



**TO STUDY THE IMPACT OF SMART BOARD BASED
TEACHING ON THE ACHIEVEMENT IN BIOLOGY OF GRADE 10
STUDENTS**

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ABSTRACT

The result of the study revealed the positive impact of using Smart Board (IWB) on the students achievement in Biology as the visual display of Smart Board has enables the students to remain engaged throughout the lessons and the barriers of learning such as disturbance in the classroom, noise disturbance, blackboard writing time were reduced. Students were able to interact freely and can understand concepts through presentations, virtual demonstrations and documentaries. Difficult topics were broken down in to subtopics and each sub topic has its own audio-visuals which were in the form of animations. The interest of the students was more on the content and hence class indiscipline issue was resolved itself as every student was focused on the video shown. Students were enthusiastic in asking questions and developing the higher order thinking. For teachers, Smart Board has proved useful in terms of time and achievable learning outcomes. It also acts as an evaluation tool for the teachers to assess student's performance in the class.

Key Words- *Smart Board (Interactive White Board) and Achievement*

Introduction-

The question that has been put before conduction of the study that, what will be the impact of Smart Board based teaching on the achievement in Biology of grade 10 students? The answer to this question after conducting study revealed that there occurs a significant difference in the effect of Smart Board (Interactive White Board) based teaching on academic achievement of students of class ten in

Biology. These are the students who had lacked interest in the subject and their performance was not found satisfactory by their respective teachers. There lacked cooperative learning among themselves.

The students in the experimental group, during the study, were found to be engaged in classroom activities. They were responsive and took active part in learning the concepts of Biology. They felt motivated with immediate feedback which they received through the Smart Board (Interactive White Board) presentation and assessment techniques.

Objectives-

1. To find out the effect of Smart Board based use on learning levels of the students.
2. To find out the advantages of Smart Board based teaching for secondary school students (Grade ten students).
3. To compare the levels of achievement of students through Smart Board based teaching and traditional teaching.
4. To compare the traditional and Smart Board based teaching.

Findings-

Benefits of using smart board (interactive white board) in classroom

For Students-

Learning environment where the learner interacts with electronic content and multimedia. This includes texts, images, electronic lesson plan activities and presentation tools that are used to enhance learning materials. They provide large workspace for hands on work with various resources. They feel involved as it has open channel for interaction with the multimedia and resource teacher. Visual display through the use of diagrams, animations, pictures, colours, text with highlighted fonts keep student engaged. Those who are still not computer literate

may lack may lack skill can gain through the use of interactive smart board step by step it is easy to handle and convenient to use.

It helps in developing independent thinking skills. It however acts as a tool for students to create presentation within the class and can be easily uploaded and shared among the class. Smart board has laid an impact on both intrinsically and extrinsically motivated learners. Short attention span learners are also benefitted where they now gain learning outcomes efficiently. It increases participation of learners. It is directly related to multisensory approach of learning. Many learning styles being the visual impaired, hearing impaired, attention deficit learners can be appealed with the use of interactive white board (smart board). The options of touch, increased size of font for partially and visual impaired, audio in presentations for visually impaired cater to the diverse learning needs of these learning styles. The use of the electronic interactive white board seemed to contribute to maintaining student motivation and interest. Student can relate to day to day life experiences through the use of interactive white boards smart board. Practical applicability of the tasks is possible.

For teachers-

Teachers have a reliable tool in the name of Smart Board (Interactive White Board) as due to its large display it increases the class participation. Provide initial scaffolding for learners through step by step presentations, the class is joyful and every learner is enthusiastic in learning and responding to the instructions. Its use enable teachers to receive immediate and comprehensive feedback while listening to learners in the classroom. This leads to deeper understanding about the progress of the learner which refers to continuous assessment as well. Smart Board (IWBs) proves helpful in presenting the material (Benett 2008).

Student imagination can be easily explored through its use. Collection of learning material can be updated easily with more software versions. The pressure on the teachers has also reduced as the lesson plan can be easily updated and modulated according to the student needs, It can greatly assist teachers in providing different learning to the student needs. It can greatly assist teachers in providing different learning experience without adding to their work load (Beardon and Way 2003). Teachers have more time for teaching process due to their structured lesson plans, Using technology appropriately enables teachers to enrich student. Learning as well as better caters for differences in how students learn.

Suggestions-

Smart Board (Interactive White Board) should not replace traditional mode of teaching completely as it is one of the tools that can be used to enhance the teaching learning process. The equilibrium between the use of technology and classroom pedagogies should be maintained. There has to be a backup plan lesson plan available with the teacher so as to overcome the technical issues such as in availability of light and software problems which can cause disruption in the learning process. For the effective use of Smart Board (IWB) teachers need to plan, analyze, select and develop all those skills which are useful in delivering the instructions through the technology medium. Use of Smart Board (IWBs) enables the regular student involvement. The students will be provided with the opportunities to create, construct and remain involved in the activities designed for their learning.

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