RECOMMENDATIONS FOR RURAL SCHOOLS SYSTEMS TAKING THE DIGITAL LEAP

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Since even before the turn of the century, educators, policymakers, and technologists have advocated for the promise of digital tools. With technology, the potential exists for students to experience new educational opportunities given unprecedented access to information, content, experts, and tools. Outside of school, as technology continues to shape the ways in which the world communicates, conducts business, and builds global connections, access to technology has become an essential component for both financial and societal inclusion. Therefore, digital transformation in education implies more than just the adoption of new technology. It refers to rethinking the systems and structures associated with education to take advantage of new affordances and opportunities. In turn, digital transformation also requires leadership and the creation of a culture of improvement.

Top 10 Recommendations

1. Start with the "Why"
2. Identify Changes to Curriculum and Instruction
3. Identify how Technology Can Support Curriculum and Instruction
4. Identify Professional Learning Needs
5. Leverage Community for Broad-Based Support
6. Leverage Small Size to Make Changes Holistically
7. Develop an Equity Strategy
8. Create a Financially Sustainable Technology Program
9. Plan for a Phased Rollout and Change Management
10. Implement a Formal Continual Improvement Process

All districts, regardless of geography, share many of the same challenges when it comes to digital transformation such as human capital, financial resources, devices, and broadband access. However, when it comes to realizing the potential for educational technology, rural districts possess some distinct advantages given their small size, close-knit community, and minimal bureaucracy. Given these benefits as well as the need to not only purchase and implement technology but also increase efficiency and access to resources, support instruction, and leverage data to inform decisions, this guide presents ten recommendations for rural districts taking the digital leap.

1. STARTING WITH THE "WHY"

Too often, conversations begin with the "what" when it comes to technology. Instead of beginning with discussions about devices and infrastructure, first articulate the greater purpose behind the initiative. Consider this vision like the North Star. Begin by involving stakeholders – administrators, teachers, parents, students, and community members – to define what learning could look like with technology, identify the intended improvements in students' educational experiences, and explain how technology supports that goal.

A strong "why" for implementing technology guides the purchasing of technology as well as future budgets, professional learning plans, and staffing decisions. Further, when everyone in the district understands the greater purpose behind the technology, then it becomes easier to get stakeholder buy-in and support. Learn more about starting with the why.

2. IDENTIFY CHANGES TO CURRICULUM AND INSTRUCTION

In his book, *Future Wise,* Harvard professor David Perkins raises the question: what's worth knowing? Before implementing any technology, look at how existing content and instructional practices align to the greater purpose. Consider what teachers, students, and families need to know about this new plan so that they can see how changes connect to desired outcomes. Think about how current instructional practices may or may not foster the desired student outcomes and create a picture of what ideal learning and teaching might look like in 3-5 years. Creating the action plan to achieve that ideal will also provide an opportunity to consider the requisite knowledge, skills, and instructional approaches.

3. IDENTIFY HOW TECHNOLOGY CAN SUPPORT CURRICULUM AND INSTRUCTION

Consider learning technology as an ecosystem that requires multiple components: network infrastructure, devices, apps and software, and specific features such as text-to-speech or dictation. Before deploying technology, consider what students and teachers need to be successful learners and then identify how digital tools might support that greater purpose. For example, think about how students might access digital resources, create multimedia products, conduct research, or submit and receive feedback on their work. As important as identifying the types of devices and applications best suited to meet students' needs, ensure that the infrastructure will support these activities.

School networks should be scalable and able to accommodate both the number of devices and how they will be used. Be sure to plan ahead, keeping in mind that even though bandwidth costs may be dropping, capacity requirements are increasing. Learn more about building a Smart Education Network. In addition, consider transitioning to cloud-based services that students can access from any device and at any time; Learn more about successfully making the transition more information to cloud computing.

4. IDENTIFY PROFESSIONAL LEARNING NEEDS

Digital transformation refers to more than just digitizing existing classroom practices or increasing efficiency with technology. Too often, districts provide teachers with "tools training" in a one-and-done workshop type setting. However, teachers require ongoing professional learning and support in order to adopt new practices that allow students to really take advantage of the opportunities that technology affords: connecting and communicating beyond the walls of the classroom, analyzing and synthesizing information from a variety of sources, and creating new knowledge and demonstrations of their understanding.

While specific technology training on cloud-based tools, learning management systems, and creation apps certainly is of benefit, teachers also need focused instruction on pedagogical strategies such as inquiry-based and project-based learning, student-centered learning, as well as digital and media literacy. Beyond workshops and online courses, they also require an opportunity to play and experiment with these new ideas as well as to collaborate with their colleagues. A successful digital transformation thus requires an increase in the pedagogical capacity of teachers so that they can truly achieve the desired greater purpose.

5. LEVERAGE SMALL SIZE TO MAKE CHANGES HOLISTICALLY

Rural districts often exist within close-knit communities that are highly invested in their local schools. District leaders can take advantage of this engagement by including parents, students, staff, business leaders, and community members in determining the greater purpose that also reinforces community values. Involving multiple stakeholders from the beginning allows them take ownership of the digital leap, builds shared understanding around the "why," and helps to stave off frustration and concerns that often arise with technology programs.

In addition to including stakeholders at the start of a program, rural districts should invite parents and community members to come to the school campus and participate in school events. Showcasing the positives and highlighting student success builds buy-in and encourages future investment in the program. Beyond direct outreach, also consider using social media to share what happens in the district and keep local press advised to update the community on your progress.

6. LEVERAGE SMALL SIZE TO MAKE CHANGES HOLISTICALLY

Unlike larger, decentralized districts, the relative size and nimbleness of rural districts can make it easier to imagine new opportunities for teaching and learning. Leaders can take advantage of existing relationships and trust to build communities dedicated to making changes in instruction. By building cross-department and interdisciplinary teams, teachers, staff, and administrators can collaborate to envision their ideal learning environment. Because digital transformation is about more than just technology, create opportunities to reimagine curriculum, instruction, assessments, and even the available course offerings.

7. DEVELOP AN EQUITY STRATEGY

Rural districts must address student equity both inside and outside of school. Within the district, it is important that students have equitable access to devices, broadband Internet, quality instruction, and meaningful learning opportunities. The CoSN Digital Equity Initiative provides school leaders with resources and a toolkit to help them address these challenges.

8. CREATE A FINANCIALLY SUSTAINABLE TECHNOLOGY PROGRAM

When districts rely on grants, bonds, or other one-time infusions of cash for technology, the program may not be sustainable. Instead, districts need to consider both initial capital expenses as well as the total cost of ownership for the program. A sustainable program plans for replacement cycles, infrastructure upgrades, and additional purchases as teachers begin looking for new ways to leverage applications and devices with their students.

District leaders need to look for sustainable sources of funding such as bonds or SPLOST (Special Purpose Local Option Sales Tax) money and should consider a shift to cloud-based infrastructure to move from large periodic expenditures for hardware to fixed monthly fees. Most important, districts need to look at the Value of Investment for new expenses to determine how they support student outcomes and the greater purpose of the technology program.

9. PLAN FOR A PHASED ROLLOUT AND CHANGE MANAGEMENT

Making a digital transformation is difficult and complicated. As such, leaders need to plan for bumps in the road and lessons learned. Before jumping into large initiatives, pilot technologies with a small number of teachers and students before rolling them our district-wide. Consider rolling out programs by grade, school, or even to cohorts of excited teachers in order to keep the workload manageable and build professional capacity.

Successful change management relies on both project and culture management. Oftentimes, leaders focus on project management tasks such as identifying goals, creating an implementation plan, and measuring progress. However, digital transformation is also about culture management - changing people's mindsets and beliefs. To transform teaching and learning with technology, all stakeholders need to understand the reason for change, teachers need to be empowered with the skills to implement that change, and leaders need to remove the barriers to change. This requires early and ongoing professional learning as well as a realistic, multi-year, phased approach to implementation that includes continual evaluation and iteration. Learn more about change management.

10. IMPLEMENT A FORMAL CONTINUAL IMPROVEMENT PROCESS

Digital transformation is not an end state, but an ongoing process of change, evolution, and improvement at every level of the district. Continuous improvement is most successful when undertaken at all levels: district, building, and classroom. Leaders should foster a culture of experimentation and encourage pilot projects and prototypes – even at a small level. Teachers then have the opportunity to share lessons learned – both positive and negative - with their peers to develop a culture of innovation.

To ensure that the district constantly evolves towards its greater purpose, change needs to be measured on an ongoing basis. Regardless of whether the metrics are qualitative or quantitative, they need to be shared and valued. Without an understanding of progress, districts cannot hope to transform learning with technology and successfully take the digital leap.

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