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Getting from "Huh?" to "Aha!"

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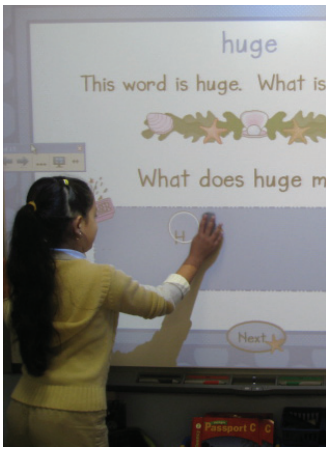
Lesson Transformation Has Rewards for Teachers and Students

By Lavonne Boutcher



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Sherry Kirkland

Instructional Development Teacher
Goodwin Elementary School
North Charleston, South Carolina

Most teachers have at least one – a lesson topic that poses a perennial challenge, either because students consider it boring or they find the concept too difficult to fully grasp. Sometimes it's a combination of both.

As an instructional development teacher and teaching coach at Goodwin Elementary School in North Charleston, South Carolina, Sherry Kirkland often hears from teachers who are struggling to make challenging topics more interesting and understandable. "They say, 'Oh my gosh, this is the toughest thing', or 'I dread when this comes up because most students don't get it, and I don't know what to do to get it across to them,'" explains Kirkland.

Kirkland trains teachers to use SMART products and to create lessons that maximize the interactive and visual capabilities of the SMART Board™ interactive whiteboard. She has been using the SMART Board interactive whiteboard herself for only about two years, but she remembers taking to it right away – in fact, she says she "fell in love." She also developed a fondness and aptitude for creating dynamic and visual lessons that she believes improve student learning.

One of the first topics Kirkland taught using her new SMART Board interactive whiteboard was a science unit on animal habitats, and she was determined to make it as interactive as possible. She had students create their own photo stories and videos, then linked them to her lesson in SMART Notebook™ collaborative learning software. She also created an interactive game and a quiz using the SMART Response™ interactive response system.

That year, she used her SMART Board interactive whiteboard every day in science class, and she says the results were dramatic. Although test scores across the district are usually lower in science than in other subjects, Kirkland says a substantial percentage of her students scored exemplary – the highest academic score possible. "I attribute it to the SMART Board because I really used it a lot in science," she says.

So what made the difference? Kirkland says it's all about getting students involved in learning by adding interactive components and activities to lessons, instead of having students sit in their seats passively receiving information. "The kids never know what's going to happen next," says Kirkland. "If it's just the same thing over and over or if they think they're going to have to listen to the teacher for 15 or 20 minutes, then they're going to zone out after 5."

Interactivity is a key part of Kirkland's lesson creation strategy – both for her own lessons and for those she writes for other teachers. For the past year, Kirkland has been creating math, science and social studies lessons for her school district's SMART curriculum writing project. The goal of the district-wide initiative is to give teachers with SMART Board interactive whiteboards easy access to comprehensive interactive lessons that cover key learning indicators for each subject and every grade from elementary to high school.

The project started with math lessons, and Kirkland says feedback from teachers has been great. They say students are paying better attention to lessons and even scoring higher on tests. "One teacher wrote that she would maybe have 70 percent of her kids pass their end-of-unit test. However, after the first unit of using the Everyday Math lessons, every single child passed their unit assessment," recalls Kirkland.

"We have tried to make the lessons as interactive as possible, where students have the opportunity to interact with the board in some way on almost every page." She does that by using interactive features like pull tabs, erase-to-reveal and animation in SMART Notebook software.

Greater participation leads to better understanding

Two of the most challenging lesson topics in Jennifer Keith's fifth-grade class at Lansdowne Elementary School in Charlotte, North Carolina, are geometry in math and weather in science. But she's been able to make those topics more interesting and easier to understand by transforming her old lessons and adding more opportunities for students to participate.

For example, she used to teach students about clouds by giving them worksheets to complete. Now she does it by getting students to play an interactive game of hot spots on the SMART Board interactive whiteboard. "Student interest is instant," explains Keith. "And because students are interested and engaged in instruction by using the SMART Board, comprehension is going to improve."

Keith also says the interactive features in SMART Notebook Math Tools software help her better explain some of the geometry concepts that used to pose problems for some students. "A good teacher knows how to present information in a way that is accessible to students," says Keith. "The SMART Board gives the teacher the tools to present that information in an engaging and interactive way."

Shayla Rexrode is a SMART education consultant who spends a lot of time talking with teachers about the value of transforming lesson content. "When visiting classrooms I have observed firsthand the impact interactive games and activities have on the learning environment," says Rexrode. "Students are more compelled to participate and feel a sense of accomplishment when they have completed an activity. And their ability to retain and remember information is also increased because they're actively participating in their own learning," she adds.

Rexrode usually starts by showing teachers how quickly they can transform a lesson using the tools and resources available in SMART Notebook software and the Lesson Activity Toolkit. "For instance, in the Lesson Activity Toolkit, we've provided them with Flash® tools, so they don't have to create the tools, all they have to do is take the content and apply it," says Rexrode. She says the title page templates available in the Lesson Activity Toolkit are another way teachers can get started quickly and easily.

"On the front end, it might take a little bit longer to create their lesson, but the long-term benefit is tremendous," she says. One of the benefits is that teachers can build on lessons year to year and enhance them with new features to make them even more compelling.

New lessons need a new teaching approach

William Lundy is an education technology specialist and the primary SMART trainer for the Hastings and Prince Edward District School Board in Belleville, Ontario. Lundy helps teachers use technology to make their lessons more interactive. He stresses that teachers can see greater benefits if they transform not only their lesson content but also the way they teach it.

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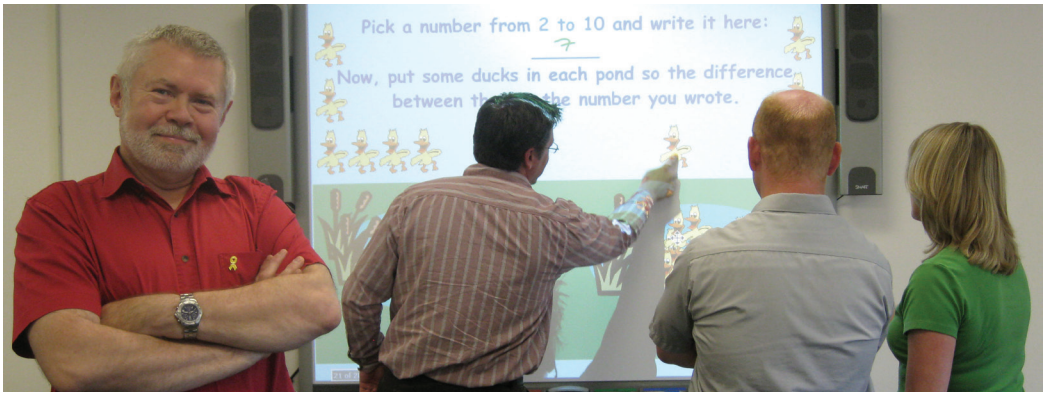
Jennifer Keith
Fifth-Grade Teacher
Lansdowne Elementary School
Charlotte, North Carolina



Lundy encourages teachers to start by asking what learning goal needs to be achieved. Then, he tells them to "just think differently and start looking at newer technologies and content resources you can bring in."

One of his favorite lesson transformations was one he did a few years ago with another teacher. "She approached me during a training session and said, 'Can you help me design a lesson so both my students and I can get through a difficult math topic with a smile?'"

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William Lundy

Education Technology Specialist
Hastings and Prince Edward District School Board
Belleville, Ontario, Canada

That difficult math topic turned out to be the Pythagorean theorem. Together, Lundy and the teacher set out to transform the static lesson, which included an overhead projector and chalkboard presentations followed by worksheets and text questions, into one that was visually appealing and interactive. "We thought all of the traditional approaches to this subject haven't worked, so let's just try something radically different," recalls Lundy.

They inserted YouTube™ videos showing different explanations of the theorem and added interesting visual elements – anything that would support multimodal learning. They wanted the lesson to have interactivity for kinesthetic learners, strong images and videos for visual learners and sound for auditory learners.

The lesson was split into two parts that ran over two periods. It started with teaching students the theorem and how to solve problems geometrically. After part one, students were put in groups and asked to describe the theorem in their own words. "Every group showed an acceptable understanding of the relationship," recalls Lundy. "There was an incredible feeling of relief that they all got it."

Lundy says the rest of the lesson worked equally well, with students eagerly working on problems and correctly solving them. In the end, he says the level of student engagement and comprehension went well beyond what they were when the teacher had used her previous approach.

For Lundy, this example shows the power of not only changing a lesson but also of thinking of different ways to teach it. "I find that teachers who first change their approach to a lesson, then build SMART Board learning objects to suit that lesson, report better levels of success than teachers who simply use the SMART Board to keep on doing what they've been doing for years."

Lesson ideas and resources abound online

Transforming lessons takes some work, and Lundy is often asked if the extra effort is worth it. He assures teachers that along with improving learning for students, creating interactive, digital lessons will save them time. He says because lessons are "upgradable and shareable," teachers don't have to start from scratch every time they need them. They can simply build on what they already have or use a lesson created by someone else. As a former teacher himself, Lundy enjoys creating lessons and regularly shares them by posting them on the SMART Exchange™ website and his own website, TeachSMARTer.ca.

When asked where she goes to find lesson ideas and creative inspiration, Sherry Kirkland replies, "I go everywhere." Among her favorite websites are Discovery Education, the SMART Exchange website and Scholastic. She says seeing what others have done sometimes gives her ideas about new ways to incorporate interactivity into the lessons she's writing for her district's SMART curriculum writing project. Those lessons are already having a positive impact on learning, and she hopes they will also become a source of inspiration for other teachers who want to create their own lessons but don't know where to start.