

M.Ed. 2nd Sem.

Paper CC5 : Educational Studies and Education

Unit : 3

Topic : Role of Media and Technology in Education

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Summary

Media and technology in education has many approaches, but there are two major approaches for using media and technology in education. First students learn ‘from’ media and technology, and second, they can learn ‘with’ media and technology. Learning from media and technology is often referred as integrated learning system. Learning with technology is referred as constructivist learning environments.

Regardless of the approach, media and technology have been introduced into schools because it is believed to have positive effects on teaching and learning. The purpose of this summarizes the evidence for the effectiveness and impact of media and technology in education globally.

The principle of the paper is to define, media as ‘all means of communication in whatever its format.’ In this sense, media include diverse system such as print, graphics, animation, audio and motion pictures. Meanwhile, technology is defined as ‘process of human origin that used to convey media.’ In this sense, technology includes books, films television and Internet.

With respect to education, media is the symbol systems that teachers and students use to represent knowledge, while technologies are the tools that allow them to share their knowledge representations with others.

One of the major reasons for the widespread attention focused on media and technology in education today is the enormous financial investment being made in media and technology in education around the world.

Media and technology have many other advantages in terms of repeatability, transportability, and increased equity of access. In addition, although the research evidence is

sparse, the cost-effectiveness, cost-benefit, and return-on-investment of media and technology may be of great benefit under certain conditions, especially in developing countries.

The paper presented the important distinctions between media and technology with the former defined as a means of symbols system for human communication and finally as a tool for the transmission of media. The paper also describes several major reasons for the widespread attention focused on media and technology in today's education.

Introduction

Media and technology in education has many approaches, but there are two major approaches for using media and technology in education. First students learn *from* media and technology, and second, they can learn *with* media and technology. Learning *from* media and technology is often referred as integrated learning system. Learning *with* technology is referred as constructivist learning environments.

Currently, the education system is undergoing rapid changes. Various new methods are introduced and used. Further, it makes teaching more effective and learning is highly significant. Inevitable, the media has been dominating in all aspects of life. Every individual is surrounded by various media such as books, magazines and internet.

Television and computer are the two primary technologies used in education. However, there is insufficient evidence that television viewing changes academic activities such as reading or assignment work and thereby has a negative impact on educational achievement. Meanwhile computers as tutors have positive effects on learning as measured by standardized achievement tests, are more motivating for students, are accepted by more teachers than other technologies, and are widely supported by administrators, parents, politicians, and the public in general.

Overall, the differences that have been found between media and technology as tutors and human teachers have been modest and inconsistent. It appears that the larger value of media and technology as tutors helps to motivate students, increase equity of access, and reduce the time needed to accomplish a given set of goals.

Computer-based cognitive tools have been intentionally adapted or developed to function as intellectual partners to enable and facilitate critical thinking and higher order learning. Examples of cognitive tools include: databases, spreadsheets, semantic networks, expert systems, communications software such as teleconferencing programs, on-line collaborative knowledge construction environments, multimedia/hypermedia construction software, and computer programming languages.

In the cognitive tools approach, media and technology are given directly to learners to use for representing and expressing what they know. Learners themselves function as designers using media and technology as tools for analyzing the world, accessing and interpreting information, organizing their personal knowledge, and representing what they know to others.

Development of technology in education has ability to answer the questions about the impact of technology in reconstruct the education system and the use of technology, in line with learning theory. While expanded use of computer facilities and other mass media will led to the rapid transfer of information.

Importance of Media and Technology in Education

Why media and technology has created so much attention in education? With respect to media, there are many issues concerning to students, parents, educators, governments and society as well. While, with respect to technology, people want to know whether various new technologies are more effective for teaching and learning than more traditional classroom approaches, whether some technologies are more motivating than others, or at the very least, whether technologies can be used to increase access or reduce costs within education.

Questions about the impact of media and technology in terms of increasing access to education and reducing the costs of education are especially high on the agendas of politicians and government agencies around the world.

Another reason for the attention being paid to media and technology in education reflects commercial or corporate interests. Although printed material continues to be the dominant medium format, but educational spending globally should be assigned for technology-related expenditures.

Similar investments are underway throughout the world, in both developed and developing countries. It is no wonder that global corporations are investing in large-scale educational technology initiatives.

Still another reason for the focus on media and education stems from sharp disagreements about the value of media and technology in education. Enthusiastic endorsements of new media and technologies in education are easy to find in news reports, political speeches, and other sources. Many of these proclamations seem overly-optimistic if not hyperbolic.

Role of Multimedia Technology in Education

Multimedia is the integration of various media such as text, numeric, graphics, images, video, animation and sound in a digital environment, and has the ability to enable users to achieve interactivity requirements without the sequence.

Multimedia is a combination of two or more types of media to create a sequence of programs that are effective in conveying an idea, with the assistance of both sound and visual. Computer simulators are used in education to help students understand and comprehend specific topics. Multimedia is the use of computers to present and integrate text, audio, video with links and tools that allow users to navigate, interaction, creation and communication.

It is well known that teaching can be vastly amplified when it is not done purely theoretically, but visually and interactively instead. This way, students can obtain a deeper understanding of the subject being taught. Learning is an activity that leads to change and control of what is taught, while teaching is a practical activity or action, be intentional and conscious to assist learning.

Media and technology in education could be easily deduced that teachers use computer for teaching and learning. They use the computer to impart knowledge in the classroom, create variety, conduct activities, easily deliver their wordy explanations and instill interest in the lesson they are teaching. The computer gives teachers the confidence in the classroom as they are not looked down by their students as obsolete and old fashioned. They prove to the contemporary generation that they too know modern technology and are not left behind time.

Furthermore, infusion gave the students the ability to infer differently and develop abilities in analysis, synthesis and imagination. Teaching and learning process is event that occurred in the classroom with the following characteristics;

- The purpose, content and approach are planned in advance by the teacher.
- Learning-oriented guidance of a teacher.
- Teaching in a large or small groups according to levels of schooling.
- Assessment in the form of test or examination to assess the effects of teaching and learning outcomes.

Conclusion

Media and technology have many other advantages in terms of repeatability, transportability and increased equity of access. In addition media and technology for educational development is a great benefit under certain conditions, especially in developing countries.

Computer usage stimulates effective learning and improves the performance of students, and also enhances high level of interactivity among students. Focusing on television and computer-based instruction, it is known that media and technology can be effective tutors, although the question of whether media and technology enable learning more than traditional classroom methods has remains unresolved.

Differences that have been found between technology as tutors and teachers have been modest and inconsistent. It appears that the larger value of media and technology as tutors rests in their capacity to motivate students, increase equity of access, and reduce the time needed to accomplish a given set of objectives.

However, it has summarized that what we know about the impact of media and technology in education. Meanwhile it is difficult to answer the question about media and technology work well than other approaches or which applications of media and technology will have the most impact.

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