INNOVATION OF COMPUTER TECHNOLOGY AND ITS IMPACT FOR THE CLASSROOM MANAGEMENT

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ABSTRACT

Most of the Indian Universities and Colleges have not recognized the importance of IT and IT related skills ie Computer based courses. Therefore, students are not getting opportunity to acquaint themselves with tools of Information Technology. The professional bodies, Trade Associations, Chambers of Commerce and Management Association have shown very little preference to associate universities in designing the framework for classroom management.

Technology has permeated many industries and professions, including education. Teachers can use technology to manage daily classroom activities such as presentation of lectures, attendance and grading. When using technology in the classroom, you should employ some classroom management strategies. Classroom management and technology together encompass both the utility of technology and its impact in the classroom. Computers are powerful, multifunctional tools that fulfill many roles at all levels of education. Computers are commonly used in education for applications such as communication, distributing education materials, remote learning, performing class work and admissions. In some cases computer use may even be an educational requirement; for instance, some graduate and professional schools require students to have laptop computers.

Keywords: Technology, Framework, Computer, Tools, Classroom management, Laptop

INTRODUCTION

The technological tools that students of today have at their disposal make the task of learning easier and allow for the creation of products that would once have been impossible. By integrating technology into their classroom, teachers can allow their students to reap the benefits that these technology tools offer and prepare to use technology in the real world. Technology has revolutionized the classroom but is not without its disadvantages--not in its use, but in what its use replaces. Many classrooms are being retrofitted with Smartboards and computers but they cannot replace old methods of teaching. When teaching using technology, instructors must be aware of the potential hindrances technology can bring to the learning process. Some negative effects of technology in today's classroom are that it can take away valuable learning time, it can be overused, and it can also turn educational experiences into games for students.

Technology is a powerful tool, and as it becomes more affordable, there are more opportunities for it to be used in both the pedagogical and administrative aspects of a

classroom. Online video provides a way to complement textbooks. Wikis and blogs are platforms that allow students to consume and produce their own content online -- as a group or individually. Lastly, teachers can use simple websites and spreadsheets to manage grading and classroom chores. With an investment in time and hardware, you can begin to explore the ways in which technology can enhance the way you teach and manage your classroom.

Managing a classroom can be difficult. Many products are designed to help teachers more effectively manage their classrooms. Classroom teachers are using technology in the classroom more frequently than ever before. According to the National School Boards Association, students who are exposed to a high volume of technology perform as well as expected on standardized test, however technology can potentially do students a disservice if used inappropriately. When teaching using technology, instructors must be aware of the potential hindrances technology can bring to the learning process. Some negative effects of technology in today's classroom are that it can take away valuable learning time, it can be overused, and it can also turn educational experiences into games for students.

OBJECTIVES

- To improve student learning through technology and improve staff's knowledge and skills to integrate technology into instruction.

- Improve decision-making, productivity, and efficiency at all levels of the organization through the use of technology

- Improve equitable access to appropriate technologies among all stakeholders

- Improve the instructional uses of technology through research and evaluation

- Adapt lesson to include technology and align standards

- Develop strategies to group students and how to manage different activities going on at same time also Develop plan for equitable use for all students including those with special needs

- Design, deliver, and assess a learning activity for a variety of student grouping strategies and evaluate and use teacher utility tools for classroom management

Uses of Computers in Education

Higher Education: All universities and colleges are furnished with computer labs. Because many professors require their students to turn in typed documents, it is more onvenient to have computer labs on campus for student use.

Faculty Usage: Teachers at all levels use computers to administer assignments, keep track of grades or offer online instruction. Many teachers use online resources in their daily lessons.

Online Education: There is an entire "sub-industry" of education called "online education." Online education is done primarily through the usage of computers and the Internet where the student does the classwork from home.

Self-Learning: In addition to books, video and other materials, self-directed learners often use computers to continue their education outside of, or in addition to, traditional facilities.

Social Networking: Popular networking sites like MySpace and Facebook can also be used for educational purposes, as some instructors integrate aspects of those sites into their lessons.

Student Usage: Self-Learning through internet, to make online assignments, to gather more information from search engine, classwork from home, for better communication.

Use of a Computer in the Education System

More than a White Board: Smart-Board, ActivBoard, Mimeo and Webster are a few of the brand names for interactive white boards. These electronic boards connect with the teacher's computer and can be used in different ways. For instance, if she takes notes on the interactive white board, then she can save those notes and provide them to students who missed class. Better yet, she can upload them to a school website, where that child or a parent can see them.

In a graphic way, the teacher can demonstrate what happens when you mix colors, divide numbers or create a virtual science experiment. The board also can provide interactive review games, where students match the correct answers or fill in the blanks. All of the white board companies have a website with lesson plans and suggestions. Teachers also can find lesson plans by searching the Internet or on teacher forums.

Discovery Using the Web: Another way of incorporating computers in the classroom is the use of online research projects, or webquests. As with interactive white boards, several online sites are available to teachers with hundreds of potential projects for their students, in all subject matters. Students are challenged to create utopian societies, time capsules, comic strips or find a career.

Simulations are another way to use computers in a classroom context. Such simulations provide a "real-life" experience with the stock market or using math in daily life. Lastly, virtual field trips bring far-flung places into the classroom. If you and your students can't travel to Colonial Williamsburg, you can visit history.org instead.

The E-Environment: Students already are using computers to connect. They use social networking sites such as MySpace, Facebook and Twitter to keep up to date with each other. The computer, far from being the anomaly it was in the 1980s and 1990s, is now a big part of their lives. Incorporating this tool into the classroom creates an environment that allows students from around the globe to help each other with schoolwork.

A Look Ahead: In the future, will we have brick-and-mortar schools, colleges and institutions? Or will students operate in a virtual classroom? Increasingly, students are participating in online or blended classes for as widely diverse reasons as earning a needed credit or taking an Advanced Placement course.

Role of Computers in Education

Effects: Computers are ubiquitous in the modern workplace; to help students prepare for future careers, assignments and class work in our schools often require the use of computers as well.

Communication: One of the primary roles of computers in education is to facilitate communication between students, teachers, administrators and parents. Email can allow teachers to contact students quickly without scheduling face to face meeting time.

Assignments can also be sent out via email and finished work can be submitted in a digital form as an email attachment rather than turning in a paper copy. Students may be expected to check their email regularly for class updates and assignments.

Benefits: Computers in education can be beneficial in several ways. They can increase the productivity of students by making tasks such as composing papers and research easier. They can make it easier for teachers to collect papers, grade them and send them back to students. Computers can also reduce the amount of paper necessary for education, since materials can be sent and viewed digitally.

Potential: Computers and the internet also create the potential for e-learning. E-learning is learning using educational materials that are available on the Internet. Many schools offer courses that take place exclusively online, with texts, assignments, quizzes and exams all accessible through a website. This can be a significant advantage for those with full time jobs or odd schedules as it allows the student to study at the times that are most convenient.

Considerations: Computers also play an important role in the admissions process in higher education. Many colleges and universities offer online applications and down loadable information and forms. In some cases, students may be required to apply using computers. For instance, many law schools require that prospective students apply online using a service that collects student information such as test scores, transcripts and letters of recommendation.

The Advantages of Technology in the Classroom

Accessing Information: Students once had to venture to the library and sort through stacks of books to find information. With the aid of technology, they can gather information almost instantly. Because the Internet allows students to gather information more rapidly, teachers can commonly squeeze more learning into their lessons.

Editing of Written Works: When students prepared papers by hand or on typewriters, they had to completely re-copy their papers to make necessary corrections. With technology, developing writers can simply make modifications digitally, adding sections, correcting spelling, or moving elements of a paper. This ability to edit more efficiently saves time that could be spent in other ways and reduces student frustration as they can more easily correct their mistakes.

Providing Supplementary Information: Teachers can easily enhance their lessons with technology. Instead of relying solely on the text book, teachers can use technology tools to present movies or audio recordings, locate and print out related articles or create slide show presentations to accompany lessons. Because technology makes supplementary material easier to gather and use, teachers are often more likely to provide educationally-rich supplementary materials to their students.

Communicating: Technology tools allow students to efficiently communicate with others across the globe. Through email, chat rooms, discussion boards and other digital communication methods, students can exchange ideas and information with others. This ease of communication allows for the development of an extensive community of learners all working towards the accomplishment of the same goal.

Motivating Students: Technology is often intriguing to students, leading to a higher degree of student motivation. When students tire of exploring standard written texts or composing

essays on paper, teachers can regain their interest by providing them with technology-rich lessons that allow them to use technology to learn and produce creative and dynamic products, such as digital movies or multi-media presentations. Because students are more interested in creating their intriguing works, they focus more attention on the completion of the task and, by connection, learn more.

The Disadvantages of Technology in Classroom

Lack of Support: A technology expert will be needed to troubleshoot problems. If schools, colleges and institutions cannot support the purchased technology, it essentially renders it useless in times of crisis or disrepair. Additionally, technology often needs frequent maintenance to keep it in good condition for use.

Inadequate Teaching Methodology: Technology does not have a place in classrooms where teachers have not been adequately trained in its implementation. While technology is fun and can add interest for students, it is not fully integrated until students are learning from technology and not just with technology.

Teaching theory behind technology education is called constructivism; teacher preparation programs or courses in educational technology teach the concepts of inquiry-based learning. In inquiry-based classrooms or lessons, students are encouraged to research topics under their own guidance and direction with teachers acting as facilitators. This type of thinking and teaching can take years to achieve, and it often requires great expense in terms of both money and time. To use technology most effectively, extensive professional development is required for the classroom teacher.

Time Lost: Because connection problems, downloading issues, policing software and other difficulties can cause road blocks when implementing a lesson in the technology based classroom, teachers sometimes they away from using it simply because of lack of time. It is one important reason why technology integration often fails in schools, colleges.

Upkeep and Maintenance Expenses: Outdated software and hardware components can be incompatible with available programs. Also, the cost of repairing broken equipment may be too expensive for school budgets. In order for a school to successfully implement technology, there must be a rolling replacement or updating plan in place to keep technology current and useful.

Incompatibility Issues: Many schools today have curricula and programs based on state or national assessments. The majority of these tests and measures are paper-and-pencil based in order to make them accessible for all students and schools. Because learning with technology involves typing input into a computer, there is a disconnect between the assessments that determine government funding and the use of technology in the classroom. To adequately prepare for these tests, students need practice with authentic assessments most closely imitating those of the standardized test.

Takes Away Learning Time: In today's classroom, teachers are pressed to make every minute count. If the teacher and students are not experienced with technology in the classroom, valuable time is often wasted on technical troubles.

Overuse: In some classrooms technology is overused. This can lead to a variety of problems. Many students learn best by physically and mentally interacting with what they are studying. If most of the teaching is done using a computer, these students' needs are not being met.

Technology should be used to supplement the classroom curriculum, but should not be used as the sole source of learning.

Classroom Management & Technology

Grade Book & Attendance: Technology makes managing your students' grades and attendance records easy. To manage grades, create a spreadsheet (using Microsoft Excel, Apple iWork, or Google Spreadsheets) with a new page for each subject that you teach. Add your class roster to the first column and the names of exams in the top row. Fill in the spreadsheet with their grades for each test. You can use a similar layout for attendance.

Homework & Tests: You can also use technology to help you manage homework and tests. Create a class website using free services such as Wikispaces or Google Sites. Create one page in the site that is used to list homework assignments and due dates. If you want to be a power-user, you can administer tests online. Create a multiple-choice test using the Gadgets feature in Google Docs. Embed the exam into a Wikispaces site. Your students can complete the test online, and their scores will automatically be calculated in a Google spreadsheet.

Classroom Chores: Many teachers assign their students classroom chores, usually on a rotating basis. One way to divide this labor fairly is to have a web page (on your class's website!) that keeps track of who should perform what chore on a given day. You can display a table that has the chores on the top row and the days of the week in the first column. Students can sign up for a different chore every day, ensuring that everyone takes a turn doing every task.

Classroom Layout: Once you have introduced technology, you must manage your classroom layout a little differently than you did without technology. For example, if you have one computer, think about whether it would be more useful in the front or the back of your classroom. If you have several computers, think about whether you will place them together in a cluster or spread them around the room. You must also consider the location of printers, scanners, projectors and any wires that you need to connect the computers to the Internet.

Access: Once you have computers in your classroom, you must make sure everyone gets to spend the same amount of time with them. If you don't have one computer for every child in your class, then you need to make sure all of your students get an equal amount of time to complete computer-based activities.

Technology Tools for Student and Classroom Management

Technology productivity tools:

- Students use technology tools to enhance learning, increase productivity, and promote creativity.

- Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.

Technology communications tools:

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.

- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Technology research tools:

- Students use technology to locate, evaluate, and collect information from a variety of sources.

- Students use technology tools to process data and report results.

- Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.

- Technology problem-solving and decision-making tools:

- Students use technology resources for solving problems and making informed decisions.

- Students employ technology in the development of strategies for solving problems in the real world.

Management through Music: If you have a computer with speakers, a CD player or, better yet, a computer hooked up to a projector with speakers, you can effectively use music to manage your classroom. At the beginning of the school year, teach students sound cues to do important tasks in the classroom. Music can be a cue to pack up belongings, get out a piece of a paper or do any number of activities in the classroom. The best part is, the teacher is not standing in the front of the room waiting for attention. Students know the cue and simply do the activity they have learned.

Online Timer: Teachers are often faced with the problem of students who take too long to get to work. That problem can be solved with digital timers that can be displayed on an LED projector. Simply give your students the task and your expectation for completion, and then set the timer. The students have a constant reminder of how long they have to complete the activity.

PowerPoint Notes and Reminders: One of the biggest frustrations of a teacher has to repeat yourself because students aren't listening or they've come into the room late or simply forgotten the directions you've given. No matter how hard teachers try, this repetition is going to be necessary. One solution is to create a PowerPoint that contains important information for the class period. When students ask -- "What page are we starting on?" -- point to the reminders.

Online Video in the Classroom: Using video in the classroom helps students retain information and understand difficult concepts. Teachers can use video in many different subject areas. One way to use video is find high-quality educational material produced by a station such as PBS. For example, on PBS' website, you can find grade-level appropriate videos about World War II to supplement a history lesson. If you are teaching about the Picasso, you can find videos on YouTube from the Picasso Museum in Paris. And if you are teaching a language, you can find short video clips that will help your students practice their listening skills.

Group Projects: A wiki is a website to which members can make changes without having to use sophisticated computer programming. Wikipedia is probably the most well-known wiki

on the web. Companies like Wiki spaces provide free wikis to educators who wish to have a wiki for their classroom. You can use a wiki for group writing projects, close reading and annotation of poetry or excerpts from longer texts and projects in which students are compiling audio, video, images and text. You and your students can edit pages, make new pages, add images (or other files) and create links to other websites. When you work in a wiki, it tracks changes by user and date, which can make it easier for you to grade group projects fairly.

Blogs: Blogs are most often used for one author (the teacher) to present information to many viewers (the students). In a classroom setting, you can use blogs in several ways. Teachers can post the text of an essay and require their students to post their reactions in the comments section of the blog. In a language class, the teacher can post a video in the language that is being studied, along with a series of questions about the video. Students practice their listening skills, and then practice their writing skills by responding to the questions. On a blog, students' comments can be seen by everyone else in the class, encouraging students to submit high-quality work and learn from each other's work.

Managing Chores: Many teachers have their student's complete daily or weekly chores in the classroom. Technology can help you organize this schedule. You can have a class website where you post the list of tasks along with the students assigned to that task for a given week. At the end of each week, you can rotate the students' names up or down the list to ensure that everyone takes a turn at all of the chores.

Classroom Management Strategies

- Why use computer technology in the classroom? What is its purpose? Most often, computers are seen as something extra to work on once the class work is completed. Computers used in this format are often used to practice specific skills, reinforce, or extend a skill that is being taught in the classroom. Most often there is some sort of software that students will use to work on specific skills. However, technology can also be used in ways that will help students and teachers accomplish something better, faster, neater, more efficiently, and more in depth. We can teach our students to use computers as a tool, just as they might use a protractor or compass as tools in Geometry. When computers are used as tools, you are using some sort of productivity software: Hyperstudio, Kidpiz, and PowerPoint are three examples of productivity software. When using computers as a tool, students are creating a product such as a word processed document, charts and graphs, a piece of art, or a multimedia presentation.

- Which philosophy will you use with your students? Most literature suggests some of both; they both have their own place within a technologically oriented classroom.

- Once you've decided to have students create a product using computers as tools, you'll find the need for certain management strategies.

- "What do I do with only one computer and 20 or 30 students?"

- "What does the rest of the class work on while other students are working at the computer?"

- "How do I teach or work with a class, when a student has problems or questions on the computer?"

- "What do I do when the computer crashes or simply won't work?"

- A variety of strategies will be presented. Choose the ones that work best into your current classroom management system.Strategies are divided into three categories.

- There is some overlap between categories;

Organization		Management	Student Expectations
One Computer	**Multiple Computers**	Mini Lessons Software Tips /Posters Computer placement	Rules/ Behavior
Binders Scheduling Planning	Scheduling Binders	Storage/ File Management Saving Students as Teachers Acceptable Use Policies	Getting Help Acceptable Use Policies

Technology Foundation Standards for Students

Basic operations and concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems

- Students are proficient in the use of technology.

Social, ethical, and human issues

- Students understand the ethical, cultural, and societal issues related to technology.

- Students practice responsible use of technology systems, information, and software.

- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

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