified products ranged from 2 to 1141. Most frequently cited tools included Edmodo (790 respondents) and Teaching Channel (584 respondents). For comparison purposes, nearly 60% (1190 respondents) reported familiarity with Google applications, although Google was not the focus of the inquiry. Overall, respondents identified products in use today in their school or district.

Figure 1 represents the distribution of identified products. Overall, as respondents were selecting products in use today, the figure below may be considered a rough proxy for market share, but it cannot be considered a precise or reliable measure.

Figure 1: Distribution of Products Identified by Type



# Findings



# Perceived barriers have minimal effect on use.

As researchers reviewed the survey data, the finding emerged that issues related to motivation, technical capacity and skills, and training and supports do not appear to significantly impede educators' use of resources.

As a result of Phase One of the study, researchers identified issues that affect implementation and scaling of technology-based products and services for improving teacher practice. Researchers clustered the issues into three major categories: training and support, technical capacity issues, and motivation. Training and support issues are related to individual teacher skill and capacity to use the product; the professional learning provided for implementation; time and fiscal resources for professional learning and implementation; and fit and function of the product within individual, school, and district professional learning systems. Technical capacity issues include product compatibility, equipment availability, functionality, usability, and capacity to provide data. The last category, motivation, includes the individual educator's drive to improve, approaches to handling resistance, and senior leaders' stewardship and prioritization of continuous improvement and product implementation.

# Training and support

Most respondents indicated that they received some form of training to use the product or service, with more than a third receiving in-person training. Over half of respon-

dents reported that they received training from a district or school representative and approximately a quarter reported receiving training from a representative of the company. About a third reported training themselves.

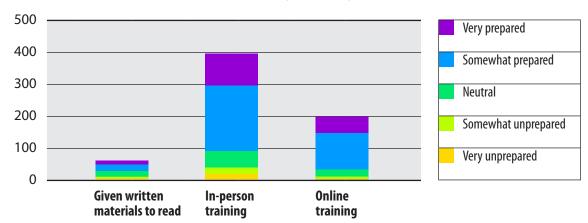
Those receiving in-person training reported higher levels of their perception of preparedness to use the product than those receiving training in other ways. Three quarters or more of respondents across all levels of schools and years of teaching reported being somewhat or very prepared following training. Respondents with

one to nine years of experience and more than 15 years of experience felt more prepared to use the product than those with 10–15 years of experience; those who taught pre-K–5 and high school felt better prepared than those who taught middle grades. Figure 2 displays results related to respondents' perceptions of preparedness after training by training modality.

Those receiving in-person training reported higher levels of their perception of preparedness to use the product than those receiving training in other ways.

# **Figure 2:** Perception of Preparedness Following Three Training Modalities

## Perceptions of preparation after training by modality



When asked in an open-ended question what features of the training were most helpful, respondents cited opportunities to practice using the product, demonstration and examples of how to use the product, time for training, clear instructions, real-life applications, ongoing support for use, personal attention, and multiple opportunities for learning.

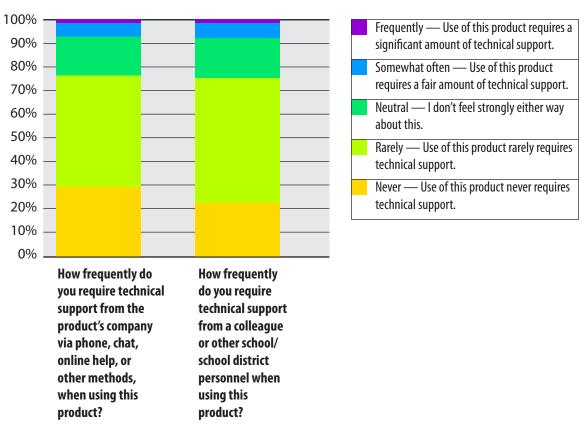
# **Technical capacity**

Slightly more than half of respondents indicated that technical skill is somewhat or very important in the use of this product, with 52% of the more experienced respondents, those with 15 or more years of experience, compared to 42% of those with one to nine years of experience and 49% of those with 10–15 years of experience indicating that technical skill is more important. However, three quarters of respondents reported never or rarely requiring technical support from the company, a colleague, or school or district staff member to use the product. They indicated that the overall usability of the product is excellent (56%) or moderately so (37%). Those who felt more prepared following training indicated that the usability of the product was higher than those who felt less prepared. For example, 80% of those feeling very prepared rated the usability of the product as excellent, compared to only 25% of those feeling very unprepared.

When asked whether the lack of technical support was a significant barrier to the use of this product, less than a quarter of respondents indicated that the need for technical support was a somewhat significant or very significant barrier to broader and deeper implementation, and only 4% indicated technical difficulties in scaling up use of the product. Those who might use the product more frequently such as teachers and teacher leaders, instructional coaches, and school-based staff other than administrators viewed lack of technical support as more significant as a barrier to implementation. Finally, the need for technical support appeared low, with over 70% citing rarely or never needing assistance from both the product vendor and colleagues as shown in Figure 3.

# **Figure 3:** Frequency of Needing Technical Support From Vendor or Colleagues

## Frequency of needing technical support



# **Motivation**

Respondents used the products they identified frequently. Role, level of experience, level of teaching, or level of preparedness had minimal effect on frequency of use. They used the

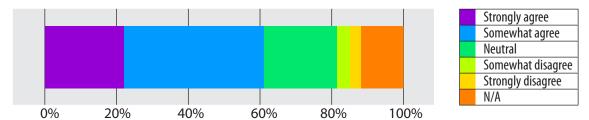
Ninety percent of respondents reported that the product made their job somewhat or much easier.

product to improve performance and to make their work easier and more effective. Those who felt prepared or very prepared after training reported that the product makes their job performance somewhat or much better. Ninety percent of respondents reported that the product made their job somewhat or much easier. More than three quarters of respondents who felt very prepared after training reported

that the product made their job easier, compared to just 25% who reported being very unprepared after training. The level of preparation also affected responses about the product's effect on job performance. More than two thirds of all respondents who felt very prepared following training (69%) felt that the product made their job performance much better compared with only 13% of those who felt very unprepared following training. Figure 4 displays the percentage of respondents who felt that the product improves their performance.

# This feedback improves my practice

**Figure 4:** Percentage of Respondents Reporting the Feedback Improves Their Performance

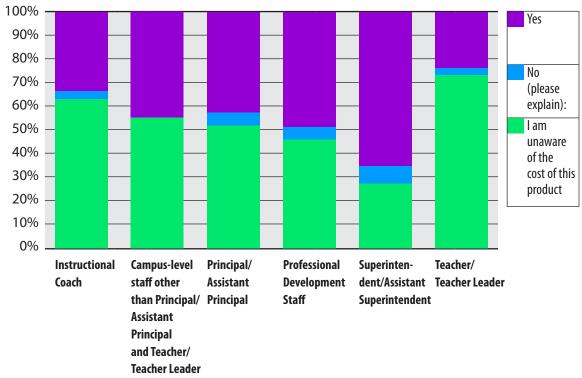


## Participants' perceptions about worth of products

In addition, when asked about the value of the cost of the product, only a small percentage of respondents, less than 5% for all role groups and 8% for superintendent and assistant superintendents, responded that their specified product or service was not worth the cost. It is worth noting, however, that more than half of all respondent groups, except for superintendents and assistant superintendents, were unaware of the cost of the product. The positive weighting suggests that participants value the product and that the cost may or may not influence their perceived value. Figure 5 displays the results.

# Is this product worth the cost?

**Figure 5:** Perception of the Worth of Products by Roles



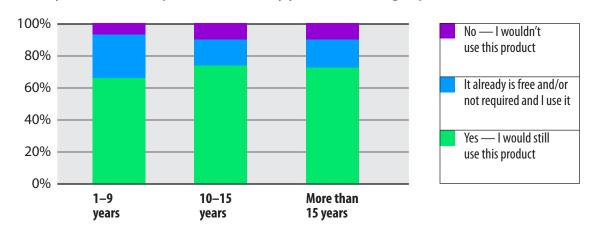
### Participants' perceptions of stickiness of products

To help determine perceptions of value, and by extension, a product's *stickiness*, researchers asked respondents if they would continue to use the product or service if it were not free and/ or not required. Answers were very positive across all levels of teaching experience. Figure 6 shows that responses vary minimally by years of experience. When asked the follow-up of "Why?," top answers, each drawing more than 70% support across nearly all categories of respondent, were that the product or service provides professional benefits, benefits to students, and saves time. Respondents perceived value from the products and services they use. However, as noted above, survey responses overall were more limited in product categories that had been traditionally tied to performance evaluation. Further qualitative analysis of these issues follows.

# **Figure 6:** Continued Use if Product Were Free by Years of

Experience

# Would you still use this product if free? (by years of teaching experience)



Lack of essential support such as training, ongoing support, and technical assistance is not a barrier to effective implementation and use. Survey results demonstrate that traditionally perceived barriers to implementing and scaling the application of technology-based products and services to improve teaching and learning are not interfering with use.



# Utility really does matter.

Concomitantly, if the product is not customizable (33%), is not beneficial (22%), or takes too much time (25%), its use will not be sustained. As demonstrated in Figures 4–6,

When asked about what influences the frequency of their use, respondents cited the usefulness of the product (76%) far more than the requirement to use it (41%).

respondents indicated that they would be more motivated to use the product if it improves their performance and makes their work easier. When asked about what influences the frequency of their use, respondents cited the usefulness of the product (76%) far more than the requirement to use it (41%). Usefulness more than required use contributes heavily to perceived worth of a product or service and may support budgetary justification, long-term implementation viability, and expanded use. While this finding may seem obvious at face value, it is a critically important

reminder that the core value of the product or service must remain the focus for both vendors and users. No amount of additional technical or motivational support can overcome a core offering lacking in fundamental value.



# Change management and teacher engagement in decision making matter.

If adequate attention to training and support, technical capacity and skill, and motivation are available, district leaders and vendors might ask what other factors they can leverage to advance implementation and scale the use of products intended to strengthen teaching and learning. The qualitative research in Phase Three showed that careful change management protocols can overcome potential barriers in the three categories studied and provide insights for other leaders and vendors in terms of their actions.

Interviews with users and vendors surfaced four main approaches to implementing an innovation: 1) mandating or requiring use; 2) providing opportunity or choice to use; 3) allowing an innovation to grow organically through natural means; or 4) designing some variation of these approaches.

Three case studies that accompany this report explore these issues in greater detail. Teacher2Teacher and the #ObserveMe social media hashtag and protocol demonstrate that organic and viral adoption and utilization is possible without administrator mandates. The St. Vrain Valley School District (Colorado) case demonstrates the value of intentionally linking video observation to a specific district professional learning program. The Bedford School District (New Hampshire) case provides a picture of a multiyear rollout plan for implementation of student surveys. Each case illustrates how implementation and use can be scaled. Taken together, the district stories allow education leaders and vendors to compare approaches and reflect on the change-management decisions they make regarding implementation and scaling use of technology products and services.

In Lake County, Florida, a tale of two discrete efforts serves to highlight implementation and change management challenges. An initial rollout of student surveys proved difficult due to political and legal complexities at the school board level. A current effort to provide teachers with meaningful feedback through video observation is proving more successful. To avoid communications challenges that had been encountered while initiating the use of student surveys, administrators made deliberate decisions regarding the sequencing of data release.

Tulsa (Oklahoma) Public Schools encountered another type of challenge. Within a difficult budget environment, district leaders made a priority to retain administration of student surveys, a move that confirms the perceived value of the data to teachers and the district leaders. Tulsa was able to decouple the student-survey data from the evaluation system and continue providing low-stakes feedback to teachers during a two-year reassessment of teacher evaluation protocols. Also, Tulsa was able to expand the surveys to include items on students' socioemotional learning, a new district improvement indicator.

# **Implications**

Implementing and scaling technology products and services require district leaders to make thoughtful, deliberate decisions about the effort to launch, implement, and scale use. District leaders grapple with the best approaches to drive change of any magnitude. They have multiple options for leading and managing change efforts. For example, they may opt to require use. However, rather than *mandating* implementation to scale use, particularly with a sensitive, politically, and socially complex innovation such as integrating peer feedback into performance evaluation, leaders may consider additional options: They could require change and leverage policy or contract language to force compliance. Alternatively, they may provide teachers with a choice to use the software and support them in doing so through training that offers multiple examples of beneficial uses of the software; personalized and differentiated approaches; coaching to assist in gathering and analyzing peer feedback in non-threatening ways; and principal advocacy that highlights positive examples of technology use within a school.

Because of the sensitive nature of the data they collect, some products and services (e.g. student surveys and video observation services) may be substantially more challenging to implement than other types of products and services included in this study. In addition, if the products and services are more tightly linked to performance evaluation within school systems that use multiple measures of teacher effectiveness, they may raise more significant challenges in implementation and require more careful change management processes.

Analysis of change management approaches uncovered in this study indicates that each has benefits and costs. Decisions about which to use require careful analysis of the context, the product, the users, and the intended results. If district leaders want to implement the use of peer feedback to enhance teacher performance, for example, they might create a policy requiring the integration of peer feedback into teachers' performance evaluation, thereby effectively requiring its implementation. Or they may move more slowly toward the requirement of peer feedback by inviting volunteers to pilot its use, and use input from the pilot volunteers to identify and address issues related to a districtwide rollout. Another approach to requiring implementation is staging the use of the innovation over time. For example, during a three-year rollout, volunteer teachers may opt in Year One with intensive training and support without monitoring of their implementation. During Year Two, more teachers may join in training and support for use, either again without monitoring or with voluntary monitoring as a pilot to use input from the pilot monitoring to identify and address issues related to monitoring. In Year Three, all teachers are required to implement the innovation, with less training and support, and with required monitoring of implementation for all teachers.

District leaders may create a hybrid approach to change by combining some elements of the approaches identified. One adaptation might be to require teacher leaders, coaches, or teachers to collect and use peer feedback to identify professional growth goals rather than as a data source for performance evaluation. Overall, leaders should apply a continuous improvement approach to the change management initiative, where relevant usage data is collected, analyzed, and used to improve implementation on a periodic basis.

# Recommendations

Based on the results of this study, researchers make the following four recommendations for increasing the use, scale, and impact of these products and services:

- Create a clear vision and compelling purpose for full-scale adoption, including a well-articulated theory of change;
- 2. Approach adoption and use of the new product and service through a robust change management process;
- 3. Engage teachers in the decision-making process in authentic ways; and
- **4.** Allocate adequate resources for capacity building including time, training, ongoing support, and technical assistance.



# Create a vision and theory of change.

District and school leaders, working collaboratively with teachers, should create a clear vision and purpose for the technology-based product or service. The vision ultimately needs to be expressed for what great instruction looks like, and *why* the new product or service will build the capacity for educators to reach that vision. Further, the theory of change must

articulate the connections between the *what* — the new product or service — and the *why*, and articulate *how* impact will be achieved. This vision needs to make explicit what is mandated and what is optional for technology. Formal documents such as strategic plans, policies, or other guiding documents clearly communicate what is expected of all stakeholders. Finally, the theory of change will include several fundamental building blocks that describe how the vision will lead to success.

As part of the vision for implementation, the district and schools should design a coherent and aligned plan that includes capacity building and support for all educators who are intended users, supervisors of the users, providers of ongoing technical support, and facilitators of professional learning. This plan will clearly depict the theory of change that explains how the technology-based products or services augment or contribute to the overall vision of the district and for how they

are launched, implemented, maintained, sustained through full-scale use, and evaluated for effectiveness and efficiency. Also, the plan needs to clarify which of the four main approaches to implementing an innovation will be applied, and why. Again, they include: 1) mandating or requiring use; 2) providing opportunity or choice to use; 3) allowing an innovation to grow organically through natural means; or 4) designing some variation of these approaches. Naturally, the theory of change and how it is articulated must be modified significantly depending on the chosen approach.

For any of these approaches, the plan will address how to use early adopters within the system to serve as advocates and facilitators of others' learning, and how to develop a collaborative rather than competitive culture that fosters learning and continuous growth. Further, leaders should define the progressions that define levels of implementation and benchmarks of progress for monitoring, feedback, and support. These progressions and benchmarks must consider real-world application.

As part of the vision for implementation, the district and schools should design a coherent and aligned plan that includes capacity building and support for all educators who are intended users, supervisors of the users, providers of ongoing technical support, and facilitators of professional learning.

The educators involved in the case study on the #ObserveMe peer observation protocol (see p. 19), have a clear vision for the process along with a theory of change about how implementation of the process spreads. They understand that teachers will find value in a continuous improvement process they control and they leverage the power of leading teachers who act as models and advocates to spread the process further.



# Approach adoption and implementation through a change management process.

While Recommendation 1 focuses on the strategic planning level, recommendations 2–4 delve into the tactical level and process-related considerations. One consideration to expand implementation and scaled use is applying strong change management strategies and processes. Specific change management strategies include increasing awareness about available products and services and the potential benefits and rationale for their use; engaging users in decision making about the products and services; identifying and addressing implementation challenges quickly and effectively; and evaluating the efficiency, effectiveness, and impact of the products and services. The results of this study suggest that effective change management has a significant effect on the scaling and spread of an innovation.

Change management is the process leaders use to initiate, implement, and institution-alize innovations. The language of the three I's was coined by Michael Fullan in his seminal book, *The Meaning of Educational Change* (1982) and represents what he characterizes as a traditional model with the initial stage of adopting or deciding to initiate change and the subsequent stages of implementing and continuing or sustaining change. Based on research about educational changes, Fullan and a multitude of subsequent business and education leaders assert that change of any magnitude requires diligent leadership, planned supports, adequate resources, and clear processes for identifying and eliminating barriers, and building shared meaning and stronger relationships. Recently, in the 5th edition of *The New Meaning* 

One consideration to expand implementation and scaled use is applying strong change management strategies and processes.

of Educational Change (2015), Fullan notes, "Careful attention to a small number of key details during the change process can result in the experience of success, new commitments, and the excitement and energizing satisfaction of accomplishing something that is important" (p. 8). Fullan proposes a second approach to managing change called the *lean start-up*, in which a change process is more fluid, dynamic, and evolving. Initiation is the process of identifying specific needs and

the unique context within which the innovation will exist, researching available products and services to address the needs.

Bedford School District (New Hampshire) Superintendent Chip McGee relies on change management processes to spread the use of student survey data in his district. After careful study of how educators tend to respond to the use of such data, he helped to craft a three-stage process for initiating and scaling the data project, listening and responding to the concerns of educators involved throughout the process (see p. 17, Bedford School District Case Study).



# Engage teachers in decision making.

A key component of managing change is determining how decisions regarding product identification, adoption, and implementation are made within districts. District leaders deliberate about how to engage representative staff in decisions regarding product or service selection. Teachers can be more prepared for and interested in continuous improvement if they have greater authority and responsibility for decisions related to how they improve and the data they

Teachers can be more prepared for and interested in continuous improvement if they have greater authority and responsibility for decisions related to how they improve and the data they use to do so use to do so. This means that they are familiar with the types of information necessary for engagement in decision-making and have clear understanding about criteria and processes for selection and implementation of new products and services. Teachers have authentic engagement in the ongoing review cycle. Finally, leaders and teachers collaboratively examine new roles for teachers as leaders and facilitators of the selection, initiation, implementation, assessment, and evaluation processes. Roles may include variants of *product tester*, *initial product pilot*, or *change champion*, each denoting a different set of expectations with regards to role, data, and process.

Data from this study indicate that level of engagement in decision making did not influence implementation and scaled use. In nearly every type of school, public or private, rural, suburban, or urban, and across all level of experience and grades taught, most respondents reported that they were not directly involved in the decision regarding the selection of the specific product or service they identified. As previously noted, superintendents and assistant superintendents (62%) more frequently indicated that they were directly involved in the decision to use a product compared to professional development staff (32%), other campus-based roles (31%), principals or assistant principals (28%), coaches (22%), or teachers or teacher leaders (18%). Involvement in decision making, or lack of it, did not vary by frequency of use, motivation to use, benefits derived, or level of training and support.



# Allocate adequate resources.

Finally, any efforts for initiation, implementation, or expanding to wide-scale use require sufficient resources to support them including time, people, and money. Learning Forward's Standards for Professional Learning recommend that resources include time, fiscal, human, technology, and materials necessary for full, rich, and widespread implementation distributed and sustained over time.

... districts should also consider opportunities to reallocate existing resources to make higher value activities possible within existing budgetary constraints. One dimension of resources is the expansion of teachers' roles to include a variety of teacher leadership responsibilities (e.g. technology coaches, peer coaches, trainers, mentors, and collaborators within a community of learners) to support their colleagues with implementation or utilization. Related to time, it is essential that educators are afforded time to meet within learning communities to support effective use of teacher feedback products or services. Given that this study's survey

data make clear the role of good training for implementation, additional staff or support to build staff capacity to do such training may also be necessary.

Each of these factors be expressed in terms of money or potential financial outlay to make incremental staffing or time allocations possible. However, districts should also consider opportunities to reallocate existing resources to make higher value activities possible within existing budgetary constraints.

# **Conclusion**

The study illuminates the complexity of implementing and scaling the use of technology-based products and services, particularly those designed to provide teacher feedback for continuous improvement and offers considerations for those managing such innovations. Interestingly, evidence about a product's usefulness or effect, the technical issues related to the product, the amount of training and support to use it, and motivation to use it are not, as demonstrated by this study, interfering with use. The crucial question facing leaders who want change, then, is how to manage it.

This study demonstrates that the quality and perceived usefulness of technology-based products or services matter. Respondents report a willingness to continue to use a product, even if it is no longer required, when they perceive that the product adds value, specifically if it benefits the user professionally (78%), benefits students (58%), and saves time (67%). Product quality is a key factor in sustaining use beyond any requirement to use the product if the product has demonstrated value to the user.

To succeed in scaling the use of technology-based products and services to promote teacher continuous improvement, district leaders ensure both the quality of the selected product and services and effectiveness of change management processes to initiate, implement, and scale use. Processes that show promise as factors to accelerate use include selecting high-quality products and services; providing capacity building through training and ongoing support; meeting technical needs; and building motivation to use through engagement in decision making. In addition, they may build partnerships with vendors who can guide and facilitate implementation. They may also want to (a) establish policies or guidance about data transparency and privacy; (b) foster trust and support teacher commitment to continuous professional growth; (c) ensure that the selected products and services are accessible, usable, and flexible to meet a variety of teacher needs; (d) expand perceived worth by assessing progress and making necessary adjustments; and (e) seeking and selecting the most viable ways to enroll users and celebrate educator and student success.

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# Case Study

# **Bedford School District, New Hampshire**

In Bedford School District in southern New Hampshire, Superintendent Chip McGee and his school board use data to inform ongoing improvements. When the state altered its requirements for teacher evaluation, neither McGee nor other leaders in the district questioned the need for expanding the use of data to inform those crucial decisions. The Measures of Effective Teaching Project study provided evidence that feedback that comes from video observation and student classroom surveys is a predictive and powerful means to distinguish levels of teacher performance.

When McGee worked as an assistant superintendent, he added video-observation calibration training for administrators and student-achievement data components to teacher evaluations. During the early efforts, the teacher association raised questions about whether using the new data could be a fair and equitable approach to evaluating all certified staff, especially those who do not have classrooms of students. District leaders eventually decided not to include student performance in teacher evaluations when the state determined that it was not required. The district remained interested in using feedback to improve instruction without incorporating it formally into the evaluation process.

The team explored various products and services for student surveys as a source of additional data. They selected Tripod, a highly reliable, research-supported measure of student input on teaching practices, student engagement, and school climate, because of its long-standing and respected history and accuracy in a variety of application methodologies. If teachers select the class they want feedback from versus sampling results or expecting all students to respond, the results are statistically sound. Rob Ramsdell, co-founder and CEO of Tripod, acknowledges that student feedback can be threatening to teachers. Ramsdell notes that much of the anxiety about the use of feedback is not based on the tools or products used to gather the data for the feedback but rather on how human beings are wired to accept and engage in feedback to promote growth. Based on his numerous experiences with implementation and use of the student survey, he encouraged McGee to address the potential fear factor as he planned for rollout of the survey. After further study, McGee and his board forged ahead with a multiyear effort that provided adequate opportunities to study and address any issues emerging from the implementation. McGee built on what Tripod had learned from other districts' experiences to design his district survey launch and met with early wins rather than barriers.

Ramsdell describes the implementation approach in Bedford as occurring in stages: First using the data in a voluntary pilot, then in an expanded pilot, and then in required use. "[McGee] is setting the table so that implementation happens in a systematic way," comments Ramsdell. McGee recognizes that no one is gung-ho about the new data set, even his administrators, yet he trusts the long-standing relationship he has with his staff. He attributes early success of the use of student surveys to the level of collaboration within the district and the favorable contract with the teacher association.

To ensure that the relationship continues, McGee gave considerable thought to achieving a successful initiation and full implementation and decided on the three-stage rollout. In Year 1, he recruited voluntary teachers with an interest in the student survey agree to use it and ensured that their results would be available to them alone. The 40 volunteer teachers were, as he describes them, "risk takers, the confident ones, fearless, can handle feedback, a set of people who wanted to be a part of what it would look like." Some volunteers were thoughtful teachers who actively disagree with the survey approach. He appreciated that they were all

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School District,
New Hampshire,
continued

willing to be honest and forthcoming with their views. He adds, "I have been here a long time and I hope they believe me that this is feedback for improvement. If it doesn't help us get better in teaching and learning, we won't do it. We need to get it right, not only so that it doesn't do damage, but so that it is right." McGee's plan called for meeting with this group several times to introduce the pilot, teach them how to interpret their results, and have them identify concerns they have related to the survey and its expanded use. He met with volunteers during three half days during the school year to offer training about the survey. For two days in the summer, one in June, and one August, he invited them to discuss their learning about the survey and the plans to move ahead. Teachers received pay for those days.

"After Year 1," McGee comments, "I learned that we needed Year 2 with pilot teachers so I let others join. The condition for re-upping was that principals need lower-stakes practice in talking with teachers about the results. This was a big change that we needed to make. So, Year 2, which we are in now, is a pilot on how to share and use results." The purpose of sharing data in Year 2 without consequence is to develop principals' capacity to use the data in growth-focused conversations with teachers and prepare both teachers and principals for full implementation in the third year. McGee recognizes the importance of preparing principals to use the data in constructive ways to support teachers' use. Year 3 will be the year for full implementation for all teachers with their results made available to their supervisors.

The effort to extend teacher evaluation to include alternative data is not, according to McGee, an effort to improve evaluation, but rather to get better at teaching and learning using feedback as a means for doing so. The purpose is to use objective data to strengthen practice, even when the data may initially make someone feel bad. The core part now, according to McGee, "is for administrators to take responsibility to get good at the conversations. This is our responsibility as administrators." Figuring out how to integrate the data into the three-year cycle of evaluation is a part of what district leaders, administrators, and teachers are figuring out during the pilot phase.

McGee contemplates the advantages of Bedford's approach to implementing student surveys. When comparing his approach to that of other districts in the state, he admits that requiring the survey was necessary to see it fully implemented. If left to voluntary use as some districts have opted to do, he estimates that only about 50% of teachers would use the survey. He also realizes that unless the survey data are considered a substantive component of the ongoing growth and evaluation system, the results will not be perceived as valuable. He notes that some districts using a student-feedback survey have assigned a 5% weight to the data and he considers this insignificant.

McGee is aware that what he does in Bedford does not equate with what occurs in other districts. Bedford has many advantages — its size, the governance structure, the school board's engagement and support, his longevity as superintendent, the stable staff and community, and its history as a high-performing suburban district. "Our challenges are less than in other districts," asserts McGee. "I am able to get in front of the faculty and speak to them directly. I can influence things because the scale is good. I know the names of almost every one of the 350 professional staff." Without these conditions, the district's approach to implementation and results would be different.

McGee realizes that the pilot is surfacing issues to address and is grateful for the opportunity to do so in advance of full implementation. He confirms that the data teachers and principals receive will lead to improved teaching and learning — that is the goal he strives to achieve.

# **#ObserveMe**

Outside the classroom doors of about 15 of the 90 teachers at Trinity School, a pre-K-6th-grade independent school in Atlanta, hangs a small sign. They have a common hashtag, #ObserveMe. Below the hashtag is a statement about what teachers in each room



want others to observe when they choose to visit the classrooms. The Faculty/Staff Leadership Team comprised of approximately 25 teacher leaders made a commitment to observe at least one member of their team during the 2017-18 school year to promote the school's vision and commitment to continuous professional learning. Director of Teaching and Learning Jill Gough made it a point to drop into each room for a lesson, make a sketch-note of her observations, and then share her notes on Twitter.

A former math teacher, Gough follows Robert Kaplinsky, who is a math teacher specialist in Downey Unified School District in southern California. She values his impact on student learning and teaching. She learned about him through networks within the National Council of Supervisors of Mathematics and National Council of Teachers of Mathematics and found his contributions authentic and useful.

Kaplinsky created #ObserveMe in an effort to make peer observations more commonplace. When educators observe one another, he believes, they gain invaluable perspective on their own practice and increase their awareness of opportunities for improvement. He also found that specifically listing the type of feedback an educator wants to receive helps amplify the learning process. He encourages teachers to learn from each other by providing authentic, real-time feedback on what they want to learn about their own practice.

Since its inception in 2015, tracking data indicate that the use of the #ObserveMe hashtag has grown exponentially and now spans the globe. Kaplinsky supports other educators in using the peer observation process. He offers educators suggestions for writing feedback goals, provides a template for making an #ObserveMe sign that includes feedback goals, and shares a potential rubric for observers to use. This process gives teachers control of their learning as well as opportunities to create a culture of collaboration and continuous improvement within their schools. Kaplinsky says that the #ObserveMe movement demonstrates the "organic, viral growth of teachers looking for authentic feedback not driven by policy or authority," but rather by his or her own desire to learn. He continues, "Teachers have control over this... Evaluation has been a tool that is considered punitive, and the idea that teachers can claim control of it is empowering to them." Evaluations may be perceived as less valuable, he acknowledges, because teachers don't have control over the areas in which they receive feedback. #ObserveMe is teacher-driven and specifies the areas in which teachers seek feedback about their practice. In addition, most evaluations are summative assessments while #ObserveMe is formative and shapes the teacher's daily practice. The real emphasis of #ObserveMe, according to Kaplinsky, "is not something being done to teachers, but rather a ground-up process" driven by teachers who want to grow professionally and who are curious about their practice.

Gough acknowledges that teachers have responsibility both for their own learning and that of their colleagues. As an advocate of peer-to-peer observation who has previously used products to serve this need and worked in a system that required peer-to-peer observation as a part of the teacher performance evaluation system, she felt the formality of adopting

Case Study

**#ObserveMe,** continued

products led to compliancy rather than fostering a culture of continuous improvement. She describes what Kaplinsky offers through #ObserveMe as a movement rather than a product, and that fits with what she wants for teachers in her school. She looks forward to every opportunity to observe teachers and works with the team of teacher leaders to overcome any obstacles that prevent them from observing one another. She and her administrative colleagues volunteer to take over teachers' classrooms to give them time to observe. She makes it a point to observe personally any teacher who hangs up an #ObserveMe sign. She eagerly anticipates the opportunity to discuss her observation sketch notes with teachers. Mostly she recognizes the tremendous value she receives from the opportunity to observe her colleagues. Each time she gathers ideas she can use in her own teaching practice as she facilitates professional learning for the Trinity staff.

@J\_Kuipees3 #ObserveMe 8:10-8:22 BIGUSHE ESPADOL 8:22-8:26 FEEE "GODALBL PORTSMOR 26-8:28 8:28-8:31 WHOUSE GROUP Q 1A -8:35 PHATINE INTERVIEWS WHOLE GROUP DEBRUEF -8:36 Stopped @ 5 MIN MARK eriquisitive expression ACTIVE MOREMENT 18:38-8:40 PARENTER WORK BHILLING WOUT FROMPTING 8:40-8:551 ESPAPOL > INIGHISH Meet VISIBLE LEMPHERS HINKING Supposer

Kaplinsky wants to empower teachers to experience the power of peer-to-peer support. "Teachers just can't possibly see everything that goes on in their classrooms," says Gough, "so having another set of eyes is very helpful."

Teachers are excited about the possibilities #ObserveMe offers. Because teacher leaders agreed to participate in the experiment with #ObserveMe and observe at least one other

teacher on their team, they demonstrate that making their practice transparent supports the growth of everyone in the school. It also models for students the staff's commitment to lifelong learning, something they want for each student. Gough reports that the greatest barrier to spreading #ObserveMe more widely among teachers is not the most frequently cited barrier of time, but rather vulnerability. Teachers, by nature, hold high expectations of themselves for exceptional performance and worry that others will judge them to be less effective if a lesson does not go perfectly. The contradiction is that these same teachers recognize that the success of teaching depends on multiple factors, not all of which remain consistent even within a classroom period. Gough wants more teachers to view teaching as a work in progress, something that can be continually strengthened.

In this process, both the observer and the observed teacher find the experience of peer observations beneficial. Observers see the nuances of teaching and learning when they can step back and watch another professional at work, and nearly always come away with techniques they are eager to apply immediately in their own classroom. Observed teachers learn from the feedback they receive from observers.

As more teachers experience the benefits of being observed and observing their peers, collaboration seems to grow. Gough acknowledges that #ObserveMe requires reciprocal responsibility among staff. "It is a two-way street. It takes both hanging the sign and being will-

From Experiments in Learning by Doing, September 9, 2016, https://jplgough. blog/2016/09/ **#ObserveMe,** continued

ing to observe. We know we are high functioning as a team, especially when someone asks for help to observe a colleague and others step in to provide the requested support so that person can do the observation." She enjoys watching teacher leaders jockeying for opportunity to observe so they can learn. She asserts that as professional educators, "We are givers of feedback all the time; we should take it as well; in a true learning community, everyone should be learning all the time."

This kind of self-directed, teacher-to-teacher practice of professional growth empowers teachers to be responsible for their own advancement and to contribute to the success of their peers. Gough finds that her sketch notes encourage teachers to seek her out to ask questions and listen to her explanation of what she captures. She finds teachers want to post her sketch notes, both to share the evidence of their work as well as to show other colleagues what the notes look like. When Gough tweets her one-page sketch note, she tags the teacher and her school to broaden the community of learners beyond the walls of her school.

Kaplinsky is excited about the growth of #ObserveMe, yet adamant that it not be required. Its true value, he states, is in its organic, voluntary nature. He provides useful resources to facilitate and encourage its use, serves as a model of the process of teacher-to-teacher professional learning by posting videos of his own classrooms on his website, and advocates teacher-led efforts to increase the transparency and value of feedback on professional practice.

Just as happened with Gough and the teacher leaders at Trinity, the use of #ObserveMe is spread by the advocacy of key teachers, sometimes across entire systems. Some teachers, such as those in Katy Independent School District, a large suburban school system west of Houston with an increasingly diverse student population, are sharing their #ObserveMe experiences with their school peers and across schools. Teachers recommend the process and share the many resources available to support teachers to post their invitations. Based on an analysis of the impact of networking and promotion of #ObserveMe through #Teacher2Teacher, exposure and connections among teachers soared in Katy ISD between November 2016 and February 2017. Evidence of the spread of #ObserveMe can be traced to a few influential teachers, who typically make up a majority of network members in schools — teachers who seeking opportunities to learn and grow from other teachers.

# Case Study

# St. Vrain Valley School District, Colorado

Located between the foothills of the Rocky Mountains and the northern suburbs of Denver, Colorado, St. Vrain Valley Schools, the state's 7th-largest school district, provides education across 411 square miles within 13 different municipalities serving 32,000 students at 55 school sites. On the state's standards-based assessment, St. Vrain student performance exceeds state averages in reading, math, writing, and science.

Among the technology-enhanced products used in St. Vrain to support teacher professional learning are Edthena's video tools for classroom observation and online collaboration.

Diane Lauer, assistant superintendent of priority programs and academic support, champions the use of the tools for the district mentoring program. Several years ago, before moving to St. Vrain from a neighboring district, she was invited to attend a technology venture capital conference at which she learned about Edthena. She immediately realized that the tools provided a relief to a common problem teachers experience when trying to observe one another — finding time. Even in the best circumstances when schedules coordinate and resources are plush, fire drills happen, says Lauer. "Edthena gave us the capacity to capture, stop, annotate, and have a discussion so we could dissect the video." Across St. Vrain Valley Schools, district leadership, school administrators, teachers, and staff have recognized the need to implement a viable way for the district's teaching and learning coaches and teacher mentors to observe all new teachers across time and space. With St. Vrain's large geographic footprint, coaches would sometimes spend more time in the car than working with teachers. Scheduling conflicts also created challenges for them to meet with new teachers and provide the level of support they needed to ensure novices' ongoing success.

As St. Vrain Valley Schools began to research solutions to enhance the coaching cycle, the district was rolling out a 1:1 technology program, placing iPad minis in the hands of all secondary students and teachers and classroom sets for elementary students. Lauer noted that a district goal was to build infrastructure and programming for teachers and staff to use their devices for professional growth to enhance their practice and model technology integration in their classrooms.

Through this work, the stars and resources aligned. With the support of district staff who were experienced with video reflection, and implementation guidance from Edthena's CEO, Adam Geller, St. Vrain Valley Schools launched the video observation process with new teachers, an audience hungry for support and coaching. Geller advised Lauer and other district staff to study the work of Miriam Sherin at Northwestern University and her colleague Elizabeth van Es at University of California, Irvine, on noticing exemplary teaching and the use of video clubs. Lauer and her team wanted to have an easy and positive launch to the program, one that would eventually cultivate a culture of using video across the district for examining practice. Goals included incubating reflection on professional practice and leveraging this opportunity to expand the practice across the district.

Video observation in St. Vrain began with a group of 50 new teachers, many of whom had previous experience using video in their preparation programs. Coaches worked with small groups of approximately 10 teachers and leveraged the technology's ease of use to alleviate anxiety — teachers simply propped up their iPads and turned them on. The district purchased tripods to hold devices for ease of capturing the video recordings and wireless microphones to enhance the sound.

New teachers were required to upload six videos in their first year for their coach to view

St. Vrain Valley School District, Colorado continued and discuss. While some coaches worried that the video capture and annotation would replace the one-to-one, personal touch they had experienced in coaching conversations, they were instead surprised that their conversations with teachers were richer and more focused on specific aspects of teaching. Because most coaches had not experienced video coaching before, they did not immediately understand its true value. To accelerate team adoption, Lauer encouraged her coaches to video their own conversations and analyze them to refine their personal practice.

Through the challenges that come with any systemic shift, Lauer's approach was to focus on constructive supports that would best ensure positive growth and value for St. Vrain staff and students. Coaches initially wanted more structure around the number of videos teachers were required to take, but after much introspection, the team chose to emphasize a more open approach in the first year. By allowing flexibility and self-direction, the team was able to distill many important lessons and best practices that would inform the future structure of the program. For example, early videos were too long. Teachers recorded whole classes but through refinement, the district found that targeted, 20-minute segments worked better for analysis and feedback. Additionally, before Edthena developed an app that directly uploads the video into the software system, some teachers found the uploading process burdensome. In exploring options, the team collaborated with the district's technology experts to identify solutions that would facilitate a better user experience for video uploads.

As the program grew, instructional partners in district departments expressed concern that the video observation might feel too evaluative to facilitate strong, supportive relationships with teachers. The coaches knew they were charting new territory and these concerns were important considerations to ensure that everyone in the district felt confident in the program. Throughout the process, teachers and coaches communicated often about how they were benefiting from video coaching and worked across departments to showcase the value of video in many contexts. There were amazing success stories that motivated them to continue analyzing how video could elevate their work. Over the past few years, use of video coaching has grown into a widely adopted, systemic practice across St. Vrain Valley Schools.

Once teachers and staff experience the value of video directly they immediately begin to appreciate its purpose and value. Access to technology makes the process of capturing, stopping, and commenting seamless, flexible, and easy for anyone to use it. Working within Edthena's pricing structure allows other teachers to try out the product a few times to experience its value.

The benefits are also growing. Teachers are recording and reviewing several videos before finding the one to annotate for their coach. Technology allows teachers to put their best foot forward by giving them the opportunity to record, review, reflect, and rerecord if they are not satisfied. The use of the time capture and annotation allowed coaches and teachers to see their practice with authentic evidence. Even if they can't get coordinate face-to-face conversations immediately after the recorded observation, the video provides the picture of reality so they are not relying on their memory or opinion as the evidence for such important conversations. By leveraging video evidence, coaches can pinpoint specific practices and use the evidence to focus their support of teachers. Coaches report that they can have authentic, purposeful, and meaningful conversations about instruction in the platform with teachers who are less comfortable meeting face-to-face with the coach.

Karen Smith, a teaching and learning coach in St. Vrain Valley Schools, reflects that video

St. Vrain Valley School District, Colorado continued adds objectivity to a conversation. She understands that new teachers may worry about feeling vulnerable and that they are being evaluated, so she models the process by teaching and recording her own lessons. By sharing her annotations on what she was noticing about students' learning with the teachers she coached, she built trust and confidence. And by modeling the value of the recording and reflecting process, she made it easier for teachers to do the same. "The video is critical part of a coaching cycle," shared Smith. "My coaching is deep, rich, authentic, and anchored in the classroom. My work is better because teachers have a mirror to see the reality of their own practice."

Recording allows teachers to review and comment on their practice before the coach does, so that when they meet, the conversation is already focused on the next steps for refining practice. "Technology accelerates teacher growth; it doesn't replace coaching," says Lauer. "It allows us to do what we haven't done before, capture reality. Because our brains are programmed to forget, the video allows us to overcome cognitive load."

St. Vrain Valley Schools uses parent and staff notifications and media release sign-offs to protect data privacy rights of individuals. In the beginning of the school year, parents receive letters informing them about the professional learning initiative using the video technology and its support of teacher growth. The use of video for instruction and professional development is part of the normal fabric within St. Vrain. The district's proactive stance regarding parent permissions, quick access to student release information, collaboration with the local teacher association, and strong history of separation of the office of professional development and the teacher evaluation process, all contributed to the ease with which the tool was introduced and adopted. Principals cannot request video evidence in the supervisory process, yet teachers can offer the evidence if they wish. Through this practice, trust in the system is cultivated and fear of failure or vulnerability is overcome.

Lauer and her team have big goals for the future use of video to promote professional growth in St. Vrain. She sees cultivating the habit of using video for professional reflection as an opportunity for teachers to visit each other's classrooms and collaborate across school walls and geographic boundaries. Teachers in St. Vrain now have the opportunity to substitute one of the two annual principal observations with a peer observation within the district evaluation process. The Edthena platform allows teachers to engage in peer observation easily and privately. In addition, educators are using video to deepen the implementation of a new elementary language arts program. Teachers participating in the voluntary professional learning program appreciate having the opportunity to observe how others at the same grade level teach parts of the unit. Teachers are guided to watch the videos through the lens of best practice and comment on the videos using the explicit criteria associated with the language arts program. Anyone — even those without a coach — can use the product to review their work independently or with peers because challenges with time and distance are minimized.

St. Vrain Valley Schools continues to forge ahead, championing a culture where video reflection for educators is as natural as it is for elite athletes, world-class surgeons, or other professionals who are always refining and reflecting on their practice. As with all systemic changes, patience, persistence, and experimentation are the key to transforming the culture. Lauer notes, "Professional learning as we used to know it is gone. We cannot do it the old way and we are not yet ready to go fully online. If we think spending a \$100,000 to bring together elementary teachers for a week in the summer is going to do it, we are wrong. Technology can change the opportunity for support that is needed to change practice."



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