Building better lessons

EDCompass newsletter

education.smarttech.com

Five teachers share how they use digital resources to enhance learning

By Heather Ellwood

Ask a group of educators how they inject interactivity into their lessons – you'll likely hear that, no matter the subject area, one key strategy is to look to digital resources. These tools can take students on learning journeys across the original 13 colonies, into the orchestra pit, beside a melting icicle, through the alphabet and the number line, and everywhere in between.

We talked to five teachers to get some insight into how they add interactivity using SMART content and resources. We found they are achieving some pretty amazing goals in their classrooms. Some use digital resources from the <u>Essentials for Educators</u> collection in SMART Notebook's Gallery to add interactivity and enrichment to their teaching. Others download SMART's <u>Lesson Activity Toolkit</u>, which provides customizable tools and templates to create engaging lessons.

No matter the source, these teachers all remark on how energizing it is to see their students' reactions to this enriching content. They mention how digital content makes learning collaborative and hands-on. How using learning objects to practice skills on the SMART Board[™] interactive whiteboard reinforces knowledge and improves learning outcomes. And all five teachers are particularly eager to share the results that emerge when digital learning objects and students are brought together.

First-grade language arts – Kimberly Rogers

When Kimberly Rogers of Devon Forest Elementary in Goose Creek, South Carolina, plans a language arts lesson for her first-grade students, her thoughts immediately turn to how she can get them to participate. In her classroom, new skills are introduced on the SMART Board interactive whiteboard, and the children are invited to engage in guided, hands-on interactive practice. Skills that have already been learned are reviewed in much the same way.

"Students need to be involved in their learning and engaged in the lesson being taught. When a child is actively involved in a lesson taught on an interactive whiteboard, he or she is personally experiencing the content, and, studies show, that child should remember at least 80 percent of the material," says Rogers.

Rogers builds this engagement into her lessons by using the tools found in what she calls her "best friend," the SMART Notebook Gallery. A visitor to her classroom would see her enhancing language arts lessons by using Lesson Activity Toolkit resources such as the Balloon Pop graphic, Random Letter Generator and Word Guess activity. She finds Essentials for Educators also to be an excellent resource for her language arts instruction – she regularly uses the Fridge Magnet tool for word practice and the Handwriting Paper for modeling letter formation.

"Literacy is socially created and socially embedded," says Rogers. "By using SMART Notebook activities, I am able to allow for the social and collaborative component of literacy, encouraging student interaction and discussion."

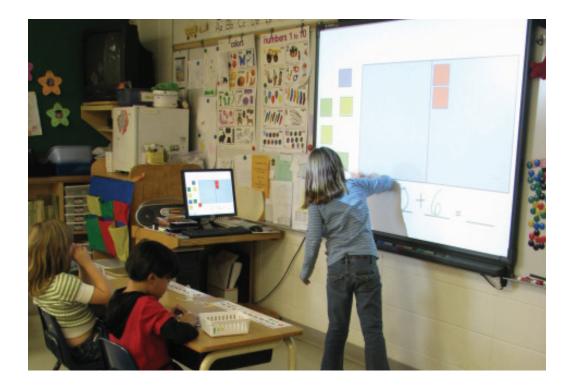


"When a child is actively involved in a lesson taught on an interactive whiteboard, he or she is personally experiencing the content, and, studies show, that child should remember at least 80 percent of the material."

Kimberly Rogers

First-grade teacher Devon Forest Elementary Goose Creek, South Carolina





First-grade math – Christine Ames Wolzl

Christine Ames Wolzl's 25 years of teaching experience have taught her that if she provides a safe and enriching environment where all her students actively participate in the learning process, each of them will have the opportunity to progress and gain confidence.

"Students learn best by doing. When I prepare for teaching, I am always reminded of the adage, 'If you give a man a fish, he will eat for a day. If you teach a man to fish, he can feed himself for a lifetime.' Any time I can provide activities for my students to be involved in their learning, I'm creating an environment where they will experience success," explains Wolzl, who teaches at Maryview School in Red Deer, Alberta.

Math manipulatives play a huge role in Wolzl's instruction. On the SMART Board interactive whiteboard, she replicates the physical manipulatives that all her students have in baskets on their desks. The digital manipulatives she uses include Dominoes, Ten Blocks, Number Tiles, Snap Cubes and Number Charts. After working through concepts at their desks, students take turns moving the digital manipulatives at the SMART Board to share and explain their learning. This structure, Wolzl insists, "creates reinforcement opportunities, becoming an integral and dimensional aspect of hands-on learning."

Using the SMART Board interactive whiteboard in conjunction with physical math manipulatives leads all students to be enthusiastically engaged. Wolzl asks, "How can you not learn when you are excited and eager to participate? The interactivity aspect of the SMART Board and the digital learning objects make it the ideal tool to assist and extend student learning."

First-grade science – Erica Bordonaro

Three years into her teaching career at Highland School in Cheshire, Connecticut, Erica Bordonaro has noticed that her first-grade students are captivated with the visual, audio and interactive components of the SMART Board interactive whiteboard – and she works diligently to take advantage of this.

"I teach with a student-centered approach. Students are encouraged to construct their own knowledge through hands-on activities, peer discussions and academic choices. SMART technology plays an important role in reaching the diverse needs of my class," Bordonaro says.

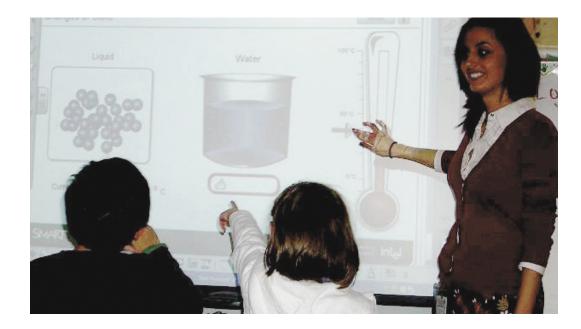


"How can you not learn when you are excited and eager to participate? The interactivity aspect of the SMART Board and the digital learning objects make it the ideal tool to assist and extend student learning."

Christine Ames Wolzl First-grade teacher Maryview School Red Deer, Alberta







While recently teaching a unit on the states of matter, she pulled in objects from the Gallery and had her students sort them according to their different properties. Then she brought up the Changes of State interactive simulation from Essentials for Educators. Students were able to instantly see how temperature affects states of matter. They loved coming up to the SMART Board interactive whiteboard and dragging the thermometer's arrow up and down, observing how water and its particles change.

When her students tackle a unit on plant life cycles, Bordonaro uses Gallery images of seeds and plants in her lessons. She also has students create their own learning objects by taking digital photos of plants they are growing in their classroom and adding them to a SMART Notebook file. Bordonaro has found this helps her students make more personal connections with the content. These images become part of an in-class collection of digital resources that can be revisited later in the year.

"I find that by using SMART digital resources, I allow my students to engage in meaningful and authentic tasks. They are encouraged to work as a community to think critically and constructively about the content. The exploration of digital learning resources sparks their curiosity and elicits so many great questions from my students, which takes their learning to higher levels," explains Bordonaro.

Eighth-grade social studies – Jim Wilke

Springfield Middle School's 2007 teacher of the year, Jim Wilke, believes that 21st-century teachers must be comfortable using technology in the classroom. However, he stresses that technology must be matched with strategies for effective teaching and learning. The Fort Mill, South Carolina, teacher keeps this goal in mind when building interactivity into his eighth-grade social studies lessons, creating "an atmosphere of positive interaction and student involvement."

He finds the learning resources in the Gallery and Essentials for Educators to be very helpful. One unit of the South Carolina eighth-grade social studies curriculum examines the original 13 colonies. Wilke accesses an outline map of the United States in Essentials for Educators and has his students come up to the SMART Board interactive whiteboard and drag the various states to their correct locations. As students move each colony, he has them give its name and add one significant fact about it.

Additionally, Wilke has discovered that the interactive tools in the Lesson Activity Toolkit are especially useful. He uses the Vortex activity to classify the differences between Upcountry and Lowcountry South Carolina. His students find vocabulary review to be more exciting when he has them use Keyword Match, Word Biz and multiple choice activities from the Toolkit.

"Using the SMART Board and its related software has dramatically changed the way I teach because my students are far more actively involved in learning," Wilke explains.





"I find that by using SMART digital resources, I allow my students to engage in meaningful and authentic tasks.... The exploration of digital learning resources sparks their curiosity and elicits so many great questions from my students, which takes their learning to higher levels."

Erica Bordonaro

First-grade teacher Highland School Cheshire, Connecticut



Middle school music education – Julie Ann Sawall

Nearly a decade into her music teaching career, Wisconsin teacher Julie Ann Sawall discovered an extra SMART Board interactive whiteboard available for her music classroom. She quickly took custody – a move that, she says, reinvigorated her teaching. Now, another half decade later, Sawall is a substitute teacher and SMART Certified Trainer who teaches other teachers how to best employ the SMART Board, not only in music class but across subject areas. She uses SMART Notebook software as the go-to place to keep all her resources, including the digital content and interactive activities she uses to impart the curriculum.

"Not only does SMART Notebook give me flexibility in terms of what resources I use, but I have no downtime because all of my resources are right there. A video clip, an Internet search, a learning activity – it's all there, ready to go. There is no opportunity for my lesson to break down or for the students to lose their engagement in what is happening," Sawall explains.

And when it comes to using learning objects and digital resources in music class, Sawall says there is no end to what can be done. At the simple end of the spectrum, she is continually pulling out blank music notepaper from the Gallery. At the other, Sawall uses the SMART Recorder to record mini lessons for the various sections of her choral group. This allows her, for example, to work with the altos on one side of the classroom while, on the other, the sopranos are gathered around the SMART Board interactive whiteboard working through a prerecorded activity designed specifically for them. She's even put music and lyrics into a SMART Notebook file and then animated a ball to bounce over the notes as the children sing along. No matter the task or the learning object that accompanies it, for Sawall, it's about engagement and enrichment.

"When my music students achieve a specific learning target, they've done that by manipulating various learning objects on the board. They view the lesson as playing a game or doing something fun, but they walk out the door at the end of the class and they've learned," Sawall says.

Using digital resources and interactive learning objects, these five teachers agree, make their classrooms more dynamic and energized – and much of that energy is centered on the hub, the SMART Board interactive whiteboard. As Christine Ames Wolzl says, "Integrating technology like the SMART Board ... in a safe and nurturing environment where the students can experiment and play with it is where education needs to be heading. We are providing the students not only with academic skills, but also with the skills for lifelong learning."



"When my music students achieve a specific learning target, they've done that by manipulating various learning objects on the board. They view the lesson as playing a game or doing something fun, but they walk out the door at the end of the class and they've learned."

Julie Ann Sawall Middle school teacher Appleton, Wisconsin

© 2008 SMART Technologies ULC. All rights reserved. EDCompass, SMART Board, smarttech, the SMART logo and all SMART taglines are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/ or other countries.



Building better lessons | PG 4