

Whiteboard Teaching

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Abstract – Writing boards and teaching go hand in hand. A chalkboard has been the oldest and the most extensively used teaching aid. With the invention of the whiteboards, and its enhancement with technology, the art of teaching has come a full circle to empower the teacher to deliver effective lectures. This paper introduces the whiteboard and discusses its pros and cons and the future of this teaching aid.

Index Terms – White board, Interactive whiteboard, Online whiteboards, effective teaching.

INTRODUCTION

A classroom experience is enhanced when a combination of media are used by the teacher for the course. Writing boards are a very essential media in teaching. A writing board is an age old teaching aid which has been used to provide class outlines and highlight important points. Whiteboards have started to replace the old chalkboards in many schools. They have gained popularity during the mid 1990s. It was invented by Berkeley White. It has a white smooth glossed surface on which a special ink is used and can be erased, making the functionality of the board similar to that of a traditional chalkboard, but with more ease. The pros and cons of this improved teaching aid and its comparison to the traditional chalkboard are discussed below.

CHALK BOARDS VERSUS WHITEBOARDS

Since the advent of the whiteboards there have been debates about chalk boards and whiteboards and the use of which is better. Each has their own pros and cons. Chalk boards have forever been associated with the chalk dust to which many people are allergic to and asthma problems. Whiteboards effectively remove the need of using chalk which eliminates the problems related to chalk. Traditional teachers use chalkboards more for the aesthetics than for the functionality of a whiteboard. Chalk boards tend to become lighter with age and the readability reduces requiring the need for repainting or replacing the board. Whiteboards are fairly easier to maintain.

Chalkboards require the user to put a lot of pressure on the chalk while writing, making it an issue for teachers with arthritis problems. And it is fairly easier to write on a whiteboard. Although white boards have not entirely replaced a chalkboard they seem to be generally more popular nowadays.

ADVANTAGES AND DISADVANTAGES

I. Gains Of Using White Boards

There are many advantages to using a whiteboards compared to other writing boards.

- First and foremost, whiteboards help save a lot of paper and are very environment friendly.
- As the whiteboards screen is white, they are also used as a projection medium for presentations, making them versatile in use.
- Whiteboards need not be repainted or replaced very often making them a one-time expense.
- Different colored markers are what made whiteboards more popular than other writing boards. The bright vibrant colors make it easy for the teachers to highlight different points and important topics and sketches stand out among the monotonous text. This makes it easier for the students to take down notes. The color range is more than the regular colors of chalk that are available.
- Whiteboards also eliminate chalk dust that is produced from chinks. This reduces a lot of severe allergy problems that affect both the students and the teachers alike.
- Whiteboards are much easier to write on than regular boards. Their smooth surface makes it almost effortless to print with help of the whiteboards markers which resemble a pen.

II. Limitations And Constraints

Whiteboards too have a lot of disadvantages. Some are discussed below.

- Whiteboards can be a very expensive unit to buy. Though cost effective boards exist, their quality is not the same as a high quality white board.
- Whiteboards need to be cleaned thoroughly with proper cleaning liquid, so it does not get oily. This oil coats the board over time and makes it very difficult to write on the whiteboard.
- Only specific whiteboard/dry-erase markers can be used on the white boards. These markers when not used properly tend to coagulate and dry up. There is an endless need to buy new markers and prove to be a bane in a class where a lot of writing is required.
- The whiteboards marker ink has a strong pungent smell which can be repulsive to most people. These markers also have a high chemical content which can be sometimes poisonous when accidentally injected. They are also non bio degradable making them an environment hazard.
- The glossy white surface can sometime reflect light and create glare spots which are unreadable from certain angles of the classroom.
- The high contrast of the white and the other bright colors on the boards make it difficult for certain students with visual impairment to read the content written on the board.
- Teachers who are used to writing on a chalkboard find it difficult to shift to a whiteboards, as it requires less pressure and the need for holding the marker differently.
- Certain whiteboard marker colors tend to stick longer to the surface of the board and do not come off easily. This needs special cleaning liquids which might not be cost effective.

USING WHITEBOARDS EFFECTIVELY

The versatile nature of the whiteboard, make it have multiple uses, however the primary functionality of the whiteboard is still to aid the student in note taking and the following are a few ways in which they can be used to their full potential

- **Outline:** The teachers may include a whiteboard outline or a class plan which indicated what to print on the whiteboard as the class is progressing
- **Content:** The writing on the white board must be neat and in big bold letters so that is readable from all angles in the class. The students must be

given time to write down the notes before it is erased. Changes to the notes while the students are taking down notes must be avoided. The writing must also be horizontal and in a straight line. Different color markers can be used to highlight important points and bring diagrams to life.

- **Materials:** Extra markers must be present at all times, since guesses cannot be made as to when the ink might dry out. Te white board must be wiped clean with proper cleaning liquid after every class, to maintain the whiteboard clean and ready for the next class.
- **Other uses:** The whiteboard can be doubled as a projector because of its white smooth surface. Markers can be used along with the presentation being projected to make the class more dynamic. The whiteboard can also be used to list down the homework for the day and updated every day.
- **Lecture:** Assumption cannot be made that the students might be paying attention to what the teacher says at the same time copy down the notes on the board. The teacher must take care that he/she speaks more to the class and write on the board. With a little practice writing and talking can happen simultaneously, and the teacher can keep the students engaged even white not facing the class.

THE FUTURE

I. Interactive Whiteboards

Whiteboards have been made dynamic with the introduction of interactive whiteboards. Interactive whiteboards connect to a computer which enables them to connect to the internet. The desktop of the computer is projected on to the whiteboard and a pen or a stylus is used to make marks on the whiteboard by the teacher while explaining the content to the class. These white boards come along with software which allows the teachers to store the information in a standard electronic format which can be easily distributed to the students who can access it at any time. These whiteboards range from just working as a projector to having response system from the learners. The input can vary from IR systems to stylus inputs. London institute of Education has performed studies on the effectiveness of the use of interactive whiteboards. SMART and Prometheus are interactive whiteboards which allow for internet connectivity and are very popular.

The cons of this type of white boards include the cost of the equipment and the resources need to set up the class room. The teacher is required to have certain basic knowledge of how basic electronics work;

otherwise the training overheads are also present. Use of fancy technology sometimes deviates from the real motive of the classroom. A separate tech support needs to be set up for any kind of technical problems in the system which can be predicted.

II. *Online Whiteboards*

Online white boards are the newest technology which is a purely internet based tools. They are websites which give the users a platform and tools required to create plans on a whiteboards and sketch down ideas immediately. Some of them are multi user, which means that the sketches can be shared to a lot of users who want to work together on an idea and are not physically present near each other. This makes sharing information extremely easy. They also allow easy file sharing from local systems. Groupboard, twiddla, skrb1 and cosketch are a few of the online whiteboards that are available to the public

CONCLUSION

The best method of teaching is the old school method of delivery. The invention of whiteboards and interactive whiteboards has reinforced the age mode of delivery that is the teacher delivering the lecture and the students listening to it. Whiteboards make the lectures dynamic and the ease of note-taking increases. Whiteboards are an effective teaching aid.

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