

Interactive Whiteboard Research Shows

by Nancy Knowlton

Since 1997 SMART Technologies has supported a variety of interactive whiteboard research projects around the world. This nonintrusive, hands-off support has allowed teachers, postgraduate students and professors to investigate the benefits of using interactive whiteboards in the classroom. Typically SMART's support has consisted of loaning the product for the duration of the project.

With more than 10 years of research behind us, we now have a clear picture of the benefits to educators of using interactive whiteboards in the classroom. While we acknowledge the differences that exist in education systems around the world, we also have witnessed few, if any, differences in the research findings, which tend to fit neatly into the five following categories.



Improved student engagement

Researchers have reported that students are more engaged in classrooms with interactive whiteboards. Students themselves report that lessons are more interesting when they get to use an interactive whiteboard.

Additionally, the wow factor really doesn't wear off over time. Skeptics might postulate that students become blasé about its use, but that speculation is not borne out by the research.

A certain level of technology competence does need to be assumed. Teachers are not delivering old-style chalk-and-talk sessions from the front of the classroom. Professional development should include training on strategies for engaging the whole class with an interactive whiteboard.

Improved Motivation and Attendance

It's a simple fact – if students aren't in class, they are not engaged in formal learning. If they are acting up in class and not paying attention, they are not learning at all. Students must be intrinsically motivated to learn, and that is much more likely when the learning environment is fun and engaging.

Researchers have reported a higher level of attendance in classes where an interactive whiteboard is being used. In some locales, simply getting children into the classroom is a major accomplishment. Igniting the will to learn with an interactive whiteboard may provide the incentive to return.

Different Learning Styles

Some students learn by simply reading a book. Some learn by listening. Others draw a picture in their mind as

teachers talk. Many students today are visual learners, and they learn best when they can see visually engaging pictures, videos, images and diagrams. With an interactive whiteboard in the classroom, teachers can draw upon a variety of multimedia resources to help more students grasp a concept.

Improved Review and Retention

At the end of the day, the aim is to ensure that students learn – to both understand and remember what they have seen, heard and experienced. To do so, they must be encouraged to build their own knowledge. Students can concentrate during class and review the teacher's digital material later in more detail, in many cases replayed just as it unfolded during class.

Teacher productivity

Although teacher productivity has not been a specific focus of most of the research studies, comments from teachers about improved productivity are common. Most comments center around the positive effects of having reusable and easy-to-adapt lesson materials, which can save teachers enormous amounts of time from one year to the next.

Teacher productivity is an important consideration for schools adopting information and communication technology (ICT). As school jurisdictions move to broadly deploy ICT, teachers also need to benefit. The achievements and enthusiasm of their students are definite motivators, but if teachers can reduce their preparation time while increasing student engagement, the advantages of the technology cannot be ignored.

All of this research paints a positive picture of the impact that interactive whiteboards can have in 21st-century classrooms.

Action Research and Large Studies

For a summary of a collection of research papers, go to www.smarttech.com/whitepapers.

To access an important recent study from the UK go to http://partners.becta.org.uk/index.php?catcode=re_rp_02&rid=14422§ion=rh.

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