

## **Short Communication**

### **Techniques of Teaching Anatomy**

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**Abstract:** About few decades back before the advent of audiovisual aids (a-v aids), the teachers of Anatomy have taught this subject only with chalk and blackboard. The teachers were very expert in displaying the diagrams of many important illustrations. However, recently with the advent of audiovisual aids, this old effort of making diagrams is gradually replaced by audiovisual aids, hence hampering the skill. Merits of audiovisual aids are that realistic pictures can be projected & good number of images within a short time could be covered. However quality and understanding of meaning of the images is very superficial. Student often thinks, let the class go off fast and they often doze off. Therefore with the comments from undergraduate students and faculty of the institute, there should be combination of both chalk and blackboard with audiovisual techniques. The present authors felt that this old method of teaching should go side by side with Audio visual aids and should make it compulsory as a syllabus for postgraduate course.

**Keywords:** Audiovisual aids, Chalk and Blackboard, Overhead projectors, teaching Anatomy

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#### **INTRODUCTION:**

Before the advent of audiovisual aids, the teachers of anatomy have taught this subject only with chalk and blackboard. Teachers were very expert in displaying the diagrams of many important illustrations and also they made an attempt to excel in the skill of making diagram. Many teachers could amaze the student with this art of making diagrams. This old effort of making diagrams is gradually replaced by other audiovisual aids, hence hampering the skill of rehearsing to draw diagram both by teachers and students.

#### **Audiovisual techniques**

I hear, I forgot

I see, I remember

I do, I understand

90% information going to brain is through eye.

8% information going to brain is through ear.

2 % information going to brain is through other senses [1].

Audiovisual aids are aid used to increase the effectiveness of teaching by means of using more number of senses to sustain attention and interest of student. The teaching should consist of a speaker backed by the aids and not vice-versa.

The different types of visual aids should not be individually exclusive and in this case it is the blackboard which usually suffers as it requires an expert teacher.

The commonly used a-v aids to enhance the presentation are black board, slide show, overhead projector(OHP), digital whiteboard, LCD projector, Multimedia, videos, audio tapes, physical objects, 3-d models, etc.

#### **Slide show**

- Advantages- It is professional, good at getting attention, retain interest, can have high impact.
- Disadvantages- It requires power supply, expensive, can be noisy, prone to technical failure, considered low tech nowadays.

#### **Overhead projectors (OHP)**

- Advantages- It is commonly used and easy to use, easy to interact with, can be prepared quickly, transparencies can be stored
- Disadvantages- It requires power supply, can be noisy, light can distract.

#### **Pc/ Computer based presentation**

- Advantages- Professional, most popular nowadays, equipment widespread and

increasingly affordable, three dimensional view can be made available.

- Disadvantages- compatibility issues. It has a tendency to proceed faster while presenting, so quality and understanding of meaning of the images is very superficial for the students.

**Physical models**

- Advantages- very high impact, get good attention, make a concept tangible.
- Disadvantages- expensive to produce and transport.

**Chalk and blackboard**

- Merits-
- It provides a stimulus of realistic anatomy to both teachers and taught.
- Diagrams of important illustration of body structure are better understood. It gives the idea of proper learning or drawing techniques to students.
- All anatomy teachers could amaze the student with this art of making diagrams in the past.
- It is cheaper, Noiseless and it doesnot require any maintenance cost.
- It can be used anywhere in daylight and mistakes made can be corrected instantly
- Writing on a chalkboard makes it easier to control the pace of a lecture because it encourages writing while talking [2].

**Demerits-**

- Time consuming and cannot cover many illustration and diagrams.
- Pollutant effect of chalk powders.
- Requires expatiation of presenter limited to two dimensional view only.

**DISCUSSION**

- According to some Authors, Black board teaching still remains the most useful of visual aids in medical education in the course of formal lecture [3].
- Chalk and blackboard leave a deeper imprint in the students mind.
- Chalk and blackboard teaching not to be abandoned totally as it is becoming the trend today. Student feels the importance of diagrams drawn in the blackboard by the lecturer, as he has taken the trouble to memorize it. They also fells that it must be easy way to reproduce on his notepaper. Later on they can refer to the illustration copied on their notepaper and by active participation through this way they can remember it for longer period.
- With the comments from undergraduate students and faculty of the institutes, RIMS, Imphal & AGMC, Agartala; there should be combination of both chalk and blackboard with audiovisual techniques (88.5%) as shown in the table:

Personal Preference (Number of person)	Chalk and Blackboard (Number of person)	Other Audiovisual Techniques (Number of person)	Combination of both Techniques (Number of person)
MBBS, BDS & Nursing students (1200)	55	106	1039(86.6%)
Teaching Faculty (500)	15	18	467(93.4%)
Total Person (1700)	70 (4.1%)	124 (7.3%)	<b>1506 (88.5%)</b>

- Lack of proper preparation by the concerned teachers is also a habit in other audiovisual techniques. Other audiovisual aids can be compared sometimes like a watching video instead of learning, something serious. In some presentation in dark room it is difficult for the student to copy on notepaper also. Understanding the illustration also very superficial in a short period of time.
- This old method of teaching should go side by side with other audiovisual aids to explain some illustration.

- For proper development of skill of drawing, post graduate students should be trained during their course.

**CONCLUSION**

- Preparation and teaching of anatomy by chalk and blackboard is indispensable.
- This method not to be completely replaced by other audiovisual aids, as it is becoming the trend nowadays.
- Learning of realistic anatomy as in the past by chalk and blackboard should go side by side with audiovisual aids.

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