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# Interactive Whiteboard as a Teaching Aid

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## Abstract

*The teaching and learning process based on resources is a topic that has always been emphasized by educators all over the world. The changes in education aids are influenced by the changes in technology. Nowadays, educators not only rely on white board and markers as a medium for teaching and learning process, but also on Overhead Projector (OHP), computers, document cameras and the latest, the Interactive Whiteboards. The Interactive Whiteboard is used all over the world as an important tool for the teaching and learning process. An interactive whiteboard is used for teaching and learning process in educational activities and also for presentations and discussions in business. There are a lot of electronic tools provided by the Interactive Whiteboards such as digital ink, digital eraser and touch screen. These features give a lot of benefits to the educators and learners such as increase the learners' interest, understanding and motivation level.*

**Keywords:** *Interactive Whiteboard, learning, teaching*

## Introduction

The teaching and learning process can be assisted by a lot of equipment. In this era people use overhead projectors, computers, document cameras and, the latest, the Interactive Whiteboards as teaching aids. Wikipedia (2009) mentions that the Interactive Whiteboards are used in many schools abroad as replacements for the traditional whiteboards or flipcharts or video/media such as the DVD player and TV combination. The first Interactive Whiteboard, called SMART Board, was introduced to the Malaysian market in 1987 by a company from Canada (Nazrul Azim, 2009). The Interactive Whiteboard is already being used widely in countries such as China, Singapore, Korea, Australia and Canada (Nazrul Azim, 2009).

## Literature Review

*"An interactive whiteboard is a large interactive display that is connected to a computer and projector. A projector projects the computer's desktop onto the board's surface, where users control the computer using a pen, finger or other device" (Wikipedia, 2009).*

Abroad, there has been a lot of research done that focus on the impact of using the Interactive Whiteboard in the teaching and learning process. As summarized by Becta based on his research done in 2007,

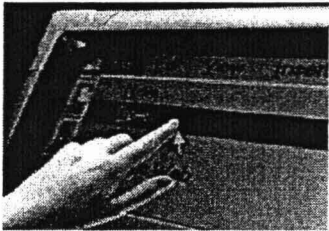
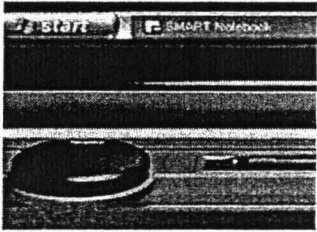
*“This study clearly shows the benefits that can be gained from effective use of an Interactive Whiteboard. We know that technology has the capability of bringing lessons to life and making that much more enjoyable for the learners. Not only the lessons become more fun, the study clearly shows the very real benefits in terms of learner attainment and engaging pupils in lessons” (Wikipedia, 2009).*

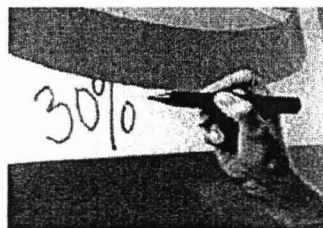
Another body that actively research on education is The Office for Standards in Education that stated “the Interactive Whiteboard and associated ‘Activote’ devices were used very effective to check the group’s understanding, enabling the teacher to correct any misconceptions before they became problematic” (The Office for Standards in Education, 2004a, p9). The statement is based on their report for Secondary Mathematics that used the Interactive Whiteboard as a teaching aid. Another statement that shows the positive impact of using the interactive whiteboard is “Where Interactive Whiteboards are used, they often enhance the quality of teaching and learning” (The Office for Standards in Education, 2004b, p.4).

**Features of the Interactive Whiteboard**

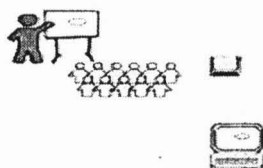
Nowadays, there are many types of Interactive Whiteboards that have been produced. The features of the interactive whiteboards vary from manufacturer to manufacturer. In general there are certain features that are common for all types of Interactive Whiteboards. Table 1 shows the common features of the Interactive Whiteboard (SMART Technologies, 2006).

Table 1: Common Features of the Interactive Whiteboard

| Features                                                                                                | Explanation                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Touch Screen</p>  | User can use finger as pointer. This can replace the mouse usage.                                                                                                       |
| <p>Pen Tray</p>      | User can choose to use either the pen or eraser, which the sensor detects. User also can use the keyboard display on the screen when they enable the keyboard function. |

*Digital Ink*

User can use either special pen or finger to write on the screen.

*Save Function*

User can directly save all the data written or draft on the screen into the computer

There is a variety of accessories available for the Interactive Whiteboard. Table 2 shows the accessories and description of the accessories for the Interactive Whiteboard (Wikipedia, 2009).

Table 2: Accessories for the Interactive Whiteboard

| Accessory                       | Description                                                                                         |
|---------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Mobile Stand</b>             | Allows the interactive whiteboard to be moved. Sometimes it is height adjustable.                   |
| <b>Slate or Tablet</b>          | Allows student control of the whiteboard away from the whiteboard.                                  |
| <b>Personal Response System</b> | Allows student to answer test questions posted in the whiteboard or take part in polls and surveys. |
| <b>Wireless Unit</b>            | Allows the interactive whiteboard to operate without wires to the computer(example: Bluetooth)      |
| <b>Remote Control</b>           | Allows the presenter to control the board from different parts of the room                          |

## **Benefits of using the Interactive Whiteboard as a Teaching Aid**

There are a lot of benefits that can be gained by students and as well as educators who use the Interactive Whiteboard as a teaching aid.

### *Easy to understand*

The Office for Standards in Education (2004b) stated that the Interactive Whiteboard provides an educator with colorful texts, illustrations, animations and also high-quality graphics in their teaching environment. With all the facilities provided by the Interactive Whiteboard, this technology is bound to help students understand and acquire new knowledge quickly.

### *Easy to review previous lessons*

The Interactive Whiteboard has features that enable it to save data into a hard disk, cd or pen-drive and to print directly into a printer. So, by using these features, it is easier to get the hard copy or soft copy of the lessons sketched on the board. It also gives an advantage to the student who is absent, for they can still refer the materials taught by the educator in the previous lesson.

### *Increase level of interest*

One more benefit of the Interactive Whiteboard is “it can help to catch pupil’s interest” (The Office for Standards in Education, 2004b, p.7) because the Interactive Whiteboard provides high-quality graphics, audio and video facilities.

### *Increase level of motivation*

86 teachers were interviewed by the University of Newcastle and it is found that “99% of respondents felt that the IWB increases pupil motivation” (Higgins et al., 2005, p.39). The statement “increases pupil motivation” refers to the pupil’s motivation to learn. So, this means that the Interactive Whiteboard is able to get the target audience’s full focus in the lesson session.

## **Conclusion**

Nowadays, there are many high technology teaching aids available for educators. The entire educator community should be alert with all these technologies and try to exploit them. Students of this era are very aggressive about changes in technology. The latest technology in the teaching and learning process is the Interactive Whiteboard. Using the Interactive Whiteboard for the educators or learners can save time and increase the level of students’ interest, motivation level and understanding of the subject matter.

## References

- Becta. (2007). *Evaluation of the DCFS Primary Schools Whiteboard Expansion Project*. Retrieved March 17, 2009, from <http://partners.becta.org.uk/index.php>.
- Higgins, S., Falzon, C., Hall, I., Moseley, D., Smith, F., Smith, H. & Wall, K. (2005). *Embedding ICT in the literacy and numeracy strategies*. Final Report. University of Newcastle.
- Nazrul Azim Sharuddin. (2009, January 8). *Skrin Pintar untuk Pendidikan Moden, Megabait (Utusan Malaysia)*, p. 11.
- Office for Standards in Education. (2004a, May). *2004 Report: ICT in schools – the impact of government initiatives (Secondary Mathematics)*. Retrieved March 18, 2009, from [http://www.ofsted.gov.uk/Ofsted\\_home/Publications\\_and\\_Research](http://www.ofsted.gov.uk/Ofsted_home/Publications_and_Research).
- Office for Standards in Education. (2004b, May). *2004 Report: ICT in schools – the impact of government initiatives (Primary Schools)*. Retrieved March 18, 2009, from [http://www.ofsted.gov.uk/Ofsted\\_home/Publications\\_and\\_Research](http://www.ofsted.gov.uk/Ofsted_home/Publications_and_Research).
- SMART Technologies. (2006). *SMART Board Interactive Whiteboard*. Retrieved September 06, 2006, from <http://www2.smarttech.com>.
- Wikipedia. (2009). *Interactive Whiteboard*. Retrieved March 17, 2009, from [http://en.wikipedia.org/wiki/Interactive\\_whiteboard](http://en.wikipedia.org/wiki/Interactive_whiteboard).
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