Are Interactive Whiteboards Worth the Investment?

Yes

Research suggests that students learn best when actively engaged in interactive assignments that match their individual learning styles and needs. That’s why it is critical that institutes of learning invest in advanced training of students through the use of interactive whiteboards (IWBs). IWBs have proven to be an important addition to today’s classrooms in three major ways. First, they allow teachers to introduce new topics, present questions, lecture, and illustrate ideas while differentiating instruction through the variety of types of classroom activities that IWBs facilitate. Second, they allow teachers to facilitate student-directed learning. When students become the masters of their own fate and buy in to their own need to learn, increased achievement naturally follows. Third, they encourage independent student learning by allowing students to interact with sensory data to construct their own understandings of...

No

Interactive whiteboards (IWBs) are an expensive, vendor-hyped, and only partially researched solution to a challenge that is better addressed with solid educational strategies. In my 35 years leading ed tech efforts in two large school districts, consulting with hundreds of districts and tech directors, and working with vendors on new product ideas and implementations, I have seen too much evidence to ignore. First, no study has controlled for the single most disruptive component of IWB implementation—the projection system itself. When my school district put projectors in all its secondary classrooms in 2000, our teachers reported a large increase in student engagement, accompanied by significant achievement gains.

Second, best instructional practices include student collaboration in “workgroup spaces.” My district’s first IWB pilot in 1997–98, supported by subsequent trials, showed that they resulted in a decrease in small-group...
the world and broaden their knowledge bases. Studies also show that the use of an IWB is a contributing factor to students’ preparation for STEM (science, technology, engineering, and mathematics) learning.

Funding technology tools such as IWBs is necessary to ensure our students’ academic and career success. In the long run, IWBs actually end up saving money because they help schools decrease the millions of dollars they spend on augmenting routine curriculum with supplemental learning materials. Buying additional materials depletes funding that could be used to purchase interactive technologies, such as IWBs, that teachers could use year round. IWBs can also interface with other technologies, such as document cameras and slate computers, to further aid in curriculum development.

IWBs have a proven track record of better preparing both teachers and students for lessons that encourage higher-order thinking. When schools use interactive equipment to enhance student learning, they also foster increased engagement and promotion of higher-order thinking skills and processes. Students gravitate toward using manipulative objects on the IWB to solve problem-based assignments, and teachers can use IWBs to walk students through such assignments and force them to probe and locate answers. They can also use the board’s unique interactive features to develop student-focused projects that delve into research, methodology, techniques, and procedure. And the board is a good tool for teaching students how to collaborate with verbal responses in a small-group setting.

In short, IWBs are money savers that strengthen both teacher pedagogy and student learning. When pitted against the costs of trying to prepare teachers for the 21st century using 19th-century teaching methods, the ROI of purchasing IWBs for today’s classrooms should be viewed as limitless.

—Jocelyn Y. Johnson is a 20-year veteran teacher with Atlanta Public Schools. Her core subject areas include visual arts and technology. Johnson also facilitates technology training for classroom teachers.

Schools have poured hundreds of millions of dollars into whiteboard technology, when less than 10% of that amount would have resulted in 98% of the same functionality.

The many articles published in recent years labeling IWBs a “must have” have been responsible for huge expenditures that only perpetuate a 19th-century classroom environment (even if it does use 21st-century tools). I urge you to distill the factors that make for an engaging classroom down to the basics: ongoing professional development to improve teacher quality, a projector for group viewing, network connectivity to share information, wireless keyboards/mice to allow student interaction, and annotation software to enhance content delivery. Expenditures beyond that are hard to justify in terms of return on investment.

—Jim Hirsch is associate superintendent for academic and technology services at the Plano (Texas) Independent School District and a past chair of the Consortium for School Networking.