SMART CLASSROOM AN INNOVATION IN TEACHING LEARNING PROCESS

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Abstract

Education is a process which revolves around teacher, student and curriculum where teacher has to play a very important role. The content and techniques of teaching depends to a great extent on what we want to achieve. With the changing scenario of education it is supposed to find ways and means to improve the teaching techniques to cope with the need of the times. Technology benefited us in every aspect of life from communication to education. The new revolutionary programme in school education system "smart class" has changed the concept of learning. It is an innovative technology that has aimed to revolutionize the way of teaching learning process. A smart class provides education better through presentation and videos.

INTRODUCTION

Technology enabled education peeping deep into the classrooms, paving a way to smart education. Smart classroom foster creativity and an interactive environment which would help in bringing in more innovative ideas, more queries and more solutions. A smart classroom is a technology enhanced learning classroom that enhances the way of teaching and learning digitally. The classroom is integrated with the digital displays, tabs, white board, assistive listening devices and other devices. A student can learn better through visualization. Such teaching helps to maintain the interest of the students and focus by engaging them fully for the entire learning experience. Quality education is an essential requisite in today's competition environment. Smart classrooms are technology enhanced classroom that foster opportunities for

teaching learning process. Now the students are thrilled at the concept of innovative and interactive learning process. The concept of digitalized classroom has not only made the education easy but it gave the students power to enhance their academic performance.

CHARACTERISTICS OF SMART CLASSROOM

1 .**ADAPTIVE LEARNING**- Any classroom always have students of different types of learning ability in it which often makes it difficult for teachers to make sure that all of them understand the concepts. The modern approach of adaptive learning gives students the freedom to learn at their own pace and in the way they are most comfortable with.

2. **COLLABORATIVE LEARNING**- Learning through collaboration is one of the most effective forms of learning. Collaborative learning activities include collaborative writing, group project, joint problem solving, debates and more.

3. **STUDENT-CENTRIC**- In smart classroom teachers play the role of facilitators. They help students think critically. Students discover and master new concepts. Student-centric classroom environment put student's interest first and are focused on each students need, abilities and learning styles.

4**. THE UPGRADED KIND OF EDUCATION**- This upgraded kind of education is very interesting for children. It is an innovative idea to change our boring system into a smart and innovative system of teaching learning activities.

5. **HIGHLY EFFECTIVE**- Smart classrooms are considered highly effective and help students grasp the concepts quickly. Smart classrooms also reduce distraction and students can concentrate more and retain more information.

6**. MOTIVATE STUDENTS**-The smart classroom motivates the students more than traditional classroom. The audio visuals are very interesting for students and helps build interest in them.

7.**INCREASE PRODUCTIVITY**- It helps in developing interest among students and create better learning outcomes .It not only enhance the aesthetic of teaching but also helps students visualize concepts in their minds making learning easier.

8**. TIME SAVING TECHNOLOGY**-With the help of the smart class notes and presentations can be shared directly with the students. Various tools can also help teachers to distribute assignments, provide feedback and involve in discussion.

9**. ENHANCED LEARNING**-A smart classroom provides enhanced teaching and learning experience. It provide the best technology for education by using tools like self assessment, e-library. The use of technology in the classroom for teaching increases the understanding of the students. The topic becomes clearer and the base of the subject becomes stronger.

10**. CONNECTIVITY**- It is widely spread in all the regions for collaborations of distance learning. With these technological tools, students and teachers can collaborate and increase the overall participation in the learning process.

11**. IMPROVES SKILL**- The classroom that is completely equipped and visually appearing makes students thinks and acts logically. It helps in developing skills in their interested field. With the help of the internet students are getting exposed to critical thing and problem solving skills.

12**. IMPARTING KNOWLEDGE**- The technological tools used in the classroom are positively changing the way of teaching. Teachers impart knowledge to the students and at the same time the teaching learning process continue with sharing of ideas of both.

13**. USE OF TECHNOLOGY**- Smart classes are technologically enhanced and information can be illustrated with the help of images, graphs, flow charts, videos etc. The smart classes help teachers to deliver lectures more effectively for their better learning experience. It has a digital board, projector, computer, internet facility for imparting quality education.

IMPORTANCE OF SMART CLASS

The smart classroom learning approach provides learner of all ages of life with a higher level of understanding. Smart class is an innovative concept in education. Now days we are living in the age of internet so our education system is also going to be online.

OBJECTIVES

- To help teachers to meet new challenges and develop students ability and performance.
- To enable teachers to access multimedia content and information that can be used for teaching students more effectively.
- To enable teachers to express their views and ensures that every child is understanding the under taken concepts clearly.
- Smart classes make abstract concept real.

- The smart classes have interactive and live teaching to elaborate and compare different objects and perceptions towards the particular concepts.
- To design a module of smart class this allows student to visualize the concept much better than static images.
- It helps to improve creative thinking in learning process and visualize the concepts, practices with model and demonstrations.

TYPES OF SMART CLASSROOMS

Smart classrooms are enhanced with technological equipments for the purpose of better learning and teaching. Based on the equipments available smart classrooms can be categorized as follows,

1. **BASIC SMARTCLASSES**

In this type of smart classroom gadgets like laptop, computer, projector, DVD player are used.

2. **INTERMEDIATE SMART CLASSES**

The intermediate smart classrooms are one step ahead of the basic smart classrooms. They include gadgets like a smart podium with control panel in addition to laptop, projector, screen and DVD player.

3. **ADVANCED SMART CLASSES**

The advanced smart classrooms have all the gadgets of a basic or intermediate smart classroom but their features are very advanced that is they use the advanced technology.

EQUIPMENTS INSTALLED IN A SMART CLASSROOM

The following equipments are installed in most of the smart classrooms

COMPUTER

A computer is a basic and necessary requirement of a smart classroom. Instead of writing on board with a chalk teaching process is done by presentation or multimedia in a smart classroom.

PROJECTOR

It is an optional device. It projects stationery or moving objects onto a screen. They create an image by shining light through a transparent screen.

SCREEN

It is a surface used to display the images projected by a projector. The screen may be rigid wall mounted screen, pull down screen or fixed frame screen.

MICROPHONE

It is generally a device which converts audio signals into electrical signals. These signals are then transmitted and recorded.

AMPLIFIER AND SPEAKER

These are the electronic devices which are used to increase the volume of sound .

DOCUMENT CAMERA

A document camera allows teachers to display worksheet on a screen. They are used for displaying an object to a large audience. A document camera magnifies and projects the images of a two dimensional as well as a three dimensional object.

DVD PLAYER

There are large amount of videos available on the internet but still there is a requirement of DVD player because there are some videos which have copyright and have to be purchased.

OVERHEAD PROJECTOR

It is a device which is used to display enlarged images of the display objects.

SMART BOARDS

Interactive white board or smart boards are helpful for the teachers to show the pictures information's easily. Instructors are also able to achieve and share any lesson that has used the board and past lessons can be revised to reinforce new topics being covered.

Need of smart classroom

In order to make learning simpler and more interesting many schools in the city have introduced smart class programme with interactive white board in classroom. Smart class brings complete transformation in classrooms. The best of teachers take pains to explain the concepts largely depend upon their own abilities. The students listen to the teachers try to decipher the figures drawn on the blackboard and read from their text book , take notes and try hard to visualize how it happens and remember at the end of the class, the teacher asks a few questions to assess how the class fared. Through smart class the teacher shows 3D animations with fine points of explanations and zooms in to show the relevant visuals, freeze, annotate when and where he or she needs to emphasize. Smart class helps teachers to meet new challenges and developing student's ability and performance. It also enables teachers to express their views and ensures that every child understands the concept clearly. Towards the end of the class, every teacher displays

a set of questions on a large screen; every child in the class gets ready to answer the questions with their personal answering device-SAS. Students click the answers, instantly; teachers are able to get a score sheet for every child in the class, teacher ends the classes by re- teaching the parts of the lesson that were not well understood by class. This result in faster and accurate understanding of the concepts in class helps in improving the overall academic performance of the students. Teachers are able to keep students engaged in the learning process and also get an instant and accurate assessment of learning outcomes achieved at the end of the class.

CONCLUSION

Smart class is the revolution in the today's classrooms. Teaching and learning process is child centric and become very interesting and effective. Education through new technology like the smart class has made it easier for the teachers to relate the subject to the students. Quality education is an essential requisite in today's competition environment.

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