

# Interactive Whiteboards in the modern classroom



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**W**hile we may have a romantic view that education remains the same today as when we attended school, we have to face the reality that children, in fact, have changed. Much of that change has to do with the pervasiveness of information and technology.

Today's learners are often described as curious, independent, self-reliant, assertive discovery learners and extensive users of technology. Fiercely pro-active when it comes to technology, students adapt quickly and accept change, possibly requiring more of a guiding role from teachers in the development of a new pedagogy. Gone are the chalk and dusters and welcomed are the Interactive Whiteboards.

While a part of the class may involve the teacher demonstrating, explaining or lecturing, important segments of classroom time must address the changing nature of students and their expectations.

### Engaging Interactive Whiteboard Strategies

The transition from being the centre of attention to being 'a guide on the side', while challenging from some, can be a liberating experience for both teachers and children. Making it work can be as easy as the following:

- Have pupils take charge of getting the interactive whiteboard, projector and computer up and running each morning and shut down each evening. It will save teachers time and involve the children.
- Let the pupils navigate websites from the interactive whiteboard. Like driving a car, they will remember more when they are in control.
- Backseat driving is allowed. When other pupils are engaged enough to help, they are switched on to learning.
- Include some students in training on the whiteboard software to allow them to support the teacher.
- Incorporate as many opportunities as possible for students to show what they know through classroom presentations.

The interactive whiteboard can be the focal point for a digital learning experience in the classroom. The interactive whiteboard is undoubtedly fun, but more importantly, it can meet the needs of teachers and pupils for an engaging experience for all.

### Teaching Methods

Technology should never be implemented purely for the sake of providing technology - its purpose is to enhance best-practices and give teachers and students the ability to complete tasks and activities that would have been more difficult without it. In keeping with this philosophy, the main benefits a SMART Board interactive

whiteboard can provide a teacher include the following:

- Provide whole-class learning from the front of the classroom. As more and more schools embrace constructivist learning, teachers increasingly provide a mix of instruction-led and one-on-one teaching. The use of interactive whiteboards allows teachers to instruct entire classes from an optimal position at the front of their classrooms.
- Integrate the latest technology with time-tested teaching methods. The use of interactive whiteboards maximizes instruction-lead learning by allowing teachers to combine traditional whole-class teaching from the front of the room with more innovative technology based resources. The sheer size of an interactive whiteboard screen allows teachers to utilize computer-based resources with the entire class, instead of being confined to a handful of students clustered around a small screen (or without the additional investment of a PC for all students).
- Remain physically and visually connected to the lesson material. While many teachers use projectors and screens to share computer-based material with the class, an interactive whiteboard takes this one step further, by allowing students to observe teachers as they interact directly with the material. This emphasizes the connection between the material and the

technology, and helps students both assimilate and retain information.

### Student Outcomes

Some students are intrinsically motivated to learn because they are driven to understand through self-reflection and participation in learning activities, benefiting self-esteem. Others require extrinsic motivation such as enticements, rewards or educator-defined goals. Interactive whiteboards appeal to both types of students:

- Extrinsically motivated students volunteer to demonstrate knowledge on interactive whiteboards in front of their peers as a means of showcasing individual achievement.
- Intrinsically motivated students are enticed to by "WOW" factor of the technology and can become motivated learners as a result of the enjoyment they experience from using the product.

Interactive whiteboards are captivating enough to successfully compete with a student's favorite consumer technologies, focusing students on task, garnering enthusiasm and providing additional motivation to attend class. More than a diverting gadget or game, interactive whiteboards successfully promote the computer skills students require for success in the twenty-first century.

With just a few simple steps, you can maximize the effectiveness of your classroom's interactive whiteboard. The three major considerations are equipment set up, visibility and operation.

### Equipment set up

- Ensure there is sufficient space beside and in front of front-projection interactive whiteboards to enable easy access to the screen and to prevent the projector beam from being blocked.
- Position the interactive whiteboard at a height so that students can reach the screen easily. One option to consider is a height-adjustable model that allows you to quickly lower or raise the screen as required.
- Use a ceiling-mounted projector if possible to reduce the chance of the projector being moved or bumped

### Visibility

- Use a font type and size that can be seen from the back of your classroom - check legibility from the furthest position

before the lesson starts

- Improve legibility by using a color other than white as your screen background. Pale pastel colors work best.
- Use full-screen mode whenever possible
- Make the most of the visual capabilities of the interactive whiteboard by adding colours and images to enrich your lessons.

### General operating tips

- Bookmark any websites you plan on using for quick access
- Add notes and highlight information over any page on your computer screen to

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emphasize key information and focus attention

- Put chunks of text on their own pages instead of scrolling through long slides. This allows you to use large font sizes and leaves room for notes.
- Place objects that younger or less mobile students will use in the lower two-thirds of the page for easy access
- Label and save your lessons files to your network or hard drive to create accurate notes for review material or absent students.

### Reaching Out: Learning Styles and Special Needs

Every day, educators strive to develop strategies and tools that will reach students with unique or diverse learning needs. Many of these learning styles - even the requirements of visual, hearing-impaired and other special-needs students - can be addressed when lesson delivery and learning activities incorporate use of an interactive whiteboard:

- Visual learners benefit from note taking, diagramming and manipulating objects or symbols. As the interactive whiteboard is easy to use, it enables students of all ages to see their own writing and objects of their own creation when they use the product.
- Kinesthetic or tactile learners, typically difficulty to engage in traditional classroom activities that are usually more visual or auditory in nature, are able to reinforce learning through exercises involving touch,

movement and space on an interactive whiteboard

- Deaf and hearing-impaired learners rely primarily on visual learning, and the interactive whiteboard facilities both the presentation of visual material and the use of sign language simultaneously in front of students
- Visually impaired students with some vision ability can manipulate objects and use text on an interactive whiteboards' large surface and participate in computer-based learning in ways that would not be possible on a smaller computer screen
- Other special needs students with

individual learning requirements ranging from physical ability needs to behavioral issues such as Attention Deficit Disorder (ADD) also find the large interactive surface valuable, its large size and touch sensitivity facilities ICT learning beyond the standard keyboard and mouse type computer interaction and its appeal can be used to promote good behavior.

The interactive whiteboard has been incorporated into learning environments for over a decade, and an increasing flow of research into its impact is emerging from the United States, the United Kingdom and Australia. From the available body of research, several themes and patterns are evident, including the positive effect interactive whiteboards have on student engagement, motivation, the ability to encompass a variety of learning styles (including special-needs students) and the ability to enhance student retention and review processes. Observations also indicate that designing lessons around interactive whiteboards can help educators streamline their preparations and be more efficient in their ICT integration.

*For further information or pricing on Interactive Whiteboard solutions please contact A1 Computing Solutions either via e-mail: [sales@a1computing.com](mailto:sales@a1computing.com) or phone (08) 8272 3027 or visit our website at [www.a1computing.com.au](http://www.a1computing.com.au)*



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