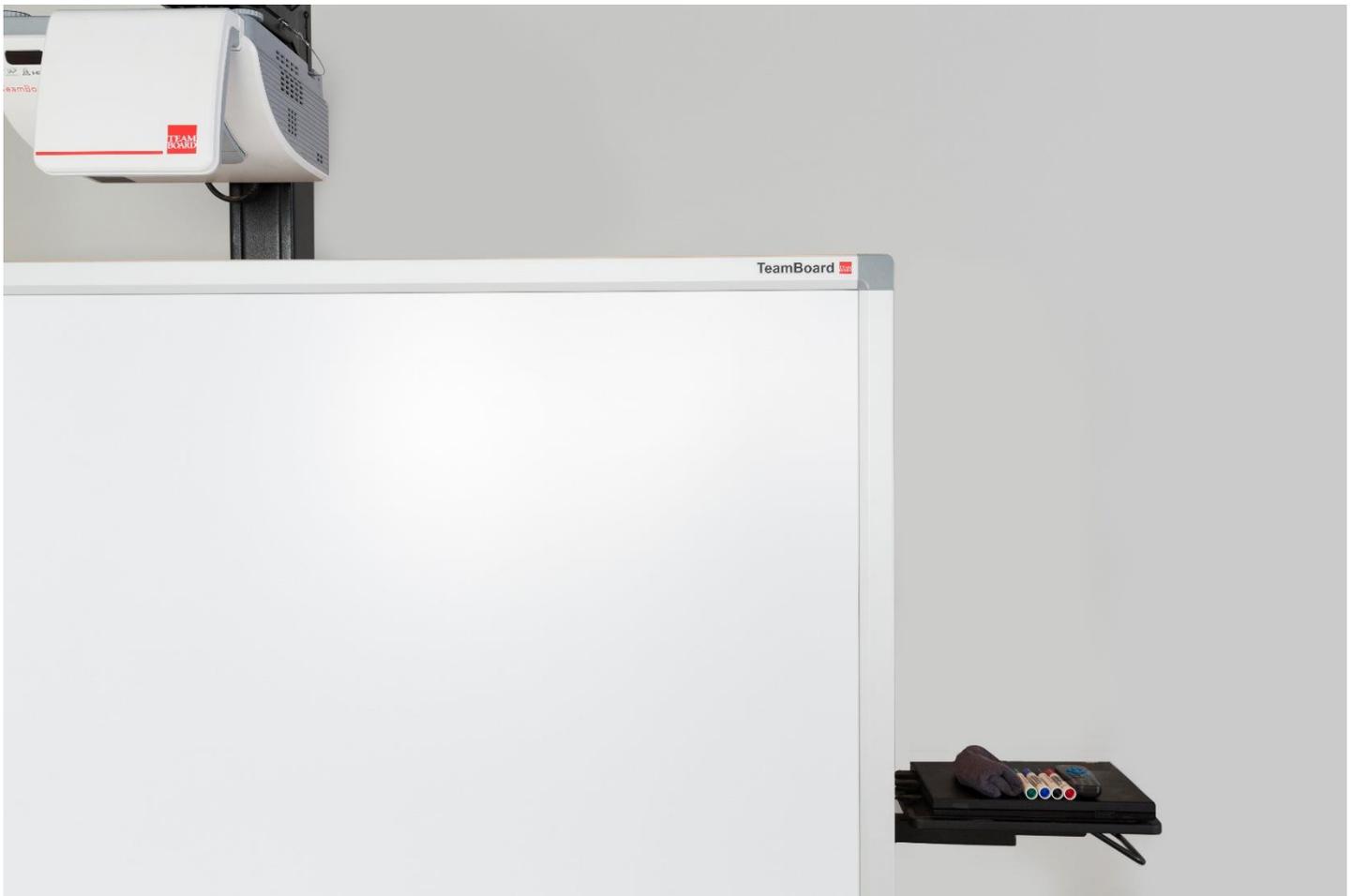


■ TeamBoard

Interactive Whiteboards in the Classroom Setting

*A look into the impact and value of interactive whiteboards
in the classroom setting*

By Jennifer Harper



Interactive Whiteboards in the Classroom Setting

As our world becomes increasingly more digital, we struggle to find the best fit of technology for our students. This paper is a tool providing current research combined with classroom experience to share the impact and value of an interactive whiteboard in the classroom.

With all the new technologies in our world, it is our role as educators to keep our students aware of the many possibilities. What does this mean? We cannot teach our students how to use each new device or keep current with each new program. However, the interactive whiteboard provides our students with a vast area to learn and explore many of these technologies while also acting as an independent space for learning, sharing and collaborating. We can foster their creativity, independence and problem solving. The interactive whiteboard opens amazing possibilities to us and our students.

An Interactive T4 Advantage

MultiTouch	Up to 4 simultaneous touches: <ul style="list-style-type: none"> ✓ Faster response ✓ Noiseless, high resolution and precise ✓ Outperforms Windows 8 expectations 	Students can: <ul style="list-style-type: none"> ✓ Work at the same speed as they think ✓ Access, move and share ideas efficiently and effectively ✓ Develop fine and gross motor skills
MultForce	Registers multiple levels of touch pressure	Students can: <ul style="list-style-type: none"> ✓ Access a variety of information using the pressure of their touch ✓ Paint or draw, changing the thickness of lines using touch pressure
MultUser	Supports up to 4 users at a time without sacrificing function or performance <ul style="list-style-type: none"> ✓ T4 tracks each individual user, reducing traditional problems with multiusers 	Students can: <ul style="list-style-type: none"> ✓ Collaborate in group work, yet have full empowerment of individual response ✓ Records individual ideas at the same time as peers'
Intuitive Touch Response	Recognizes the many natural touches: <ul style="list-style-type: none"> ✓ Light touches, fingers, gloved, paintbrushes, objects and more 	Students will: <ul style="list-style-type: none"> ✓ Engage and empower their learning with the natural sensory devices ✓ Confidently create, collaborate and explore

Creating an Interactive Classroom

The interactive whiteboard extends far beyond a fancy PowerPoint or movie screen. In our classrooms it can be: a place to create, develop and expand ideas, a tool to collaborate locally and globally, a tool to access a wide variety of textual resources, a place to record and assess for, as and of learning, a portfolio of learning, a device to provide feedback for learners and a safe space to make mistakes for further learning.

Using a tablet, personal handheld device or personal computer can also expand the classroom beyond the walls as well. However, the interactive whiteboard additionally creates a highly engaging and large visual space. It is a strong focal point creating a communal learning environment for easy modeling, collaboration and whole class learning. Teachers can create media rich lessons independent of the classroom environment and then share this experience with their students.

Feature	Tablets & PC	Interactive Whiteboard
Individual tasks: such as skill development, creation and recording ideas	✓	✓
Collaborative tasks: such as sharing information individually, in small groups, locally and globally	✓	✓
Assessment for, as and of learning	✓	✓
Model lessons and direct whole class teaching		✓
Individual, small group and whole class collaborating and sharing		✓
Streamlined lessons prepared with media rich experiences for students creating a public learning space		✓
Ability to engage more than one user and work at their individual needs level		✓

“THE INTERACTIVE WHITEBOARD PROVIDES OUR STUDENTS WITH A VAST AREA TO LEARN AND EXPLORE MANY... TECHNOLOGIES WHILE ALSO ACTING AS AN INDEPENDENT SPACE FOR LEARNING, SHARING AND COLLABORATING.”



Recent studies have compared tasks given to groups of students providing them with different tools -tablets, interactive whiteboards and personal computers. With more classrooms heading towards 1:1 digital learning environments, the interactive whiteboard allows teachers to tie together the individual learning that happens on the various personal devices and bring it into a communal learning space (Lui & Kao 2007). It is the tool that links the 1:1 learning and provides the space to learn directly, collaboratively and independently.

“STUDIES HAVE SHOWN THAT STUDENTS FIND THE USE OF AN INTERACTIVE WHITEBOARD MOTIVATING...USING THE INTERACTIVE WHITEBOARD CAN INCREASE STUDENT ACHIEVEMENT ...[AND] CAN MEET THE NEEDS OF VARIOUS LEARNING STYLES.”

Research has proven interactive whiteboards provide the following classroom advantages:

#1 Increasing Student Motivation

The dynamic of the classroom changes when a large interactive screen is placed in front of students. It is motivating for them to experience media rich images, alterable text, and immediate feedback all accessible all by touch. They want to use it. They want to interact with it. Combining the multimedia and multisensory aspects engages our students. It makes learning fun.

Studies have shown that students find the use of an interactive whiteboard motivating:

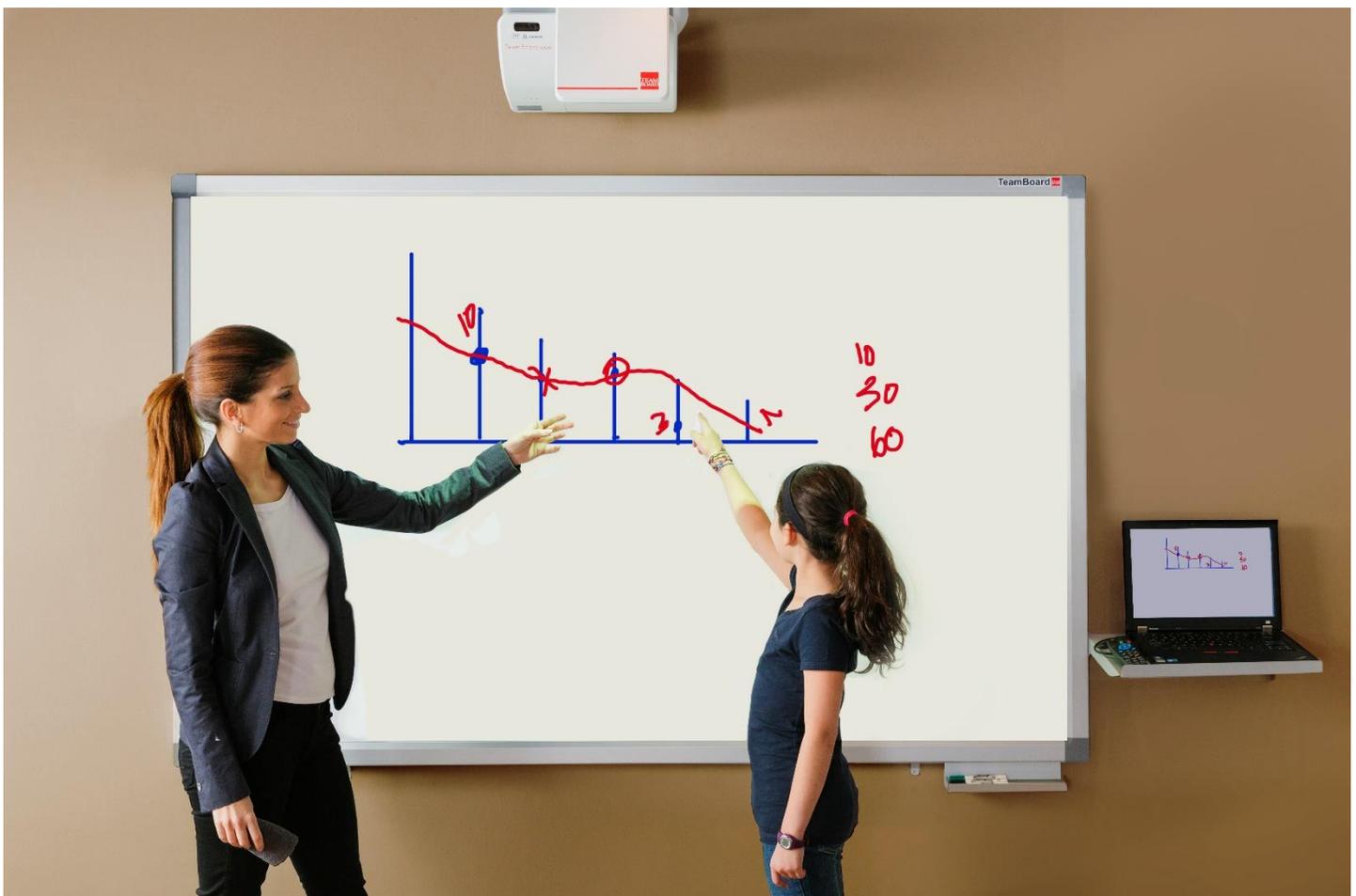
- ✓ Lessons are more enjoyable and interesting improving students' attention span and behavior (Beeland 2002)
- ✓ Students report that lessons are faster paced, more fun and exciting (Levy 2002)
- ✓ Boys are more engaged in literacy lessons (Birch 2002)
- ✓ Teachers are more motivated by the boards impacting the students' perception (Cogill 2002)

#2 Improved Student Performance

As educators, we know that when our students are engaged their performance improves. The interactive whiteboard also offers multimedia that can bring the outside world and powerful images and sounds into the classroom. This helps our students grasp abstract or larger concepts. We can create and link to many games and lessons that offer immediate feedback for our learners. Ultimately, the interactive whiteboard is a safe space to learn and make mistakes, improving our students' performance.

Studies have shown that using the interactive whiteboard can increase student achievement:

- ✓ Greater engagement and participation levels among students through the ability to interact with the materials on the board (Becta 2003)
- ✓ The interactive whiteboard presents information in sharp colours. Its ability to annotate, conceal, manipulate, move and zoom in on or focus on images including text, is also said to enhance the learning process (Damcott et al, 2000; Bell 2002; Levy 2002)
- ✓ Students recall the images in their minds even after the lesson (Burden 2002) making learning more memorable
- ✓ There is a wider variety of information so that ideas and concepts become more tangible and students find the concepts easier to grasp (Levy 2002)



#3 Adapting for Learning Styles

Our classrooms are filled with students who have diverse learning needs. By supporting our lessons with media, we appeal to a broader range of students. Through the use of the multimodal interactive whiteboard, our students constantly have opportunities to use linguistic, visual, kinesthetic and auditory modes to make meaning. The large display leads to a collective or shared experience appealing to our interpersonal learners. T4s multiuser feature also appeals to our intra-personal users as they can create or interact at their pace and ability without the interference of others. They are feeling, thinking, reflecting and are actively doing to understand the concepts they are exploring.

Studies have shown that using the interactive whiteboard can meet the needs of various learning styles:

- ✓ Interactive whiteboards host a range of learning styles so that teachers can call upon whichever type of resource is suitable for a particular student's need (Glover & Miller 2001; Billard 2002; Bell 2002)



About the Author



TeamBoard is proud to have Jennifer Harper on the team as Education Advisor. Jennifer has taught in various classrooms from Grade 1 to Grade 7 in both public and private schools. She is passionate about teaching and finding the learning spark to ignite each student's curiosity. She is currently energized by eager learners, teaching at Upper Canada College and chasing after her three young sons. With a degree in English and Theatre and a Masters in Curriculum Studies, Jennifer is constantly experimenting with a variety of strategies to engage and empower her students. She is the author of Literacy Smarts, focusing on using the interactive whiteboard in the classroom, as well as Student Driven Learning. Jennifer's preferred interactive whiteboard is currently the TeamBoard T481 with TeamBoard ION interaction software.

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