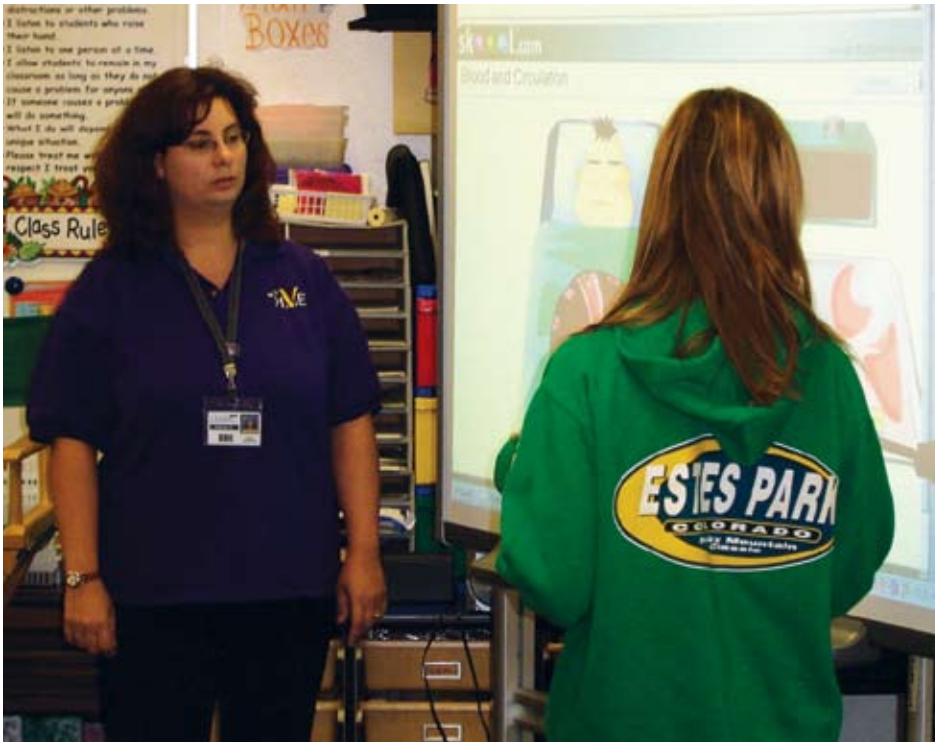


Case Study



Highland Village Elementary School, Lewisville Independent School District Flower Mound, Texas

SMART Board interactive whiteboard facilitates differentiated learning

In a perfect world, Corryann Thompson would be a facilitator of learning and her fifth-grade science students would be the teachers. Thompson, a science teacher at Highland Village Elementary School in Flower Mound, Texas, believes the more she can get her students to share, demonstrate and model what they've learned to their peers, the more advanced thinking skills they master. She's getting closer to realizing her goal by using the SMART Board™ interactive whiteboard to create a student-centered classroom.

"After we do experiments in science, each group explains its results up on the SMART Board, and they teach the lesson to the other students," explains Thompson. She adds, "It's a way to change roles, and it allows me the time and space to observe and really assess them. It lets me see if they've reached a higher level of thinking about a concept. The more I can get them to play that teacher role, the more I get them to do more critical thinking. In science, that is the biggest thing – getting them to think critically."

Her SMART Board interactive whiteboard, she says, fosters an environment that allows students to go beyond the surface and dig deeper into a concept. Her students are of varying abilities and some of them are on modified programs to assist them with their learning challenges. The SMART Board interactive whiteboard, asserts Thompson, not only fosters critical thinking in these students, but also cultivates differentiated learning.

Challenge

Differentiate instruction so that learners of all modalities fulfil their potential.

SMART solution

SMART Board interactive whiteboard and SMART's Notebook software.

Result

All learners are focused, standardized test scores are up and content is retained.

"I have to make sure that every learner is getting the same message, and using the SMART Board means my instruction is reaching all of the learners in my class. It helps me teach to the different modalities, especially the visual and the tactile, because my students come up to the board and move images around or draw on it," Thompson says.

Thompson, Highland Village Elementary School's 2006 teacher of the year, stresses that her SMART Board interactive whiteboard keeps her students visually stimulated and on task. If students are able to see and experience an idea she believes, they will learn a concept more completely. For example, when Thompson's students are individually analyzing materials using the class set of microscopes, she projects the image they are supposed to be studying, from her digital microscope onto the interactive whiteboard. Then her students can compare what they see in their microscope to the image on the interactive whiteboard. In this way, Thompson facilitates hands-on learning while using the SMART Board interactive whiteboard as a check point and focus for the entire class.

The best science teachers not only encourage hands-on learning, but they also make abstract concepts concrete. In Thompson's class, this concretization most often happens on the SMART Board interactive whiteboard. In a recent unit of study on the molecular structure of water, Thompson pulled video segments from the Gallery (an integral part of SMART's Notebook™ software) of ice melting and freezing, and projected these onto the interactive whiteboard. Her students were able to watch the process firsthand, replay it as many times as necessary, write notes with previously learned vocabulary and save the entire lesson for review at the unit's end.

Responsible for teaching science to the approximately 80 fifth-grade students in Highland Village, Thompson relies on the SMART Board interactive whiteboard and Notebook software, not only for its visual impact, but also to help organize her lessons.

She says, "Because Notebook is able to incorporate everything in one area, it's so easy to use. I grab images or video from the Gallery, use the short links to jump to a website, create concept maps and build worksheets. I pull all of those elements together and there it is, ready to utilize in a lesson. My lesson bank in Notebook is really a work in progress. Every day I add more to it."

Her lesson bank and the SMART Board interactive whiteboard appear to be paying dividends. Fifth-grade science students, through the Texas Assessment of Knowledge and Skills (TAKS), must take standardized tests as one way to measure their achievements, and the SMART Board interactive whiteboard is making a difference in how Highland Village students are scoring, Thompson states.

"I can really testify that I've seen a big improvement year over year. In 2006, after only four months using the SMART Board, I saw a four percent increase on our science scores," she explains. "This year, I feel we're already testing at higher levels, and the students are gaining a lot more knowledge than last year because of our use of the SMART Board. I have seen better rankings on the assessments than I have ever seen. I know ... my current students are grasping so much more of the information than my students in previous years."

With such excellent results and keen students, one can understand why Thompson can't imagine teaching fifth-grade science without her SMART Board interactive whiteboard. Thompson's perfect world of critical thinking and differentiated learning is being brought to fruition with the SMART Board interactive whiteboard and Notebook software. As she says, "Every teacher and student should have the privilege of using this technology."



Corryann Thompson conducts visually dynamic whole-class instruction on the human circulatory system.

"I have to make sure that every learner is getting the same message, and using the SMART Board means my instruction is reaching all of the learners in my class. It helps me teach to the different modalities, the auditory, the visual and even the tactile."

Corryann Thompson, fifth-grade science teacher, Highland Village Elementary School, Lewisville Independent School District, Flower Mound, Texas

About SMART

SMART Technologies Inc. is both the industry pioneer and a global market leader in user-friendly interactive whiteboards and other group collaboration tools. SMART products include the award-winning range of SMART Board interactive whiteboards, interactive response systems, pen displays and digital signage as well as wireless slates, conferencing applications and software. SMART products are designed to meet the requirements of today's education and corporate environments. Teachers can access and share the information they need to improve student learning outcomes and streamline lesson planning. The SMART Board interactive whiteboard is used to teach over 15 million students in more than 500,000 classrooms in more than 100 countries around the world. SMART's education customers include New York City Board of Education (U.S.), Oxford University (UK), Kobe City Board of Education (Japan), Barnier Public School (Australia), University of Ottawa (Canada), United World College (Singapore), Stephen-Hawking-Schule Neckargemuend (Germany), Florida School for the Deaf and the Blind (U.S.) and Harvard University (U.S.).

SMART is a private company founded in 1987. Employing more than 1,000 people, SMART is headquartered in Calgary, Alberta, Canada, with assembly facilities in Kanata, Ontario, and offices in Bonn, Tokyo, Shanghai, New York City, Chicago and Washington, DC. SMART has been issued and maintains a broad portfolio of patents with numerous U.S., Canadian and other patents pending. In 1992 SMART formed a strategic alliance with Intel® Corporation that resulted in joint product development and marketing efforts, and Intel's equity ownership in the company. SMART products are sold through dealers across North America and distributors worldwide. To learn more about SMART as a company and its products and programs, visit www.smarttech.com and www.education.smarttech.com.

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