



Schools of the Future

Seven gears principals can leverage to enhance technology use.

By Thomas C. Murray

Over the past decade as many school budgets have remained stagnant, spending in educational technology has climbed to record levels, with no signs of slowing.

As schools around the country consider investing in technology as a way to improve student outcomes, particularly for those students deemed “at-risk,” it’s imperative that district leaders understand the methods research has shown actually work.

One of the top research reports on the topic, 2014’s *Using Technology to Support At-Risk Students’ Learning*, from the Alliance for Excellent Education and the Stanford Center for Opportunity Policy in Education, indicates that when implemented properly, technology can help boost engagement and produce significant gains in student achievement, particularly among those most at-risk. After analyzing more than 70 studies on the effective use of educational technology, Linda Darling-Hammond and her team at Stanford University were able to provide concrete examples of classroom environments in which technology has made a positive impact in learning among

at-risk students. The researchers identified three important components to the successful use of technology:

- Interactive learning;
- Using it to explore and create rather than to “drill and kill”; and
- The right blend of teachers and technology.

With more money being spent on educational technology than ever, it’s imperative that the money supports research-based, highly effective instructional pedagogy. Adaptive technology can facilitate “interactive learning” experiences and a more personal approach for students, amplifying high-quality instruction and boosting learning. As a result, school leaders find themselves buying the stuff, pushing it out to buildings and hoping the tools will have a positive impact. For example, nationwide school leaders are rushing to implement a 1:1 student-to-device ratio with little to no systemic implementation plan or long-term vision for a shift in instructional mindset.





So, how can schools systemically plan for the effective use of technology? Future Ready Schools® (FRS), led by the Alliance for Excellent Education, is a bold initiative to maximize personalized learning opportunities and help school districts—public, private, or charter—prepare students for success. A coalition of over 60 national and regional partner organizations, including NAESP and NASSP, support the free initiative. FRS helps districts build capacity to:

- 1 Lead with a vision for learning, not technology:** Principals who invest in technology find themselves excited about its use and often focus on that rather than on creating authentic learning experiences. Principals must have a vision for teaching and learning and how technology can accelerate those experiences, not vice versa.
- 2 Plan before purchasing:** Before technology is rolled out, principals must ensure that a systemic plan is in place, one that includes curricular impact, professional learning for those implementing it, policies related to privacy and protocol, and a long-term plan for support.
- 3 Maximize a “return on instruction” (ROI):** Principals who support teachers with the effective use of technology and empower them to create learning experiences in which technology can be used to explore, design, and create will see a maximized ROI.
- 4 Build trust with educators and support them through personalized learning opportunities:** Shifting the instructional pedagogy is no easy feat. Building the trust needed to do so and supporting teachers throughout the process are essential. Principals who model dynamic learning experiences help create that trust. A principal’s faculty meetings and in-service time should be a direct reflection of the type of learning he or she is looking for in the classroom.
- 5 Systemically develop a culture of innovation:** The principal’s ability to create a culture of innovation in school is crucial to effectively using technology to enhance learning. Principals must model the dynamic culture they want in order to empower staff to take risks.

This initiative continues at a critical time as districts embrace college- or career-readiness as the goal for all students and recognize the

potential of digital tools to help teachers personalize learning for each student. FRS provides districts with the resources and support needed to ensure that local technology and digital learning plans align with effective methods, are implemented by highly trained teachers and lead to personalized learning experiences for all students, particularly those from traditionally underserved communities. The backbone of the initiative is the Future Ready Framework, a comprehensive, research-based support system for school leaders. At its heart is personalized student learning, which can be achieved through the implementation of seven “gear” areas:



Curriculum, Instruction, and Assessment

In a Future Ready district, curriculum, instruction, and assessment are tightly aligned to engage students in 21st century, personalized, technology-enabled learning. Curricula and instruction are standards-aligned, research-based, and enriched through real-world problem-solving. Students and teachers have robust and adaptive tools to customize learning, teaching, and assessment, ensuring that they are student-centered and emphasize deep understanding of complex issues. Assessments are shifting online and are performance-based. Data and associated analysis serve as the building blocks for learning that is individualized to ensure all learners succeed.

Principals: What do you want teaching and learning to look like in your school in five years? How are you building on instructional practices to get there?



Personalized Professional Learning

In Future Ready Schools, technology and digital learning expand access to high-quality, ongoing, job-embedded opportunities for professional learning for education professionals. Nontraditional forms of learning, such as the use of social media and Edcamps, are valued, not dismissed. Such opportunities can lead to improvements in student success and create broader understanding of the skills that comprise success in a digital age.

Principals: How are you modeling the type of professional learning that you're looking for from your staff? How are you empowering staff to lead professional learning opportunities?



Use of Space and Time

Personalized learning requires changes in the way instructional time is used and the learning space is designed. Many schools are shifting to competency-based

learning, which focuses on meeting the needs, pace, interests, and preferences of the learner.

Principals: Do the learning spaces in your school match the type of pedagogy you're looking for? How can you make anytime, anywhere learning a reality?



Robust Infrastructure

The effective use of technology as part of a comprehensive educational strategy provides tools, resources, data, and support systems that increase teaching opportunities and promote

efficiency. High-quality, high-speed technology and infrastructure systems are essential to enabling anytime, anywhere learning.

Principals: What is your refresh plan for the devices in your school? How are you working to ensure ubiquitous connectivity and support?



Data and Privacy

Data privacy and security are foundational elements of personalized learning. A personalized, learner-centered environment uses technology to collect, ana-

lyze, and organize data to provide continuous cycles of feedback to students, teachers, and other education professionals to increase the depth, breadth, complexity, and efficiency of learning. The district ensures that sound data governance policies are enacted and enforced to ensure the privacy, safety and security of confidential data.

Principals: What policies and procedures do you have in place to ensure adherence to the Family Education Rights and Privacy Act, Children's Internet Protection Act, Children's Online Privacy Protection Act and relevant state laws?



Budget and Resources

The transition to digital learning will require strategic short- and long-term budgeting and use of resources. All budgets at the district and school levels should be aligned to the same vision, with consistent funding streams for recurring and nonrecurring costs.

Principals: As you purchase additional technology, what is your plan for updates and upkeep?




Community Partnerships

Community partnerships include formal and informal local and global community connections, collaborative projects, and relationships that advance school goals.

Digital communications, online communities, social media, and digital learning environments often serve as connectors for these partnerships.

Principals: How are you collaborating with the community and using digital tools to share your story?

The outside ring of the Future Ready Framework, and what holds all of the interworking gears together, is collaborative leadership. Simply put, *you*, as school leader, are part of the foundation of a Future Ready School. Critical to a successful transformation is your ability to create a culture of innovation that builds the capacity of students, teachers, administrators, parents, and community to work together to transform the learning experience.

Today's students, regardless of ZIP code, both need and deserve greater opportunity than the traditional education structure has provided in the past. This is an educational and economical issue that will have a lasting impact on generations to come. Time is of the essence. It is our obligation to prepare students for their future. We must create and lead schools that are relevant for the world our students live in, not the world our staff grew up in. We must do this—starting today—and you are part of the solution. 

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