Review Article

The Impact of Digital Technology on Secondary Education

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Abstract

Traditionally education is centered on sources such as schools, teachers and print media. The learners reached the information sources by enrolling with schools, teachers and libraries. Advances in digital technology have opened up many avenues of learning. Most of the resources use on the computer and internet is made with code. Programming is a core element of the digital technologies curriculum because it helps students develop essential skills such as problem solving, logic and critical thinking.

Keywords: The Impact of Digital Technology, Education, critical thinking.

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Introduction

By digital technology we mean the use of computer and technology assisted strategies to support learning within schools. Technology for students, where learner use programs or application designed for problem solving or open ended learning and technology for teachers, such as interactive whiteboards or learning platforms. Digital technology approaches often require additional training and support for teachers which can be essential in ensuring the technology in properly used and learning gains are made.

Traditionally education is centered on sources such as schools, teachers and print media. The learners reached the information sources by enrolling with schools, teachers and libraries. Prior to the digital, era, information was not accessible by the majority of people and even those accessed were unable to obtain current information with respect to today’s context. The modern society wants to know the information as it happens and when it happens and the word is moving from n information society to a knowledge society. Thus education is given the highest priority and brainpower is becoming the most valuable asset of an organization.

Most of the resources use on the computer and internet are made with code. Programming is a core element of the digital technologies curriculum because it helps students develop essential skills such as problem solving, logic and critical thinking. Digital Education system is software and hardware integrated system, which will automate almost all the activities in the organization. It has been developed to overcome the problems faced by traditional education system.
By digital technology we mean the use of computer and technology assisted strategies to support learning within schools. Approaches in this area vary widely, but generally involve:

- Technologies for students, where learners use programmes or application designed for problem solving or open ended learning.
- Technology for teachers, such as interactive white boards or learning platforms.

Evidence suggests that technology approaches should be used to supplement other teaching, rather than replace more traditional approaches. It is unlikely that particular technologies bring about changes in teaching and learning interactions. For example they can support teachers to provide more effective feedback or use more helpful representations, or they can motivate students to practice more.

Studies suggests that approaches which individualize learning with technology (such as one to one laptop provision where pupils work through learning activities at their own pace, or individual use of drill and practice software) may not be as helpful as small group learning with technology or the collaborative use of technology.

Digital technology approaches often require additional training and support for teachers which can be essential in ensuring the technology improperly used and learning gains are made.

**Concept of Secondary Education**
A school intermediate between elementary school and college and usually offering general, technical, vocational or college preparatory courses. Secondary education covers two phases on the international standard classification of education scale level 2 or lower secondary education is considered the second and final phase of basic education and level 3 (upper) secondary education is the stage before tertiary education.

Every country aims to provide basic education, but the systems and terminology remain unique to them. Secondary education typically takes place after six years of primary education and is followed by higher education, vocational education or employment. Like primary education, in most countries secondary education is compulsory, at least until the age of 16. Children typically enter the lower secondary phase around age 11. Compulsory education sometime extends to age 19. Secondary education is in most countries the phase in the education continuum responsible for the development of the young during their adolescence, the most rapid phase of their physical, mental and emotional growth. It is at this very education level, particularly in its first cycle, where values and attitudes formed at primary school are more firmly ingrained alongside the acquisition of knowledge and skills.

India has primarily 4 boards of school education, namely CBSE, ICSE, STATE Boards and IB. A brief intro to education boards in India is below:

**CBSE Board**
Central board of secondary education (CBSE) is the most popular school board in India with over 9000 CBSE affiliated schools in the country and presence in 21...
nations across the globe. The stress in this board is on application of science and mathematics related subjects.

ICSE BOARD
The Indian Certificate Of Secondary Education (ICSE) is an examination conducted by the Council For The Indian School Certificate Examination, a private board of school education in India. It has been designed to provide an examination in a course of general education, in accordance with the recommendations of the New Education Policy 1986(INDIA), through the medium of English.

IB Board
International Baccalaureate (IB) is a non-profit educational foundation that was founded in 1968 and now works with over 3000 schools in 141 countries. The board is gaining prevalence in high end new schools in India. Currently limited to the metro and large Tier-I cities in India. Their vision is on all round development of the student into an inquiring, caring and knowledgeable young individual.

State Boards
State education is inclusive, both in its treatment of students and in that enfranchisement for the government of public education is as broad as for government generally.

Some of the states boards of education are as follows:

1. Andhra Pradesh Board of Secondary Education
2. Andhra Pradesh Board of Intermediate Education
3. Andhra Pradesh open school society
4. Board of Higher secondary education Delhi

5. Assam higher secondary education council
6. Assam state open school
7. Bihar board of open schooling and examination
8. Bihar Sanskrit shiksha board
9. Bihar school examination board
10. Central board of secondary education
11. Central board of education ,AJMER,DELHI
12. Chhattisgarh board of secondary education
13. Council for the Indian school certificate examinations
14. Grameen mukt vidyalaya shiksha sansthan
15. Goa board of secondary & higher secondary education
16. Board of high school and intermediate education Uttar Pradesh

Role of Digital Education in Schools
Researchers have reached to this conclusion that technology integration involves the educators and students seamless use of technology as a tool to complete a task in a disciplined study that promotes higher order thinking skills. The incorporation of technology in the classroom is a process that involves change in an educational system and occurs over a period of time.

The combination of the Internet and multimedia make it possible that digital classrooms adjust many forms of distance learning. Classrooms too, can be thought of as a platform, and they certainly are no exception to increasing amounts of research and the pervasiveness of multimedia. The digital classroom is quickly spreading into many campuses and is increasing in visibility. The attainment of this goal entails a reform in an
educator’s method for the delivery of instruction with student.

Digital learning is replacing traditional educational methods more and more each day. With how rapidly classrooms are changing and it is best to forget methods we may remember. The inclusion of digital learning in the classrooms can vary from simply using tablets instead of paper to using elaborate software programs and equipment as opposed to the simple pen.

Children also develop positive feelings of accomplishments from mastering new knowledge and skills using digitized learning tools giving them the confidence they need to want to learn even more new things. It is commendable that millions of courses by the best educators are available for free to anyone with an internet connection. The possibilities are endless.

Technology evolution plays a pivotal role in improving numerous aspects in the education space. Implementation of digital technology in education necessitates substantial investment and supports the use of education-related apps and social media. It enables easy learning by providing access to mobile devices, which helps students meet defined standards as well as challenges. Several learning management systems help students to learn the creative way, complete assignments with ease, perform better research, explore electronic methods and utilize wireless technology to integrate teaching and learning. Students can now better meet the required expectations.

- 42% of the teachers use at least one digital device everyday while teaching.
- 88% of the schools have the mobile phone and digital device policy and 46% of the schools provide mobile applications to students for learning.
- Education today believes that technology creates a positive impact by increasing the interest level of student.
- Students are more interested in smart digital learning compared to classroom learning, as it helps them learn things practically and deliver assignments innovatively.

Impact of Digital Technology on Teacher Practice

Digital technology classrooms require a shift from a teacher-centered to student-centered environment where the instructor must take on multiple new roles. The constructivist theory that supports asynchronous learning demands that instructors become more than dispensers of knowledge; it requires that they become instructional designers, facilitators, and assessors of both grades and their teaching methods. As instructional designers, emphasis is placed on establishing the curriculum, methods, and the media through which the content will be effectively delivered. Once the design is in place and executed, the instructor must then facilitate the communication and direct the learning. Through this project, teachers became involved in building their knowledge base. They took an active role by determining a wider vision for their learning journey, taking part in the process from start to finish.

Impact of Digital Technology on Students

The student-centered nature of asynchronous online learning requires students to be actively involved with and take more responsibility for their own
learning. In addition their normal duties as learners, students are required to

- Become proficient with the technology required for the course.
- Use new methods of communication with both peers and instructors.
- Strengthen their interdependency through collaboration with their peers.

**Conclusion**

Digital classrooms are considered as the vital element in promoting and improving the traditional methods of teaching and learning. So all schools and universities focus on it, and try to attract more virtual students. So they apply the most friendly user software and technology with skillful teachers and engineers to fulfill this aim. In fact digital class transforms the education process, and cause universal interactivity between teacher and learners as well as among learners themselves, all around the world. This global interactivity cause mutual understanding between teacher and learner, and among the learners. It also causes more adjustability of materials and methods, which are used in the process of education. So different educational organizations enter a competitive situation for promoting their materials and methods and the result is the improvement of learning and educational process.

**References**