Research Paper Education

Smartclass as Future of Education – a Study

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ABSTRACT

Technology enhanced learning spaces at Northestern foster opportunities for teaching and learning by integrating learning technology, such as computers, specialized software, assistive listening devices, networking, and audio/visual capabilities. These spaces are available to the University community and require a reservation prior to use. This paper deals with the impact of smart classrooms in recent education as in present scenario technology has the greatest influence in every field especially in the field of education the role of technology is becoming inevitable. The classrooms with black board have been converted into smart classrooms, which integrate all the multimedia elements to achieve multi-faceted goals. Through smart classrooms the students learn and capture information more rapidly than the conventional classroom set up. The understanding of the students are letter as they tend to learn much complicated topics more easily for the concepts are explained in simulation mode.

KEYWORDS : smartclass

A Smart Classroom is a traditional lecture style teaching space that has available technological equipment that can be used to aid and enhance instruction of a course. Classrooms are categorized based on the equipment available:

- Advanced Smart Technology: Features a smart podium with a touch panel control system, PC and laptop connection, document camera, DVD/VCR Player, projector, and screen.
- Intermediate Smart Technology: Features a smart podium with a control panel, PC and laptop connection, projector, and screen. May also have an overheard transparency projector.
- Basic Technology: Includes a laptop connection, projector, DVD/VCR player, and screen. May also have an overhead transparency projector.
- The type of technology available in a Smart Classroom depends on its classification level:
- Advanced Smart Technology: Features a smart podium with a touch panel control system, PC and laptop connection, document camera, DVD/VCR Player, projector, and screen.
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Smart class did what no one had ever thought of before, bring technology into the classroom. It brought an exhaustive repository of world class digital modules or lessons, (consisting of 2D and 3D animations, graphics, audio and video) on every subject in the K12 spectrum, which the teacher could easily access and project in the classroom that illuminated and explained abstract and difficult concepts with liquid clarity. The result was amazing. Knowledge flourished freed from the centuries old bonds of books and chalk and blackboard. A new light of understanding dawned on young awakened minds. And the classroom became a fascinating place to be in as a new generation of learners saw (instead of just being told and explained) for the first time how things happened. And the teacher smiled as she now saw not just one, two or three but a sea of hands go up every time she asked a question.

Even as it popularity grew with school after school adopting it, as pioneers we realised that we needed to keep pushing the frontiers of technology, make it adapt to changing times, make it more user friendly, more versatile and more resourceful. Over the years, such upgrades and improvements kept happening on a continuous basis. But the time was fast approaching for metamorphic and transformational change. For nearly 2 years starting end 2009, the think tank at smart class has been at work devoting millions of man days to execute the most comprehensive re-engineering of its kind to make smart class a truly 21st century teaching-learning. Imagine a Science teacher explaining how a DNA replicates, a History teacher teaching a class about the Harappan Civilisation, or a Geography teacher teaching how Block mountains are formed. The best of teachers take pains to explain the concepts largely depending on their own abilities. The students listen to the teachers, try to decipher the figures drawn on the blackboard and read from their text books, take notes and try hard to visualize how it happens and remember. At the end of the class, the teacher asks a few random questions to assess how the class fared. Invariably a few hands (mostly of the same set of brightest students in class), go up, the answers are given and the class ends.

Smart class brings about a complete transformation in classrooms. The Science teacher while explaining how a DNA replicates is able to show the class a 3D animation of the DNA replication process on a large screen. She can explain the fine points of the process, zoom in to show the relevant visuals, freeze and annotate when and where she needs to emphasise. Similarly the History teacher shows the class a virtual walk through of the Harappan Civilisation. Uncovering the relevant parts step by step as a part of her lesson plan , while the Geography teacher shows a virtual Block mountain being formed… all with engaging animations, colors, music, sounds and voice. The teachers gain complete attention and interest of every child in the class. Every child gets a visual input on how it happens and the concepts are well understood and internalised. Towards the end of the class, every teacher displays a set of questions on a large screen, every child in 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 class. She ends the class re –teaching the parts of the lesson that were not understood well by class. The result: faster and accurate understanding of the concepts in class and consequently improvement in the overall academic performance of students.

Implementation Technologies Smart Classrooms integrate an array of technologies to achieve several multi-faceted goals. i.e., (a) enable distant teachers to becomes as effective as those who teach at local classrooms;(b) provide the students with an enhanced local class participation experience;(c) ensure system wide security; and (d) provide accessibility to past contents. In achieving these goals, the adopted technologies should facilitate multiple natural modalities for teaching, learning and class interactions. Furthermore, these must be accompanied by secured, reliable and high speed synchronous/asynchronous contents. The followings can be considered as the most important state-of-the-art technologies which can be used for the implementation of both current and future smart classrooms.

We all know how helpful it is to remember something that is taught visually to us rather than the one that is read through pages after pages. Just imagine, how beneficial would it be for students to understand a chapter visually in class. The concept of smart class education is indeed a blessing to the students of the 21st Century. Technology is changing the way life functions and if it's for the good, then why not go for it! Smart classes use all interactive modules like videos and

presentations and these visually attractive methods of teaching becomes appealing to students who are already struggling with the traditional method of teaching in a classroom. In fact, smart classes are almost like watching movies as sometimes, animated visuals are used to teach a point. This kind of visual is both eye-catching and young students can easily relate with them. This is because the audio-visual senses of students are targeted and it helps the students store the information fast and more effectively. And then, there is the advantage of utilising much of the time wasted earlier in drawing or preparing diagrams on board. Smartboards have all these information in memory and can be presented during the time of class lectures and thus, the time saved can be used in more important things.

Some students and teachers have problems with chalk dust and they tend to suffer from allergic reactions. The smart boards saves you from such distress and won't let you develop any health issues later. Smart boards are a lot smarter when it comes to field trips which is impossible with textbooks. A field trip to the deserts of Sahara or the rainforests of the Amazon basin becomes easy with visuals in the smartboards of smart classroom. These visuals are definitely more attractive than those descriptions in a few lines of a textbook.

One of the main reasons behind the constant increase in popularity of smart classes is the fact that this kind of education is perfect for all kinds of students. A classroom has students with varied power of understanding and learning, and studying from notes and other materials becomes difficult for some students. But the use of smart classes and modern technology eases the learning process for all students. Moreover, this kind of education in class promotes more interaction between teacher and student with more participation from both sides.

When you take the negative side of this kind of smart education, there are just a few when compared to the myriad advantages it offers to students. Some technical fault that might arise during a class lecture is a common concern among those lobbying against smart technologies in classroom education. Then, there is the costing factor as well that is preventing schools to adopt this technology. With smart education comes the problem of high cost of education. The possibilities or advantages of smart classrooms are endless. Although adopting such a new concept might be a tough decision for many, but the technology can create a new opening for the education sector.

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