# Interactive Whiteboards

**Statement of the Problem:** The development of interactive whiteboards has made the integration of technology available to entire classrooms through just one computer. The ease with which a nationwide problem can be solved so easily has sparked critics to question whether interactive whiteboards are in fact an effective way to integrate technology, or just a giant gimmick, representing a fad that will pass.

**Identification of the Issue:** Should interactive whiteboards be integrated into K-12 classrooms?

**Overview:** Interactive whiteboard capabilities began to be recognized in the early 1990's due to their ability to save written documents to a computer's hard drive and provide immediate printed versions of the board's display. They were first used successfully in the business arena as a presentation tool and then product reviews touted the boards as an interactive learning tool as early as 1993. Interactive whiteboards were then used in distance communication, but the cost made them prohibitive still to classrooms. Manufacturers' special offers to educators and price reductions caused educators to take interest in the boards during the late 1990's. Since the costs have further decreased, increasing numbers of universities and public schools have added interactive whiteboards to their classrooms (Bell).

An interactive whiteboard is simply an electronic display that interfaces with a computer. The computer images are displayed on a screen either with the aid of a data projector, or through a rear projection system. The images displayed on the board can be used interactively by adding notes, highlighting points of interest, manipulating images, etc. The resulting annotations, drawings, etc. can be printed out from the computer or saved for future reference. Additionally, touching the screen as if the user's finger was a mouse can control all the computer's programs.

**Assumptions:** Assumptions are based on impressions made when people see how "interactive" interactive whiteboards are and on their ease of use. Observers assume that something this eye catching and simple cannot possibly be effective. A presentation device of this sort must involve an immense amount of lesson preparation and really not be so trouble-free to use in the long run. The cost of an interactive whiteboard, data projector, and computer simply cannot justify putting one in every classroom. All of these statements are valid on the surface, but can quickly be dispelled with a discussion of the advantages to the learners seated in a classroom with an interactive whiteboard.

**Arguments For:** The satisfaction displayed by users and learners of interactive whiteboards is well documented. Studies have supported the following conclusions:

- Teachers using the boards become more creative in their approach to lessons (Basilicato, Bell, Glover).
- Discussions and answers to open ended questions indicate that students are more involved, attentive, and motivated during lessons using the boards (Bell, Davison).
- Board features repeatedly praised were interactivity, ability to mark and save notations, display size for presentations, ability to manipulate software from the board (Basilicato, Bell, Glover, Smith).
- Board use was easy to learn (Bell, Smith).
- Students gained confidence in computer use through direction demonstrated on the board and through taking an active part in teaching when using the board (Smith).
- Interactive whiteboards seem to work all the time without glitches (Smith).
- Teachers and students are enthusiastic about the board presentations (Basilicato, Bell, Glover,

Smith).
- Interactive whiteboards are appropriate as assistive technology for students with learning disabilities (Basilicato).

**Arguments Against:**

- Does not promote a good teaching methodology (Wodarz).
- Technology is too pricey to be justified as a tool for note taking (Wodarz).
- Teachers reluctant to use new technology due to lack of time, resources, additional training, or confidence in their technology abilities (Basilicato, Glover).

**Analysis of the Validity of Arguments:**
- Dr. Nan Wodarz was critical of the effectiveness of interactive whiteboards based on opinion and not on fact.
- Basilicato and Glover have stated a problem relevant to all new technology when introduced to teachers.

**Values Emphasized and Compromised:**  Those who have used the interactive whiteboard technology can see the advantages it gives to integrating technology in the classroom and learners.  Those opposed to the technology have brought out general criticisms of newly introduced technology, or have given their unsupported opinions.

**Personal Position:**  Based on daily use of the technology in my classroom, I can attest to the ease of use of the technology, the accessibility it affords students with learning disabilities, the immediate student enthusiasm and resulting attention to lessons, etc.  All of the advantages are obvious with each use of the technology.  Further, it has been easy to adapt lessons and extend them.  I was proficient in the use of the technology within a week and my lessons were all converted to interactive status within a year.  Overall, students, parents, and other staff are satisfied with the technology and three more units have been added to our campus.

**Suggestions for Problem Solutions:**  The few valid criticisms offered concerning teacher proficiency with technology in general are a subject of continual research.  School districts are trying to address teachers' lack of proficiency by offering campus led training sessions, coaching situations, and paired technology training.  Simply attending a demonstration session on the use of interactive whiteboards can dispel the criticisms offered by Wodarz.

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