

EDUCATION AND TEACHING IN THE INFORMATION AGE

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ABSTRACT

Alterations have been made to numerous aspects of the educational system as a result of the progression of time as well as advances in technical capability. The shift from the traditional teaching style and methodology was put into practice by the educators. The traditional method of teaching with a blackboard is rapidly being replaced with sessions that are more participatory between the teacher and the students. The rapid advancement of information technology has made it necessary to alter the educational process as well as its goal. This has required the creation of new pedagogical technologies as well as the introduction of techniques and means of instruction that are more efficient. As a result of recent advancements in technology, there is now a window of opportunity to implement instructional practices that are more productive in the classroom. Today, one of the most prominent methods of instruction is the use of multimedia. In this paper we reviewed the competitive advantage of traditional and Contemporary Teaching methods in school educations system.

Keywords: *Educations System, Contemporary Teaching Methods, Pedagogical Technologies, Information Technology.*

Introduction

Education is a process that continues throughout one's life and touches all facets of that person's existence. Education is the process of shaping the quality of life, which in turn improves the quality of both society and the universe as a whole. An educational institution is known as a school, and its primary purpose is to instruct students while the instructors serve as the guides.

Students in ancient times used to live in places called Gurukuls, which were run by teachers who had the full time and obligation to mold their students' lives for the development of both the students and society. Then, as time went on, the system evolved into schooling, in which pupils went to a designated building for a predetermined amount of time and listened to a lecture while their teacher utilized a blackboard and chalk to help them comprehend the material being taught. In the traditional educational model, teachers were in charge of the majority of the instructional tasks in the classroom. Their primary objective was to ensure that pupils retained all of the information they presented within the allotted amount of time.

In the early 1990s, the idea of using multiple media formats was first introduced. The term "multimedia" can also be used to refer to computer media. The term "multimedia" refers to the combination of various types of media. This contains not only text but also graphics, audio, and video, among other things. A presentation that includes both audio and video clips would be an illustration of what is known as a "multimedia presentation." The term "multimedia software" refers to a type of educational program that combines elements such as animations, sound, and text. Multimedia improves

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the user experience by presenting the information in a variety of ways, which makes it simpler and easier to understand. Multimedia also makes it go by more quickly. The days when a school would have a separate audio-visual department in a separate building are long gone. In the most recent few years, there has been a noticeable acceleration in the spread of the use of multimedia within the educational sector, and it appears that this trend will continue to expand in the years to come. The use of multimedia in education has the potential to make the teaching-learning process more efficient, entertaining, and approachable. This makes multimedia a universal means.

Access to learning materials, which may assist idea development in learners in a variety of ways to match the unique requirements of individual learners, is the most important thing that teachers need. The emergence of new learning technologies that make use of multimedia presents new opportunities for education to take place not only in classrooms but also in homes. Teachers now have access to multimedia learning materials, which not only encourage the formation of positive concepts but also make it possible for them to concentrate more on their role as a learning facilitator while they are dealing with individual students. Innovative teaching strategies that make use of multimedia tools and resources have emerged in recent years as a direct result of developments in computing technology and other forms of electronic media. These developments have contributed to an increase in the likelihood that students will receive an education of sufficient caliber. The use of multimedia in classroom instruction and student learning is now considered to be standard practice in the field of education. The traditional lecture hall has been replaced by a digital environment known as a smart class.

The all-encompassing solution known as "Smart class" was developed to aid educators working in private schools in overcoming the challenges they face on a daily basis in the classroom and improving their pupils' academic performance through the use of technology in a way that is straightforward, applicable, and significant. Additionally, it enables educators to rapidly analyse and evaluate the learning that their pupils have accomplished while in the classroom setting. Smart class is driven by a massive reservoir of digital teaching materials that have been meticulously mapped to match the specific goals that have been outlined by various state learning standards. The content repository is comprised of thousands of highly animated, lesson-specific, 2D and 3D multimedia modules that were developed with an Instructor-led design. This design enables the instructor to effectively transact the lesson in a typical classroom setting that contains a diverse set of students. Teachers now have access to a library of educational movies sourced from the Eureka and Discovery channels to utilize in their classrooms. The modules are embedded in a template, which gives the instructors the ability to teach a selected lesson to their students in class, frame by frame, using an animated set of visuals that is both engaging and instructionally sound, all while maintaining full control over the pace at which the material is presented.

It ensures that teachers have uninterrupted quality time with students while dealing with educational concepts. The Smart Class Multimedia System aids in developing an easy yet effective control and communications system for teachers in the computer lab. This solution will increase the overall quality of the educational experience by enhancing traditional teaching strategies with contemporary technological tools, as well as by exposing youngsters to a plethora of knowledge and interactive learning strategies.

Literature Review

It is not enough for teachers to simply be aware of the desired outcome; they should also be aware of the means by which their goals can be accomplished, or more specifically, which instructional strategies should be utilized. Therefore, what is the most effective approach? In the latter half of the 20th century, the Albanian educational system and its teaching practices came to international attention for its adherence to a number of time-honoured practices. The goal of this mode of instruction is to facilitate the learning of new information by communicating facts and rules while also utilizing activities. However, in today's educational systems, it is necessary to communicate ideas, models, and abstractions through the use of methods that place an emphasis on finding solutions to problems. Both of these approaches to teaching should be used in the classroom, with a focus on using a variety of instructional tools to instil in students the ability to solve issues, as well as to think critically and collaborate effectively. The explanation for this is quite straightforward: technologically advanced societies require people who are not only able to memorize facts, which is something that computers are quite good at doing, but who are also able to easily understand the information that they require, are able to effectively apply it, and make use of it throughout their entire lives. This is the reason why it is vital for teachers to initially be capable of knowing and comparing models, as well as to be able to develop their own teaching and learning processes, basing them on the fundamental information and desires associated to them.

Traditional Teaching Methods

Traditional teaching, which is a method that has been employed by many teachers over their many years of experience in education, involves the transmission of fundamental scientific information through the direct lecturing of teachers and the provision of guidelines by those same professors. This approach places an emphasis on the leadership role that instructors play throughout the learning process by making the classroom the focal point of instruction at all times. Students have the expectation that they will learn through listening to and taking notes during lectures. Evaluations in the form of tests and examinations are the most reliable methods for gauging the level of information acquired by pupils and the most effective measuring tools overall. The students are divided into two groups, A and B, and given two distinct types of tests to complete in the same classroom in which they sit. The majority of the questions on the test were drawn from essential sources such as school textbooks that were pertinent to the subjects that were being taught.

The instructors have discussions about the topic at hand with the students, and they anticipate that the students will learn everything from the lectures that take place during class time. Traditional teaching has been at the centre of the activities that take place in schools for thousands of years. It has shaped the brains of erudite people, artists, and ordinary men and women alike... When people were younger, they were expected to sit still throughout formal schooling, which consisted of the instructor and a group of students collected together in a certain classroom. Students obtain the knowledge they require to be successful in life through the use of the conventional modes of instruction in the formal education that they receive. Traditional teaching methods have been regarded favourably for a long time and have been shown to be effective; however, they do have a few drawbacks as well, particularly when compared to the scale of development that exists today. Technology has greatly improved teaching effectiveness, making teaching and learning processes more appealing and enjoyable by enhancing interactive relations among students as well as by means of the scientific and educational information that schools provide. Traditional teaching methods have been regarded favourably for a long time and have been shown to be successful.

Modern Teaching Methods

In today's world, outstanding achievements in all areas of science, in technique and technology, as well as in other areas of human development, are continually inducing more and more profound changes in the organization of the teaching processes. The goals of these changes are to improve the effectiveness of education and to make it simpler for students to acquire the knowledge, skills, and desires that they seek. These kind of shifts are being made in an effort to better equip younger generations to deal with the challenges of the 21st century, as well as to equip them with the skills necessary to compete successfully in the labour market. Changes have begun to take place in the organization of classes, the application of new teaching techniques and interactive methods, etc., in order to make use of the contemporary teaching methods at all levels of education. These changes were brought about in order to make use of the contemporary teaching methods. Despite this, there were significant shifts made to the ways in which the teaching activities were organized.

First and foremost, the ability of the teachers in a particular classroom to retain and increase the students' interest in what is being taught is essential to the success of the instruction that takes place in that room. There has been a significant increase in the engagement of communities in order to bring about changes in education. Millions of Euros have been spent on the training and qualification of teachers in order to further develop their capabilities and to integrate them in the educational currents that are taking place worldwide. It is indisputable that education is a challenge that must be confronted and rebuked in order to discover the most suitable means for the education of younger generations who will be responsible for the destinies of the countries of the globe as a whole in the future. This is the case in all of the societies of the world. Teachers are staying the course toward growth, which is even being backed by the revisions to the curricula that the Albanian state has planned for the future. These alterations call for an appropriate implementation of the New Curricula as well as ongoing professional development opportunities for educators in order to make a contribution to an improvement in the overall level of quality within the realm of education.

Changes in the roles of both instructors and students are necessitated as a result of the incorporation of the surrounding communities into the day-to-day operations of the school, in addition to the interplay of a wide variety of additional educational considerations. Teachers who are themselves creative should be able to recognize their students' creative potential and put it to good use. To do this, they should encourage their pupils to think creatively and avoid relying solely on textbooks and other conventional teaching techniques.

Kumar, K.S. Kiran (2011) conducted research to investigate the impact of incorporating multimedia into grammar instruction for students attending secondary schools in rural areas. Research has shown that using a multimedia presentation can improve a student's overall performance. As a result, using a multimedia presentation is an innovative approach to the teaching-learning process because it enables endless drill and practice without the need for repetition, and it provides the learner with immediate feedback on his or her progression.

Jadal, M. M.(2011) conducted research into the efficacy of incorporating computers into English instruction. It was discovered that pupils in the experimental group who were taught English via computers were more successful in their academic endeavours.

T.Enok, Joel (2011) conducted research on the impact that multimedia has on students' attitudes toward computer science at the secondary level. The perspective people have toward computer science can be affected by the multimedia package. It has been observed that the manner of teaching, in conjunction with the use of contemporary instruments, plays an important role in the development of students' attitudes.

Vansia, Falguni S. (2011) a study titled "Development and Effectiveness of Computer-Based Learning Programme in Teaching Mathematics" was looked into and reported on. The Computer-Based Learning (CBL) Programme that develops in Mathematics is the focus of this study. Students in both urban and rural areas should participate in this program so that its efficacy may be evaluated. The efficiency of the CBL approach was discovered to be significantly higher in comparison to the students' achievement scores.

Singh, Y. G. (2010) conducted An Investigation on How Effective a Multimedia Program Is in the Classroom of Biology. The purpose of the research was to create a multimedia program for the instruction of biology, test the program on a group of students who were enrolled in the twelfth grade, and determine whether or not it was more effective than the conventional technique of instructing. The design for this study consisted of using pre-test groups and post-test groups that were equivalent. According to the findings of the study, students who learn via the use of multimedia programs perform significantly better than students who learn through the more conventional methods of instruction.

Jing, Liu (2010) conducted a controlled experiment to investigate the efficacy of incorporating multimedia into college-level English instruction. The purpose of this study is to investigate, through the use of empirical research and qualitative analysis, whether or not multimedia assisted teaching approaches are beneficial in college English classrooms. It would appear, and the results of a few studies have demonstrated, that learning English can be facilitated more efficiently through the use of approaches that make use of multimedia. The findings of this investigation, however, do not provide supportive evidence for the concept presented earlier.

Acha, J. (2009) carried out some research. The efficiency of children's vocabulary learning with the use of various types of multimedia programs. The current study used children's self-guided multimedia programs to explore the impact of three distinct presentation formats on their vocabulary acquisition. In this investigation, 135 kids in the third and fourth grades were exposed to a brief narrative in the English language that was delivered by means of a computer application. The narrative contained twelve previously undiscovered words, which were referred to as "key words." For the purpose of facilitating the students' comprehension of the twelve key terms, they were provided with verbal annotations (written translation), visual annotations (image depiction), and a mix of the two types of annotations. Students who were solely given verbal annotations had the greatest amount of success in recalling word translations. These findings imply that there is room for improvement in the efficiency of self-learning multimedia applications in the process of acquiring vocabulary in a second language.

Ellaisamy, M.(2007) a study on the effectiveness of using a multimedia approach to teaching science at the upper primary level was carried out. At the end of the upper elementary level, the students in the experimental group obtained higher levels of success in science than the students in the control group. When it comes to their scientific mindset, the students in the experimental group have shown greater growth than the students in the control group. This is because of the beneficial impact that taking a multimedia approach to learning has on the education of students in the eighth grade.

Kannan, M. (2007) carried out some research. An Investigation into How Effectively the Application of Computer Technology Can Be Used to Teach the Ideas Behind Physics to Senior Secondary Students. Teaching physics ideas at the senior secondary level via computer-assisted instruction is the most effective way currently available. Students won't be able to acquire a significant amount of useful knowledge about physics ideas by the use of computer technology alone, without the assistance of a teacher or through the more conventional approach to the subject matter's instruction.

Desai, Beena Y. (2004) did a study comparing the effectiveness of teaching home economics using the conventional approach and the multimedia strategy. The subject of the study was home economics. This is an experimental study that makes use of a design that includes both experimental groups and control groups. Smt. J.P. Shroff Arts College in Valsad provided the participants for the study, all of whom were in their first year of the Bachelor of Arts program in home science (2001-2002). It was discovered that the students had positive attitudes regarding the use of the multimedia approach. According to the findings of the research, there is not a significant difference in the effectiveness of instructing students in the topic of Home Science using either the conventional technique or the multimedia strategy.

Justification and Relevance of the Study

The field of multimedia has been the subject of a significant number of studies, both in India and elsewhere in the world. Researchers Acha (2009), Jadal (2011), and Kumar (2011), among others, have investigated the efficacy of incorporating multimedia into English instruction and discovered favorable results. The findings of a study that Ellaisamy (2007) did on the effectiveness of adopting a multimedia approach in the classroom demonstrated that this method of instruction is successful. Research on the use of multimedia in home economics was carried out by Desai (2004), who reported that the research was successful. Vansia (2011) discovered a positive outcome after conducting a study on the development and usefulness of computer-based learning programs in the classroom for the purpose of teaching mathematics. To this day, researchers in a wide variety of fields have conducted a large number of studies to investigate the efficacy of multimedia. The majority of the findings point to good outcomes, with students exhibiting positive attitudes toward novel instructional approaches. The majority of the studies imply that using a multimedia approach to teaching is more effective than using a traditional approach. Taking into consideration the results of the experiment, a number of educational institutions have used a multimedia approach to instruction in their classrooms. Over the course of the past several years, an increase in the number of efforts made to produce and use materials based on multimedia for teaching in theory and practice has been seen. It gives rise to a new way of educating and being educated.

The researcher is very interested in finding out whether or not the multimedia method to teaching is, in fact, as successful as the majority of researchers claim it to be. When a multimedia approach to instruction is utilized widely and on a consistent basis in the classroom, the results of research may be completely unrelatable to the actual classroom setting. Altering the manner in which content is delivered can, in most cases, result in an improvement in performance. Students will often respond positively to something simply for the fact that it is novel, even if it does not help them learn the subject matter any better. For instance, if a lecturer decides to alter the way they present their lectures, students' overall learning will almost certainly improve. The learning of the students is improved by a change that can be considered "appropriate."

Conclusion

Students are more motivated to study when they believe the instructor is giving them attention that is more personalized than that given to other students. The new procedures eventually became the standard, which led to a reduction in the increased learning. As a result, it is entirely possible that the use of multimedia in the classroom will become less successful as more students begin to view it as the standard. As a result, the researcher has come to the conclusion that it is necessary to carry out this study in order to determine how successful the use of multimedia in educational settings is. Will it continue to be efficient even if it is implemented broadly and persistently in schools as the standard?

In addition, developing nations such as India may not have the resources necessary to provide multimedia facilities in all of their schools, which leaves the vast majority of pupils without access to such a resource. Even if the facilities are there, there is a possibility that there will not be enough trained personnel. Because there is no shortage of qualified educators in our nation, the funds that are currently being spent on providing access to multimedia may be put to better use by employing those educators. Since multimedia will never be able to take the position of a teacher, adjusting the number of students to teachers might look like the preferable choice.

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