

INNOVATIVE SCHOOL DISTRICTS ARE BALANCING THE BEST OF DIGITAL LEARNING WITH POWERFUL FACE-TO-FACE EXPERIENCES

Mount Pleasant Area and North Allegheny



During the long stretch of hybrid schooling that unfolded in COVID's wake, school districts had no choice but to get creative. They sought any means to keep on teaching and to help students keep on learning.

Remote learning required digital solutions, leading schools to embrace a wide array of apps, platforms, and software. Districts where students hadn't spent much time on digital devices began scrambling to get every child virtually connected.

Now, some education leaders are pausing to ask: Is our current use of digital tools and devices benefiting our students and staff in the best possible way? What might we do with these fast-evolving tools?

Innovative districts are tackling these questions by refining their use of digital resources, from sprawling learning management systems to the tiny free apps that teachers have incorporated into classroom learning.

School districts are also building on their experience to create powerful, tech-infused learning opportunities that give students of all ages a chance to build digital skills while grounding themselves in face-to-face learning.

The goal? To find the best mix of virtual tools and real-world experiences so that students will not only be technologically savvy and digitally fluent, but also fully comfortable learning and thriving in the real world.

It's a challenge that two districts —

North Allegheny and Mount Pleasant Area — have been meeting head-on.

THE BEST POSSIBLE DIGITAL EXPERIENCE FOR STUDENTS

Mount Pleasant Area and North Allegheny are both members of Future-Driven Schools, where they have the opportunity to brainstorm with other districts about innovative approaches to everything from supporting student mental health to redesigning school buildings — and also the vital work of thoughtfully combining technology and education.

Future-Driven Schools is a regional alliance of school districts working to prepare every learner for tomorrow. Together, these districts help teachers, administrators, and board members do what they do best: innovate and collaborate in ways that benefit their students and communities.

One hallmark of the alliance: While districts have ample opportunity to brainstorm together and share insights, each district approaches challenges and opportunities in its own distinctive way.

FUTURE-READY LEARNING THAT BRINGS THE PAST TO LIFE

At Mount Pleasant Area, one priority for school leaders has been to make technology a truly cross-disciplinary experience. For students in multiple grades, teachers are interweaving hands-on, non-digital learning into

a high-tech undertaking called The Portals Project.

The year-long project has exposed students to advanced techniques in 3D digital imaging, fusing that learning into a multidimensional community event.

Under the mentorship of Mark Dietrick, director of services for the Pittsburgh-based company Case Technologies and an expert in tech-enabled historic preservation, students gained hands-on experience in methods used for architectural restoration and digital reconstruction.

How did their hometown look in the past? The technology of today helped students explore the visual history of their own community through a digital-age lens.

Community involvement was crucial. To ensure that the project reflected Mount Pleasant's interests and heritage, residents were invited to vote on which historic structure would be recreated virtually. The final choice, the L.E. Smith Glass Factory, highlighted the town's rich legacy in glass production.

The Mount Pleasant Area Historical Society provided historical resources, strengthening the connection between students and their local heritage.

The project culminated in a community showcase where students from multiple grades presented their work. Fifth graders shared their experiences with the glass-blowing process and displayed glass mosaics they created. Eighth-grade students distributed

brochures detailing their research on the factory. And a documentary produced by AP English students at the high school featured interviews with former factory workers.

Then came the big reveal: the virtual reality experience, in which attendees donned headsets to explore the students' 3D re-creation of the factory.

It is, says Assistant Superintendent Beth Hutson, "part of the district's commitment to affording students opportunities to apply emerging technologies in meaningful, relevant ways."

As high-tech as this experience was, the human touch was equally important. To further immerse attendees in history, a punch recipe originating from the factory was served at the showcase in authentic L.E. Smith punch bowls and mugs. As a token of appreciation, each guest received a mug as a souvenir.

In powerful ways, the real world accompanied the virtual one to bring additional layers to the project.

Looking ahead, Hutson says, "the Portals Project continues to evolve." The district is continuing its collaboration with Case Technologies and Epic Games. But now, "rather than reconstructing historical structures, students will embark on an innovative journey to reimagine and transform the high school library into a modern learning space with areas for collaboration, quiet areas, comfortable seating, and a presentation center."

This highlights another facet of this project: As students build digital skills, collaborate and problem-solve together, and vividly learn about local history, students are also helping to guide the project as it unfolds.

"This evolution of the Portals Project underscores the importance of student voice and engagement in shaping a space that meets their educational and collaborative needs," Hutson says.

"There's a lot of folks that would say 'We should go all digital' or 'We should go all traditional.' The secret recipe is somewhere in the middle, and it's our job to try to figure it out."

DIGITAL ECOSYSTEM CLEANUP

At North Allegheny, educators have been busy with a thorough examination of the role that technology plays in learning, says Jim Cox, the district's director of technology and innovation.

They're working not only to balance face-to-face and digital learning, but also to bring in a new learning management system and take a thoughtful look at digital privacy and protection for students and staff.

North Allegheny is also weaving computational thinking lessons throughout their curriculum. Students at all grade levels are building the skills to approach problem-solving in a systematic way through data science.

"Instead of the students just answering a question and having it right or wrong, you want them to observe things. It's a bit like a lab-based scenario like we had when we went to school. But you're using technology, and everybody has a role in the experiment or the lesson," Cox says. "Maybe one person creates the experiment, one person runs it, and one person is the statistician. They collect data using technology, and then create visualizations of what they've recorded. Then they can write about it and reflect on whether their prediction was correct. If it wasn't, why not?"

As early as elementary school, Cox says, "they're building a skill set — learning how to collect and display data and work with it — that they can build on. It's getting them used to data science and even coding and those types of things that they can use when they get into middle school. And they can expand it even further with the coursework that we have at our high school."

With all of this in mind, the district has launched a "digital ecosystem cleanup" — a comprehensive review of its digital practices and whether they actively benefit students. Things that work are being retained and accentuated; things that don't are discarded.

The cleanup, Cox says, is about "making sure technology is used in a meaningful way, instead of kids just playing a math game. If they're using an app, is it really benefiting them, or is it just a replacement for something that you did on pencil and paper?"

Privacy is front and center, Cox says — particularly making sure that the apps students use aren't collecting data and using the students to refine targeted advertising. But questions of impact and relevance are also essential: ensuring that the technology brings something extra, rather than simply, "oh, we're learning, but it's on a screen," Cox says.

Central to it all is a theme similar to Mount Pleasant's, albeit expressed in a different way: the principle that real-world experiences should be used side by side with technology, each elevating the other.

"There's a secret recipe for great learning that I don't think anybody will ever quite find, that's a little bit traditional and a little bit digital," Cox says. "There's a lot of folks that would say 'We should go all digital' or 'We should go all traditional.' The secret recipe is somewhere in the middle, and it's our job to try to figure it out."

