



CHALK BOARD TEACHING AND TEACHERS ARE THE BEST COMBINATIONS OF TEACHING AIDS -A STUDY

Anatomy

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ABSTRACT

The objective of present study is to know the advantages and disadvantages and importance of black board teaching and its application in the process of learning in medicine especially in teaching Anatomy to first year M.B.,B.S students .

METHODS:A descriptive questionnaire-based study was conducted for the first year M.B.,B.S students in different medical colleges in three different countries [on 150 students in India,100 students in Nepal,60 students in China].A series of 10-12 questions were asked individually to all students in English regarding black board teaching and other aids and their opinions were noted down Merits and demerits of each type of teaching were also asked and noted down. Their percentages were calculated and compared with the available literatures.

RESULTS: Opinions were taken and analyzed by statistics and results were expressed as percentages and displayed with the help of bar diagram and pie chart. In this study different percentages were shown in three different colleges in three different countries in favor of chalk board teaching [,they are 61.45% in India, 52.84% in Nepal , 73.56% in China]. This showed that students preferred black board teaching because they understood subjects well especially Anatomy and showed interest in learning. Others preferred power point presentation.

CONCLUSION: Chalk board teaching also referred as chalk and talk method is an age old method of teaching in both developed and developing countries with proven success This is because both black board as well as Teacher are best teaching aids for better understanding and to create interest in minds of students. Hence studied and reported.

KEYWORDS

Chalk,Chalk board ,Teachers,Teaching Aids, Old and traditional methods.

INTRODUCTION:

Teaching and learning is a constantly evolving ongoing process [1]. It is method by which knowledge is transmitted from generation to generation since primitive human civilization. Actually from 1801,teaching to impart knowledge was started in Scotland through slate that was hung on the wall to disseminate the information to a large gathering at one time .Black board teaching was started in United States in the middle of the 19th century for teaching the students. Nowadays blackboard teaching is done on green or brown board since 1960.Later in 1980s white board teaching came into existence. Other teachings aids were already present like projected aids, micro projector. Transparency sheets for teaching purposes came in vogue in 1960s [2]. The behavior of learner will change permanently through learning [3,& 4.].It is the black board that is commonly used to deliver lectures in order to propagate the information while Transparency sheets and Power point Presentation are other modes of teaching.[5].The use of Microsoft Power Point Presentation of late is frequently being used as a electronic device to deliver knowledge or to teach in the most important gatherings of Medical Education[6]. Studies have shown that audiovisual aids too which are increasingly being used have great impact in the minds of students [7].The black boards, green board, white boards and smart boards are being used GLOBALLY in the class rooms of Universities ,Colleges, and schools [2]

MATERIALS AND METHODS:

The present study was conducted in three Medical Colleges in three different countries in three different periods [In 2001 done in Nepalgunj,2004 in Republic of China & during 2011-2012 done in Pondicherry . In the year 2001, study was done in Nepalgunj Medical College, Nepalgunj, Nepal on only one hundred First year M.B.,B.S students of India and Nepal origin.. Opinions were taken from each students of the above college. This is followed by study done at Xing Xiang Medical College, Henan Province, Republic of China during the year 2004 on sixty First year M.B.,B.S students of Indian and Nepalese students.. Later study was perceived at Mahatma Medical College, Piliyarkuppam, Pondicherry[South India] on 150 First year M.B.,B.S students of Indian origin in the year 2011-2012.

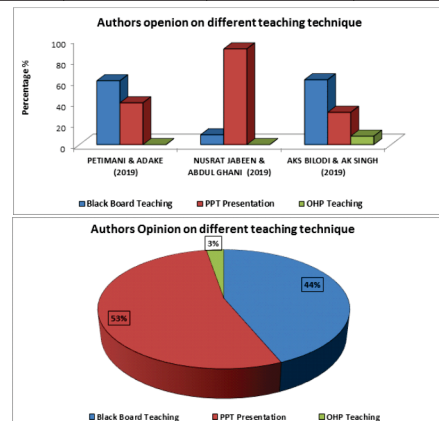
After consent was taken from the all students and from permission taken from head of the institution, each student was asked about the type of teaching aid he or she prefers, and their advantages over the methods and opinions were recorded. The data were recorded in tabular form. Results was calculated in percentages and shown through

bar diagram and Pie chart.

RESULTS: This study showed advantages of black board chalk piece teaching where majority of students preferred this type of teaching

TABLE-1.Showing percentages of incidences of black board teaching, power point presentation teaching,and over head projector teaching

Name of the Institution and country	Mahatma Medical College, Pondicherry., India[N-150]	Nepalgunj Medical College, Nepalgunj, Nepal[N-100]	Xing Xiang Medical College, Henan Province, Republic of China[N-70]
Black Board Teaching	61.45%	52.84%	23.56%
Power Point Presentation Teaching	30.56%	8.0%	62.67%
Over Head Projector Teaching	7.9%	39.16%	13.77%



From the above table, It is observed that black board teaching constitutes higher percentages of incidences in

- 1] Mahatma Medical College, Pondicherry, India[N-150]=61.45%
- 2] Nepalgunj Medical College, Nepalgunj, Nepal[N-100]=52.84% While in
- 3] Xing Xiang Medical College, Henan Province, Republic of China[N-70], it was only 23.56%

While Power Point Presentation Teaching constituted **62.67%** in Xing Xiang Medical College, Henan Province, Republic of China[N-70] followed by **black board teaching only 23.56%**. In Nepal, second majority method teaching was Over Head Projector Teaching which constituted 39.16%. **Even the elder age group of Teachers preferred Chalk board Teaching** because they feel confident and practiced for 3-4 decades during their period of teaching..

DISCUSSION :

History: About 5000 years back, Sumerians in Southern Mesopotamia were the earliest urban societies, where they developed wedge shaped strokes of writing and practiced for the next 3000 years later. These writing systems were known as CUNEIFORM[8]. Different system of writing was developed through out the world by 3500 BC. In 3400 BC, fully developed hieroglyphs was brought in use. Only one hieroglyphic script was on stone and rest other scripts were in ink on papyrus [9]. It was Archimedes (287-212 BC) who first designed documented teaching machine to teach Astronomy This was already described by Cicero (106-43 BC) and told that Thales of Miletus (ca 550 BC) said to have constructed a globe [10]. The wax tablet was first known erasable tablet that was used as a teaching aid. It was when Quintilian who made students to write on tablets made of wood or metal using a blunt stylus [11]. Before paper and graphite pencil came into existence, they were using tone slate and stylus as reusable writing material probably for the first time in the mid 20 in the developing part of the world. [12]. In order to provide information to a large gathering there came the existence of Black board. This board provided for large group of students to visualize information. These boards are being used throughout the world in schools, colleges, and universities class rooms. This teaching aid is of different colour namely, black board, green board, white board, and now smart boards have come [2]

REGARDING BLACKBOARD :

In 18th century, teachers and students started using clay tablets in United States and in Europe. In 1801, a geography teacher by name James Pillians, who was also head of the school, taught on a large piece of slate that was hung on the wall to the students [13]. Later a Mathematics teacher from United States taught on the first wall-mounted blackboard with connected slates. By middle of 19th century, they started using blackboard for teaching purposes in all class rooms of United States. These boards were of dark grey or black slate stones [14-17]. The writing material was made up of calcium carbonate or calcium sulphate to write on the board. This introductory teaching methodology was great invention and accepted by all teachers which gained popularity around the world [2].

Mahalaxmi .Petamani & Prabhakar Adake [2015]

Conducted a study in Department of Biochemistry at Yanepoya Medical College, Yanepoya University, Mangalore on First year M.B., B.S students to know the advantages and disadvantages of both black board teachings and Power point teaching [PPT] on 49 students in the year 2015. They collected data after predesigned and pretested questionnaire in English. The results showed black board teaching was the most preferred and popular teaching aid [60.43%] when compared to Power point teaching [39.56%] which has advantage of covering larger part of the topic [69.3%] [18]

Nusrat Jabeen, AbdulGhani [2015]: Also

Conducted a study in Department of Anatomy in a medical college :Jammu on 140 students out of 150 students of first year M.B., B.S in a Medical College, Jammu. They were asked to fill a questionnaire. The purpose of the study was to find out whether chalk board teaching is better or power point presentation is better to teach gross anatomy. Results were analyzed. This study showed that 90.7% students preferred PPT presentations to learn gross anatomy, where as only 9.3% students preferred to learn from black board teachings in the lecture hall [19]. The disadvantages of black board teaching is it consumes more time to write and to teach, hence, may not be more effective for large gathering.

Studies done by Nusrat Jabeen & Abdul Ghani

have stated that some students were fond of power point studies while

other students liked black board teaching than over head projector teaching [OHPT] and power point teaching [PPT] [18]

Demerits of black Board teaching:

Black Board teaching is time consuming when writing and drawing the diagrams and while erasing the board. In black Board teaching, voice of teacher may not be audible and visualization of the written material may not be appreciated for all students [say 100 or 150 students]. This can be improved by introducing PPT, OHPT [19].

Thomas & Appala

were of opinion that clarity of concepts and writing the diagrams are better done in black board teachings and students preferred the same. There will be good inter action between student and teacher in Chalk board teaching [CBT], hence students are active learners in CBT. [20]

IMPORTANCE OF BLACK BOARD TEACHING AND ITS IMPORTANCE:

It is flat surface made up of wood or fiber, black in colour where chalk has been used as writing material. According to Geoffrey "A blackboard is defined as a flat surface feature, it can be a board made of wood, fiber or sometime made plastered on the wall of the class. The board is painted black to reflect the white chalks used to write on it [21]. Bello has written the value of BBT as follows "the discussion between a teacher and the class intermediated by the blackboard" [22]. Black board is meant for interaction by the teacher where board can be made use for writing, where teacher can turn back and talk to students again he or she can turn back to draw diagrams or sketches. He can show important things with the help of pointer. Teacher can ask to explain in the class and students can present their work. All these can happen on the black board. As per Philips, *Is like a moving slide that interest student to the maximum*" [23]. Through black board teaching teacher can show flexibility & he can change what is written on the black board to suit the students need. Hence BBT can change with the time. So Hudgins has said "The blackboard can be rubbed several times and the correction of pictures or others features to be made" [24]

IN THE PRESENT STUDY:

The present study has shown that Chalk board Teaching has become most preferred teaching aid because it students brings about good interactions with the teachers It has made learning more attractive. It has lot of advantages like it needs no electricity and there is no power supply interruption. Teacher can show flexibility towards students Changes can be made by rubbing the boards several times followed by corrections of diagrams. Through black board teaching discussions can be made. Teacher can point out important features through pointer and he can explain what students want and clear his or her doubts. Immediately Hence black board has multipurpose and its benefits both for learners and teachers.

CONCLUSION:

Black board chalk piece teaching has come into existence since centuries all over the world. Hence it is traditionally old method of teaching which has got paramount importance globally both for learners and teachers. Hence it should be adopted and embraced in all educational institutions ranging from the Nursery to professional college upto University level.

TAKE HOME MESSAGE:

This old method of black board teaching can be combined with other aids of teaching to make the learners more interesting.

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