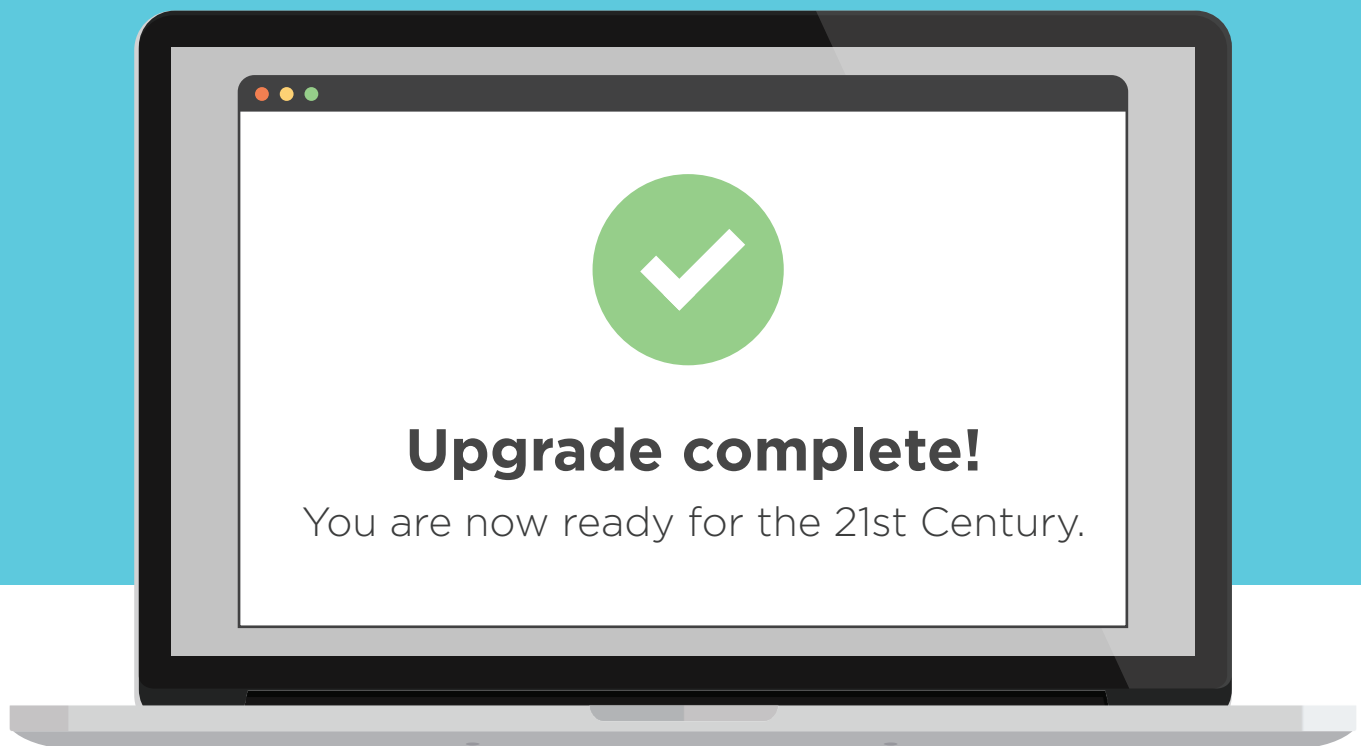


# How to Make the Case for Technology Change in Small to Midsize Districts

—  
With contributions from thought-leaders  
Tom Murray, Eric Shenerger, Adam Bellow, & Steven Anderson



**K-12's First Holistic Student Engagement Platform**

# How to Make the Case for Technology Change in Small to Midsize Districts

## EXECUTIVE SUMMARY

The education technology market is exploding, and K-12 leaders have more critical technology decisions to make than ever before. To take advantage of this unprecedented number of opportunities to leverage new technology to enhance the effectiveness of education, leaders must balance the opportunity with their staff's appetite and ability to digest and process operational change. While the education technology revolution is creating meaningful ways to save time and money and improve educational efficacy, some real and perceived barriers exist in the areas of district culture, process, budget, legacy contracts, and ingrained habits. Districts that are able to navigate change and harness technology properly are often rewarded with numerous benefits, such as improved student outcomes, increased operational efficiency, and budgetary savings. Large districts tend to be better equipped from a resource and process standpoint, and get more attention from technology providers and the media. Yet 87 percent of the districts in the US have less than 25,000 students, and these small to midsize districts struggle to navigate technology change at a rate that keeps pace with the market.

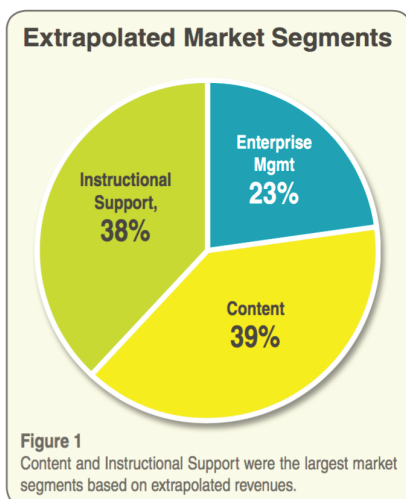
This paper defines the K-12 education technology landscape and articulates the importance of embracing technology change in school districts. It then outlines the challenges and opportunities for districts, and provides a toolkit and best practices for making the case for technology change in small to midsize districts.

## WHY YOU SHOULD EMBRACE TECHNOLOGY CHANGE

### *The Evolving K-12 Education Technology Landscape*

The education technology market will soon be a \$60 billion business worldwide, with K-12 spending accounting for roughly 40 percent of that total. The US market generates annual revenues of nearly \$8 billion. Significant innovations are born every week by established conglomerates and energetic start-ups alike, and for every compelling new product there are just as many failures. The result of this flurry of activity is a considerable volume of noise through which busy leaders must sift and find the signal of solutions which can help them achieve their goals.

According to [SIIA's 2014 Ed Tech Market report](#), instructional



support and content solutions have equal footing, with about 38 percent of market revenues. Enterprise management makes up 23 percent of the market. This reflects a focus on technology innovation in the classroom, with only a quarter of the focus on enterprise technology, an area warranting more attention. The enterprise segment grew in 2014 by 40 percent, as districts are recognizing they need to upgrade their core technology systems invested in infrastructure upgrades to support their technology needs at the site level.<sup>1</sup>

### ***There's No Better Time Than Now***

Without question, the world and the educational system's role in shaping its future leaders is in a state of significant transformation and cultural change. The stunning pace of technological change coupled with shifting global economic, environmental, political and social issues necessitate a new set of skills and knowledge that students need to learn to be successful.

Schools and districts must change how they operate if they are to change what and how students learn. Today's outside-the-box idea that seems like a fad may be tomorrow's best practice. The educational organizations that neglect to adapt to this reality will inevitably leave their students at a disadvantage compared to their counterparts in other parts of the country and around the globe.

However, change for the sake of change is not a winning solution. As schools and districts are compelled to innovate in the face of great challenges, they are best served by seeking a balance of looking inward to enhance their best educational practices with looking outward for new ideas to shape their future. This thoughtful balance is the key to success. **Recent studies show that when technology is used strategically and effectively, rather than as an add-on tool or to reinforce didactic practices, it can help every school and district reach their ultimate goal – to prepare all learners for college and future careers.**

Last year, the Alliance for Excellent Education published [“Using Technology to Support At-Risk Students’ Learning.”](#) a report by Stanford professor Linda Darling-Hammond that dug deep into research data and case studies to find what works in education technology. According to the report, technology has measurable effects on student success, particularly among at-risk populations when schools use it in ways that provide:

- Interactive learning
- Exploration and creativity rather than “drill and kill”
- The right blend of teachers and technology<sup>2</sup>

Moreover, school district leaders and educators have the opportunity to emulate the skills they hope to develop in their students through technology adoption. By using technology throughout the district in various ways, such as communicating with parents and students and extending instruction outside the classroom, districts set an example for students that technology is not only a tool for entertainment and play but it also has a place in learning and the workplace. They also see their educational leaders embracing and adapting to change, a critical skill that students will need in the future when they are adults facing great challenges. When students are immersed in an effective technology-enriched environment at school and at home, they begin to internalize the values and processes that made it possible.

Districts that are nimble enough can be on the leading edge of the technologies that are changing

how schools operate, not only in the classroom but also in the vital works undertaken outside of it. Improvements to infrastructure and management systems might not get the headlines that classroom technology receives, but have been shown to be just as vital to improving the efficiency of classroom activity. By making a teacher's job easier, they have more time and the right information to focus on improving student outcomes.

## WHAT YOU NEED TO FORGE THE PATH AHEAD

### *The Unique Needs of Small and Midsized Districts*

While districts with 25,000 students or less have similar goals for teaching and learning that their larger counterparts do, they tend to have smaller staff sizes and fewer resources. In the report [Size Matters](#), the Center for American Progress indicates that smaller school districts are more costly to operate, with higher overhead costs to provide broad educational programs for a smaller number of students than larger districts. Small to midsize districts do not have economies of scale.<sup>3</sup>

According to the [Schools and Software](#) report from the Clayton Christensen Institute, smaller districts can be neglected in the marketplace as their voice is often drowned out by larger districts. Small to midsized districts are underserved by the market and express difficulty finding workable or customized technology solutions at an affordable price.<sup>4</sup>

As districts adopt a growing number of digital technologies and resources and transition away from print, their small IT departments and instructional technology specialists are increasingly overextended. Nearly every new school- or district-wide application requires time spent on data transfers, class rostering, training and other integration activities. Fewer than 11 percent of respondents to the [CoSN 2015 K-12 IT Leadership Survey](#), who were overwhelmingly from small to midsize districts (up to 14,999 students), report that their IT staffing matches their needs across every category.<sup>5</sup>

However, smaller districts are inherently nimbler. Because they have fewer "movable parts," change can occur much more quickly than in larger districts. Instituted changes tend to have received support from top to bottom, having a noticeable effect on the overall success of an initiative. The key is making the case for change in the first place.

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**The 21st century is an exciting time in education, one not seen in the more than 125 years of organized instruction in this country. Adopting technology is not without its challenges. However, for small to mid-sized districts, the changes can be relatively swift and truly transformative for your students.**

Adopting technology can seem overwhelming. However, for small to midsize districts, the changes can be relatively swift and truly transformative for your students and broader community.

Given the special qualities of small to midsize school districts, investigate technologies that include the following attributes to address your particular needs:

- High-quality customer service and IT support that will provide assistance in data transfers, integration, and analysis as well as on-demand help to your faculty and staff
- Integrated solutions that can do the work of multiple technologies in one
- Intuitive platforms that require little training for teachers to use so professional development can be focused on where it matters most – incorporating technology in ways that improve teaching and learning
- Flexible features that enable the district to easily and quickly customize the application or platform themselves

**Your case must address both why it's imperative to change and how the district will benefit as a result.**

### **District Challenges to Overcome**

Even though districts with less than 25,000 students tend to be able to change course faster than large districts, they still face physical, human and cultural barriers in making a case for change and implementing technology effectively.

Human factors such as institutional inertia affect many districts as action requires more effort than inaction. While this may seem to be a challenge to overcome on an individual level, the lack of risk-taking and desire to maintain the status quo often stems from the school or district climate. Cultural factors related to vision, leadership, and community-building can have a significant positive impact on the success of technology integration, solutions for which are addressed in the next section.

Although many school districts have the fortitude to implement technology change, many lack the right physical resources and support, particularly if their chosen technology is difficult to use or implement. In the Joan Ganz Cooney Center [report](#), educators overwhelmingly cited inadequate time and training as barriers to technology integration. When examining data use, in particular, teachers also indicate insufficient technology tools and systems as hindering their ability to integrate technology to reach district goals, according to the [Teachers Know Best](#) report by the Bill and Melinda Gates Foundation.<sup>6</sup>

Ultimately, the key to getting things done tends to become

convincing your stakeholders—many of whom may lack the will, energy, or interest to upgrade to modern technology—that your vision is a transformative improvement that can positively affect student outcomes and district operations. Your case must address both why it’s imperative to change and how the district can overcome the challenges it faces.

### ***Opportunities to Seize***

When districts consider technological changes, they tend to seek some common benefits:

- Improved differentiation in the classroom
- More efficient district operations
- Save time and money
- Enhanced classroom instruction
- Increased student engagement

**Having a clear understanding of your strengths and weaknesses ensures that decisions are evidence-based, and will help you get stakeholder buy-in more easily.**

Districts, schools, and educators across the country are seeing these results, and can serve as replicable models to spread pockets of innovation to other areas. Additionally, new integrated solutions and cloud-based technologies not only offer time and cost savings, but can also deliver greater effectiveness in district management, curriculum and instruction management, and teaching and learning.

The [SIIA 2015 Vision K-20 Report](#) shows that there is a narrowing but persistent gap between the current and ideal levels of technology integration in districts, inhibiting the use of data to personalize instruction and use technology in deeper and more broader ways. Districts are making slow but steady progress toward those goals. According to the report, new technologies that are entering the market may provide opportunities for districts to reach their goals with more cost-effective and less hardware-dependent solutions.<sup>7</sup>

## **HOW YOUR DISTRICT CAN BECOME A TECHNOLOGICAL CHANGE AGENT**

### ***Identifying Needs and Establishing Goals***

[The Future Ready Framework](#) was developed to aid school and district leaders in this critical and challenging work. The Framework enables school districts to determine their educational needs and goals in order to identify technologies that align with their vision. Having a clear understanding of your strengths and weaknesses ensures that decisions are evidence-based, and will help you get stakeholder buy-in more easily.

The Framework was developed by Future Ready Schools, a partnership between the Alliance for Excellent Education and the US Department of Education dedicated to maximizing digital learning opportunities for the nation's students. Future Ready organizes regional summits for education and community leaders and provides tools for districts, including the Framework, to move forward with technology adoption.

At the heart of the Framework is an Interactive Planning Dashboard, where districts can assess their readiness for digital learning, identify gaps that may exist in their current methods, select from suggested strategies built around best practices across the country, and finally make a plan to move forward in technology adoption. The Future Ready Framework includes seven "gears" that form the roadmap toward digital learning:

- [Curriculum, Instruction, and Assessment](#)
- [Use of Time](#)
- [Technology, Networks, and Hardware](#)
- [Data and Privacy](#)
- [Community Partnerships](#)
- [Professional Learning](#)
- [Budget and Resources](#)<sup>8</sup>



The dashboard process begins with an overall [digital learning assessment](#), which your leadership team helps complete. The results are loaded into the dashboard, and a report is generated about gaps that might exist based on the seven gears of the Framework. Each gear begins with another survey so your district leadership can self-assess your current status. Resources are provided, goals are set, and responsibilities are assigned to move the project forward.

Although designed around the idea of digital learning and classroom effectiveness, the Future Ready Framework can be easily leveraged to other adoption processes that might have more indirect effects on classroom learning.

### ***Fostering the Right Culture***

The key to success of any education technology initiative is a sense of innovation that pervades from the district office down to the individual classroom. These districts not only embrace technology—they expect success with every adoption. They are willing to become standard-bearers in the landscape. Representatives from these districts are often presenting their best practices at annual education conferences like ASCD, ISTE, and the regional technology gatherings.

However, this kind of change does not happen overnight. Often, it starts with competent and visionary leadership. It can seem an overwhelming job, but the following resources can provide a valuable starting point.

In [Leadership: Key Competencies for Whole System Change](#), authors Lyle Kirtman and Michael Fullan

identify the key competencies, mindsets and strategies leaders need to champion innovation. The book is based on decades of work with administrators to help new leaders create and sustain systemic change that is focused on moving education into the future.<sup>9</sup> Three key competencies that are at the heart of technology change is creating a commonly owned plan for success, challenging the status quo and taking risks, and building trust through clear communications and expectations.

More closely examining technology-based leadership, CoSN provides the [Empowered Superintendent Toolkit](#) to help top-level administrators ensure that their school districts embrace transformative digital learning. The toolkit provides self-assessments, guides, action steps, and case studies to help superintendents to determine their challenges and increase their capacity to lead technology efforts.<sup>10</sup>

With the right knowledge and skills at the top, districts can embark on fostering a culture of innovation and collaboration. There are numerous ways school and district leaders can set the tone for a technology-enriched learning environment, but key to any work is leading by example. If leaders are to expect teachers across the district to embrace technology in their classrooms, they themselves must use it regularly as well. Use text messages, blogs and Twitter to communicate with parents and students. Review data dashboards on a daily basis to inform decisions. Sit in on technology trainings with teachers periodically and try the tools yourself. Identify and share innovative new tools with staff for their consideration. These are just some of the ways to demonstrate you are invested in leveraging technology to reach district goals and support the vision of college and career-ready students.

The Learning Accelerator, along with its partner 2Revolutions, has released a tool for establishing a culture of innovation in a school district: [So You Think You Want to Innovate?](#) It includes an assessment of your current culture as well a framework for moving toward innovation. The major takeaway: grant teachers more autonomy. They are often the ones with the transformative ideas.<sup>11</sup>

One way to foster innovation is by creating lighthouse schools that serve as labs and models for change. For example, [an increasing number of states are creating "Innovation Zones" or "iZones"](#). iZones allow districts to identify a small number of schools that can be released from certain rules and guidelines when it comes to instruction. In essence, these schools are approved in a similar way to charter schools. They tend to focus on technology and student-centered learning.<sup>12</sup> Even if your state has not created such a scheme, piloting comprehensive technology strategies in a small number of classrooms or schools can get your district's feet wet when it comes to educational innovation.

It only takes one person to spark a cultural change in an entire district. Once other teachers or schools start seeing new ideas have an effect on student learning, they are quick to jump on board.

### ***Using Best Practices to Empower Stakeholders***

The first question in any adoption is how the new product or service will affect the learning that goes on in your classrooms. Some products have a direct impact on instruction. They tend to focus on content delivery or instructional capacity. While underlying systems, such as a Learning Management/Student Information System or infrastructure, have an indirect yet critical impact on student learning. One of the first steps in championing technology-based change is identifying the metrics that will be used to evaluate the success of the product or service. And, those objectives should be shared with stakeholders.



The goals of adoption may be solving an identified, meaningful problem in your district's classrooms or working toward achieving a larger vision of improving student outcomes. Problems can be instructional (e.g., enhanced differentiation for low-income students, better resources for English Language Learners) or foundational (wi-fi bandwidth is inadequate, the LMS/SIS is too cumbersome or is not used). If the foundational technology is not modernized, then the entire district's technology capabilities are impaired. So, as a best practice districts should start with improvements to the foundational technology and then build upon that strong foundation.

Case studies can be valuable in providing insight into what is currently being done at other pioneering schools and districts to showcase the potential benefits in your district. The examples can help stakeholders visualize the possibilities more easily. Vendors often produce studies that focus on their products, and there are independent resources that highlight what is possible in technology adoption and digital learning:

- The Alliance for Excellent Education is behind the Deeper Learning initiative. 500 schools across the country have aligned themselves to utilize best practices in digital learning. [Their ten learning networks are highlighted here.](#)
- The Michael and Susan Dell Foundation [produces case studies](#) based around blended learning best practices.
- Getting Smart [produces a myriad of publications](#) centered around education technology best practices, including highlights of schools and districts.
- ISTE provides [best practices-in-action](#) that showcase how districts are addressing standards through technology.

Eric Sheninger, senior fellow and thought leader on Digital Leadership with the International Center for Leadership in Education, emphasizes the importance of connectedness as a key element in guiding change in your school districts and identifying best practices. Connectedness brings new ideas and knowledge into your districts to influence decisions and opinions. He writes in his article in [Driving Change](#) in *Principal Leadership*: "...I lacked the fundamental knowledge about how we could effectively integrate technology at our school. It wasn't until I became connected that I truly understood the error in my ways and views. My acceptance of social media gave me the knowledge, tools, and ideas I desperately needed to initiate change. For my school, connectedness was the original catalyst for change. It also enabled us to form numerous collaborative partnerships with an array of stakeholders who have assisted us along the way."<sup>13</sup>

### ***Communicating the Vision***

Not surprisingly, a large percentage of the work in making a case for technology adoption comes down to outreach. No where is this more important than with teachers. Many districts opt to create committees with a cross-section of teachers from across their schools to examine benefits of new technologies in meeting goals, to participate in the evaluation and selection process, and to help develop technology initiatives and implementation plans. This ensures teachers have a voice in the process and are more likely to get behind change.

The adoption process goes much more smoothly if everyone is as informed as possible. This is also true in the case of parents, who tend not to be well-versed about the education technology landscape and what is possible in the district.

**Be clear about expectations at each step of the way for stakeholders to understand that it's a long term process with established milestones to keep the effort moving forward. Hiccups are bound to happen, but open, two-way conversation will put faculty, students and parents at ease.**

Many schools and districts host parent technology workshops. Some take an informal flair, such as Kim Cofino's "[Parent Technology Coffee Mornings](#)" at the International School of Bangkok.<sup>14</sup> Others are more structured and take place at the district level. A key to generating interest is covering issues that affect parents at home. Weaving in education technology with social networking best practices for children produces a workshop that is more likely to be attended than a discussion on classroom laptops.

If such events do occur, the proceedings could be captured on video, shared on social channels, and uploaded to YouTube, as the [East Troy Community School District in Wisconsin has done](#). No matter how compelling the workshop topic, some parents will not be able to attend.

According to Joe Sanfelippo, superintendent of Fall Creek School District in Wisconsin, storytelling through social media enables school leaders and educators to better communicate the great things happening in their districts and model the benefit of technological changes. He [writes](#): "The opportunity to tell our story is one we really need to gravitate to with the current landscape of public education. We can't hope that the stories are told...we have to help others tell them. We can change the narrative by connecting with parents and community members through many channels."<sup>15</sup>

Regardless of the method, communication and engagement in technology change should be:

- Consistent: Just like consumer brands reinforce the same message repeatedly through various communications channels to solidify it the minds of its customers, so too should districts. The brand you are selling is your district technology plan and its benefits to teachers and students is the message.
- Ongoing: All stakeholders appreciate regular communication so they feel in the loop and part of the process, which cannot happen if the only time a group hears from the district is when they want something.
- Transparent: Be clear about expectations at each step of the way for stakeholders to understand that it's a long term process with established milestones to keep the effort moving forward. Hiccups are bound to happen, but open, two-way conversation will put faculty, students and parents at ease.

### ***Building a systematic plan for change***

Just like any other endeavor, having the right plan can make the difference between success and failure. Steven Anderson, author, speaker and former district technology director, writes, "Sometimes

a rush to make things happen can cause the entire planning process to come off the rails.” He stresses the importance for a holistic approach to [technology planning](#) and offers tips that include establishing measurable goals and implementing high-quality professional learning.<sup>16</sup> Founder of eduTecher, Adam Bellow’s [10 Tech Commandments](#) provides practical advice that should also be considered by district leaders and its teachers when developing a technology plan to ensure successful implementation.<sup>17</sup>

The underlying purpose of the following systematic plan is to ensure a methodical adoption process for any large technology rollout, particularly those involving the primary systems in a school district’s operations.

### *Budget*

Of course, a school district adoption cannot get very far without considering the budget. The fact is that money will be a determining factor in any purchase, large or small. All budgets, short-term and long-term, should be aligned with the vision of technology improving the instruction and efficiency of the district.

It’s especially important for small to midsize school districts, which often have fewer resources than their larger counterparts, to stipulate cost savings as a top criterion in technology decision-making. Streamlined cloud-based systems, easy-to-use tools that require little training, device-agnostic applications, OER, and technology buy-back programs can all be solutions to budgetary concerns.

The sustainability of major technology implementations should be evaluated and determined prior to any purchase. Tom Murray, director of state and district digital learning policy and advocacy for the Alliance for Excellent Education, [states](#): “Difficult budget-related decisions to ensure sustainability must be made on a yearly basis. Analyzing usage rates, effectiveness, and cost-benefit each year is a must, as is continuing to find ways to budget strategically while ensuring a higher level of quality. Technology is one key area that continues to get better and more cost effective each year, and districts that continue to use that to their advantage will have better sustainability rates long term.”<sup>18</sup>

CoSN’s [Smart IT](#) initiative offers resources to help guide you through the process of planning and managing a budget under fiscal constraints, with special focuses on: demonstrating a return on investment (ROI), saving money through sustainable practices, and connecting and aligning financial leadership.<sup>19</sup>

Additionally, when you have established an innovative district culture and maintained open, frequent communication with all stakeholders, you’ll have greater community support. Technology investments will be easier to justify and implement, and bonds will more likely to be passed.

- 1. Training Is Essential**
- 2. Money Isn’t What Makes Educational Technology Work**
- 3. Restricting Access Is Too Extreme**
- 4. Banning Tech Tools Is Detrimental**
- 5. Teach With An Understanding of Today**
- 6. Collaboration Is Key**
- 7. Schools Need Direction**
- 8. It’s Okay To Try**
- 9. Technology for Technology’s Sake Can Be Worse Than No Technology At All**
- 10. Understand buzz words and keep your finger on the pulse**

A critical consideration in any technology plan is how much training will users require moving to the new product. Retraining staff equates to time and money, which has an effect on the budget and the overall buy-in and success of the plan. Accounting for these needs early can save headaches later down the line.

Prioritizing purchases based on intuitive design and ease-of-use can pay great dividends. Complicated systems require more training. If a user can take the new purchase and run with it, your retraining needs have been drastically decreased.

Many districts opt for a train-the-trainer program to save costs. It also lessens the chance of a disconnect between an outside trainer and the ways the district operates. Faculty and staff are more likely to embrace technology supported by their peers than from an outside source. To close the loop, work with vendors to share feedback from the training programs. This ensures everyone is on the same page and can inform modifications or new features to the system.

However, any technology training program should be differentiated to teachers' individual needs and aligned with their goals in the classroom. The one-size-fits-all rarely works. Consider a mix of webinars, in-person workshops, ongoing support and networking.

Murray explains that personalized professional learning is one of [five key elements](#) to technology transformation. He writes: "For the digital conversion to ultimately be effective, the instructional paradigm must shift. The effectiveness of the conversion will be directly correlated to the shift in pedagogy...Districts currently undergoing a transformation in the area of professional learning are coming to the realization that the effectiveness of the one-size-fits-all, sit and get, hours-based model of professional learning, that for years has remained prevalent in our nation's schools for years, is minimal. Study after study verifies that this traditional approach to professional learning is highly ineffective; resulting in a tremendous waste of time and money; both of which are limited for schools to begin with. For professional learning to be effective, it must be both engaging and personal. Districts that are transforming classroom instruction as part of the digital conversion process are finding ways to personalize professional learning and make the learning engaging, interactive, and hands-on. Simply put, high quality professional learning mirrors a high performing classroom."<sup>20</sup>

Further, Sanfelippo [notes](#) that allowing time for adjustment to change and exploration of technology is critical. "As leaders, we

**Prioritizing purchases based on intuitive design and ease-of-use can pay great dividends. If a user can take the new purchase and run with it, your retraining needs have been drastically decreased.**

have an obligation to seek out and model opportunities that could help our students, staff and community. We need to provide resources and time for people to dive into the process and grow through ownership of learning. Self-guided exploration of learning is great for both students and staff. We don't need to have all the answers and often won't, but if we are seen as leading the learning, we will be in a better place."<sup>21</sup>

## CONCLUSION

The rapid rate of technological innovation is creating unprecedented opportunities for small to midsize districts to transform into highly efficient engines of 21st Century learning which truly leave no child behind. District leadership, employees, and operational processes must evolve to keep pace with the rate of innovation in the world beyond the K-12 walls.

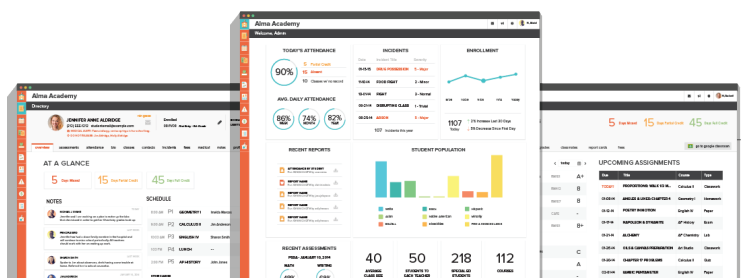
In a world that is inexorably being changed by technology, the barriers to keep up are rooted in human behavior such as attitudes, habits, or processes. Whether willingly or not, educators are tasked with preparing children to navigate a world of increasingly constant change, and modeling that behavior by example in a vibrant district culture fostering life long learning and adaptation is critical to the success of our K-12 educational institutions. An efficient, agile organization weaves in a culture of innovation with sound business practices, producing a state-of-the-art experience for its students that gets results.

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### About Alma

*Alma is K-12's first Holistic Student Engagement Platform. It combines a Student Information and Learning Management System in a single platform as intuitive and easy to use as a smart phone. With customers in 37 states and 21 countries, Alma is helping schools around the world save time and money while empowering educators with better data to improve teacher effectiveness and student outcomes.*

For more information, visit [www.GetAlma.com](http://www.GetAlma.com).



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