21st Century Learning and Community Engagement

The impact of an innovative learning environment extends beyond the school walls.

By Todd Bushmaker AIA, LEED AP



The math lab at Berlin Middle School in Wisconsin was designed for flexible, collaborative-based mathematics instruction across multiple grade levels.

an you think of a career that isn't more connected to technology today than it was just a few years ago? Many jobs rely heavily on technology, some careers are dependent upon it, and yet others are greatly enhanced because of it.

According to Gallup's August 2015 Work and Education Poll, 37% of U.S. workers say they have telecommuted—up slightly from 30% last decade but four times greater than the 9% who telecommuted in 1995. Many members of today's workforce couldn't connect to their customers and colleagues without technology.

As our schools prepare students to be college and career ready, they increasingly turn to technology to support those goals. Technology ensures that students aren't confined to learning within the four walls of a traditional classroom . . . they can learn anywhere, anytime, and often in a way that best fits their learning styles.

The innovative classrooms that support 21st-century learning are flexible, versatile, tech-infused spaces that enable teachers to provide instruction in vibrant learning environments. In fact, it's no longer necessary for students to sit at their desks—and for some, it's detrimental to their learning process. Comfortable chairs, even bean bags, provide seating for students as they read or work on a tablet or laptop; this type of seating can easily be

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Booth seating is popular for collaborative assignments. Wedgeshaped desks can be separated for individual work or grouped for team activities. "Kinetic seating," such as backless chairs/stools that swivel, can help keep students who fidget focused on the task at hand.

Many expensive furniture and equipment options are on the market, but districts can create cost-effective, innovative learning environments through thoughtful analysis of how each space will be used.

For example, to remain relevant, libraries are shifting their focus away from paper books and moving toward elearning with multimedia resources. Fewer books and bookshelves means the walls can be freed up for natural lighting and writable surfaces students and teachers can use for brainstorming, outlining projects, and thoughtful collaboration.

Traditional science labs consist of fixed lab tables, often laid out in peninsulas and islands with a separate area for desks. Today's more flexible solution is to arrange all the casework along the walls, including stations with sinks and gas hookups. Adjustable-height tables can be wheeled to the stations for lab experiments or arranged in the center of the room for lectures, discussions, and other learning activities.

With flexible options, learning spaces can be configured and



An innovative learning environment has its rewards, such as improved student morale and the ability to attract and recruit high-quality teachers.

reconfigured easily to better support the needs of the students and the learning environment.

Considering the Community

Effective 21st-century schools recognize the importance of communication, collaboration, critical thinking, and creativity as they work with students and with the community. Schools must be attuned to what is going on in their communities and how they can help the community meet its needs and reach its goals.

In many communities, there is a chasm between the anticipated workforce needs and the knowledge and skill level of students. According to the Georgetown Center on Education and the Workforce, 65% of U.S. jobs will require some form of postsecondary education by 2020. At the current rate, we are expected to fall short by at least five million workers.

To fill this gap, are educators in your district preparing students to obtain four-year or associates degrees, or applicable trade certifications when they enter the workforce? Are districts developing new programs, facilities, and even events that will help ensure local, regional, and national workforce needs are

properly aligned with skills training and educational programs?

Success in Berlin

Educators and members of the business community must work together to ensure the needs of the area workforce are appropriately aligned with available educational programs and skills training. In the end, everyone wins.

For example, the Berlin Area School District in Berlin, Wisconsin, passed a referendum by a three-toone margin by working closely with the community. The referendum included expansion of the elementary school, renovations to the high school, and construction of a new middle school. Community support was integral to the 21st-century learning environment that made Berlin a good place for families to live.

A key focus in Berlin—in both the schools and the community—was the importance of STEM: science, technology, engineering and math. One aspect of STEM education is its contributions to helping develop a labor force that is well versed in these disciplines. While increased access to technology is a good start, some districts, like Berlin, are focused on niches, like providing students with



Science labs that promote 21st century learning are flexible spaces. often positioning casework against the walls, along with sinks and gas hook-ups. Tables can be moved to accommodate group discussions, lectures, and lab experiments.

the chance to create and interact with new technology. Learning environments such as these prepare students to not only survive, but thrive in the careers of tomorrow.

Berlin has already seen results from their new referendum-enabled STEM programs. Their middle school math lab, for example, allows flexible, collaborative-based mathematics instruction across multiple grade levels, and preliminary results after the first full semester show accelerated uptake of math concepts among the students in the program. As teachers continue to adjust and tweak their pedagogy to suit the initiatives, similar results are expected in the language lab as well.

Set the Example

A skilled workforce is only one way communities benefit from quality 21st-century learning. River Crest Elementary School in Wisconsin's Hudson School District became the first elementary school in the state. and the second public elementary school in the nation, to receive LEED Gold® level certification under the LEED for Schools rating system.

The 93,450-square-foot facility epitomizes educational effectiveness by providing ecofriendly behavior in

the entire community, while simultaneously serving as an inspiration of sustainability for students, family, and staff. Everyone benefits from the smaller environmental footprint; the healthier environment for teachers. students, and staff; lower construction costs; a 21st-century learning environment; and a greater connection to the community.

Students, staff, and community appreciate the facility but others have taken notice as well. Since the U.S. Green Building Council® (USGBC®) delivered its third-party validation of River Crest Elementary, it has been showcased by the media and has received several awards. Each time the project is highlighted, it's another opportunity to promote the process, features, benefits, and collaboration the schools of the future engender. These opportunities also offer myriad ways to promote the community, guide others to making their own sustainable choices, and shine a spotlight on opportunities for school-community partnerships.

Expect Benefits

With a progressive mindset and sustainable partnerships, results are evident.

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Here is a sampling of the benefits:

- Improved staff morale and increased staff retention.
- Ability to attract and recruit high-quality teachers and administrators.
- Improved student morale.
- Quicker student advancement.
- An elevated PR profile.
- Additional school revenue in light of positive open enrollment.
- Increased community pride.
- More sizable donations.

Many people who are considering relocating to a community check the quality of the schools before making the decision. The competency of the school district plays a pivotal role in the economic well-being of our communities.

When we provide a true 21st-century education that is aligned to the workforce needs of our community, the regional business environment and our communities succeed. Then, we attract more people, raising our enrollment . . . and the cycle continues. As John F. Kennedy aptly stated, "A rising tide lifts all boats."

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