PARADIGM SHIFT - The Role of Educational Technology and Internet in Indian Education System

Namreen Asif V. A. [1] & Niyaz Panakaje [2]

[1] Research Scholar, Institute of Management & Commerce, Srinivas University, Mangalore India- 575001,
ORCID ID: 0000-0001-8533-4488; E-mail: namreenasif@gmail.com
[2] Associate Professor & Research Guide, Institute of Management & Commerce, Srinivas University, Mangalore, India- 575001,
ORCID ID: 0000-0003-4568; E-mail: niyaz0191@gmail.com

How to Cite this Paper:
Namreen Asif, V. A., & Panakaje, N., (2022). PARADIGM SHIFT - The Role of Educational Technology and Internet in Indian Education System. *International Journal of Case Studies in Business, IT, and Education (IJCSBE), 6*(2), 930-944. DOI: https://doi.org/10.5281/zenodo.7508889

© With Authors.

PARADIGM SHIFT - The Role of Educational Technology and Internet in Indian Education System

Namreen Asif V. A. [1] & Niyaz Panakaje [2]

[1] Research Scholar, Institute of Management & Commerce, Srinivas University, Mangalore India- 575001,
ORCID ID: 0000-0001-8533-4488; E-mail: namreenasif@gmail.com
[2] Associate Professor & Research Guide, Institute of Management & Commerce, Srinivas University, Mangalore, India- 575001,
ORCID ID: 0000-0003-4568; E-mail: niyaz0191@gmail.com

ABSTRACT

Purpose: *Educational technology and the internet have been linked in recent years not only as a tool to increase teaching and learning, but also as one of the key barriers to changing the educational paradigm and pattern. This article examines numerous paradigms and patterns in used for re-defining Indian education systems that have resulted in significant shits in education, and compares them to the current system. The role of various education technology & Internet, innovations and projected consequences of a paradigm shift on the Indian education system are explored. Finally, certain recommendations are made for its successful implementation in order to achieve its goals and SWOC is used to analyze the educational system in terms of educational technology and the internet.*

Design/Methodology/Approach: *The information for the study was obtained from secondary sources like google scholar, journal papers, literature, reports, magazines, and books.*

Findings: *Historically, the Indian education system began with an Ancient education system in which fathers were required to pass on their knowledge to sons as a method of passing. Later post-independence the Indian government has always encouraged and promoted the advancement of education and educational technologies. Teaching and learning have undergone significant transformations, from lecture to role learning to internet-enabled learning to knowledge-based education to technology innovation-based education. In a variety of educational contexts, educational technology aids in the detection of problems. It also aids in overcoming disadvantages. But still, there are so many challengers in faced by the education system on educational technologies redesigning.*

Limitations/Implications of the Research: *There are few sources for references, few topics are not highlighted, and most of the information is obsolete, thus gathering relevant data was difficult.*

Originality/Value*: This paper brings to focus paradigm shifts and patterns the Educational technology which has re-defined education system in teaching and learning but still lacks in E-learning planning and also its Non- available of experts in many parts of both urban and rural areas in the country, especially during the time of abnormalities like the pandemic.*

Paper Type: Case study.

Keywords: Paradigm shift, Education, Technology & Internet, SWOC Analysis,

1. INTRODUCTION :

In an era of the 21st century, today education is the essential means of the future development of young people and society. To meet the increasing challenges of fast changing world people, believe that they should change education fundamentally from traditional models towards modern new models. Hence there have been numerous education policies and incentives in different parts of the world since the new century [1] [2].

Paradigm shift in education has often been emphasized to make fundamental changes in the aims, conceptualization, and practice of education with the aim of enhancing the future competitiveness and

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

development of students. In an education system, paradigm shift occurs when faculty and their institutions redesign teaching and learning activities to fully utilize new technology [2].

The current educational paradigm is based on creating knowledge stocks, transferring those stocks to individuals, and then validating that the knowledge has been transferred successfully However, society is changing shifted gears the focus is increasingly on behaviors rather than skills as well as the knowledge that may be obtained on demand. The next generation is progressively defining itself in a variety of ways in terms of their social network - their hobbies, interests, and activities and interpersonal relationships - rather than Credentials and affiliations [3].

2. RELATED WORKS:

Technology has four purposes in the field of education: it is used as part of the curriculum, as an educational delivery method, as a tool to aid instruction, and as a tool to increase overall learning process. In the former, staff are taught or trained to do tasks differently than they did previously. In the latter, education is aimed at instilling curiosity in student's thoughts. In either situation, using technology can aid students in improved understanding and retention of concepts [4] [5].

Table 1: Contribution by different scholars for role of education technology and internet.

S. No.	AREA	CONTRIBUTION	AUTHOR
1.	Evolution of educational technology	Every generation has its own method of instruction or set of methods for establishing a specific culture. The more evolved the culture, the more difficult it is to describe specific ways of thinking, doing, speaking, or feeling using instructional technology. Over the centuries, any significant change in educational ideals, goals, or objectives has resulted in a vast diversity of instructional devices.	Saettler (2004). [6]
2.	Education Redefined	The perception of the relationship between educator and student (or graduate), as well as educator and firm, has shifted. Knowledge is drawn in as needed rather than pushed out through instruction. Rather than being concentrated on periods of instruction, knowledge is supplied just in time as work-integrated learning. Individuals in this setting are continuously on the search for fascinating and valuable knowledge, knowledge that they will 'draw in' and learn to fill a gap in their current knowledge, a gap that is keeping them from finishing a project or accomplishing their goals. Moreover, this knowledge does not have to come from a prestigious educational institution; it may just as easily come from a community college.	Desai, et al. (2008). [7]
	The paradigm shifts Redefining education	The current educational paradigm is based on creating knowledge stores, transferring that knowledge to individuals, and then confirming that the learning has been successfully transferred. However, society has progressed. The emphasis is increasingly on behaviors, as skills and information can be learned on demand. Instead of institutional labels like diplomas or affiliations, the next generation is increasingly identifying itself in terms of its social graph - their interests, activities, and interactions with other people. Rather than individuals with profound analytical and evaluation abilities in a specific subject, the challenge for organizations is to discover individuals who excel at finding new problems to address and new solutions to solve them.	Evans-Greenwood, et al. (2015). [8]
3.	Innovative teaching and learning	Introducing innovative ideas in academic institutions can assist the country achieve its human development goals by empowering individuals, strengthening governance, and a system.	Kalyani (2018). [9]

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

4.	Modern technology in education	The educational system has changed as a result of technological advancements. Technology's importance in education cannot be emphasized. Indeed, the introduction of computers into the classroom has made it easier for teachers to impart information to students and for students to learn that information. The enjoyment of the teaching and learning processes has increased as a result of the usage of technology. Teachers and students should make excellent use of information to break down the barriers that prevent many kids and schools from reaching their full potential. As a result, in the future, every country must build a more technologically advanced education system.	Raja (2018). [10]
5.	Technology Integration in higher education	Although implementing technology competencies can be a launching point, effective use of technology in the classroom will necessitate a paradigm shift from teaching to learning, which will necessitate adequate training in technology and learning styles, as well as adequate technical support. Which places an emphasis on learning and provides adequate technical support to help faculty integrate technology into instruction.	Rogers, D. L. (2000). [11]
6.	Digital Textbooks	Students want more control over the tools that guide their learning as they gain more control over their learning. The traditional textbook is no longer meeting the needs of today's students in many ways. As a result, students and faculty members are looking for alternatives.	Heider, K., (2009). [12]
7.	Information Communication Technologies in Education	At the moment, information and communication technologies (ICT) have an impact on every aspect of human life. They are prominent in the workplace, business, education, and entertainment. Furthermore, many people see ICTs as change agents, bringing about changes in working conditions, information handling and exchange, teaching methods, learning approaches, scientific research, and information access. Policy, planning, infrastructure, learning content and language, capacity building, and financing may all pose challenges to the integration of ICTs in education systems. ICT-enhanced education necessitates clearly stated objectives, resource mobilization, and political commitment from the relevant bodies.	Mikre, F. (2011). [13]
8.	The Mixed Teaching Mode	Many industries have seen changes and upgrades as network information technology has advanced, and the combination with Internet technology has created many new development opportunities. Furthermore, as the number of students has increased in recent years, the gap between teachers in the field of education has grown significantly, and the demand for preschool teachers is gradually increasing. According to the current situation, society has increasingly high expectations for the overall quality of kindergarten teachers. As a result, in order to realize preschool education reform, "Internet plus" must be used. The use of "Internet plus" in preschool education not only combines the educational resource network of preschool education with preschool education, but it also represents a novel reform method. Preschool teachers should make full use of network	Li, X. (2022). [14]

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

		information technology to create a new teaching system.	
9.	A NEW PARADIGM IN THE EDUCATIONAL` SYSTEM IN THE ERA OF ARTIFICIAL INTELLIGENCE AND DIGITAL TECHNOLOGIES:	It is to be noted that the state and prospects for the development of higher education are currently among the most hotly debated issues in every society. Knowledge and competency requirements are dynamically changing, and what was in demand at the start of the new twenty-first century may differ significantly from the current needs of society and the state. It becomes clear: in order to be in demand, you must study your entire life. In this regard, it appears necessary to consider the fundamental conceptual approaches and paradigms employed in the analysis of educational policy.	ALLAHYAROVA, T. (2). [15]

3. RESEARCH GAP :

In our fast-changing world, it is extremely difficult to overcome technology learning challenges and potential successes. As a result, research into the applicability and implications of educational technology and the internet in the Indian education system is required.

4. RESEARCH AGENDA :

The study has following agenda:
(1) What is the role of education paradigm past, present and future?
(2) What is the evolution and growth in the Indian education system post-independence?
(3) What is the role of technology and the internet in the current educational system?
(4) What are the strengths, weaknesses, opportunities and challenges of technology in the education system?
(5) What are the suggestions for improvement in the education system?

5. OBJECTIVES OF THE STUDY :

The technology-enhanced paradigm has had an impact on teaching practice as well as how students approach their learning. Information and communication technology are frequently regarded as a channel for change, such as a shift in teaching methods, a shift in learning techniques, or a shift in the availability of knowledge.
(1) To understand the role of the Education paradigms past, present, and future
(2) To provide an outline of the paradigm shift in the Indian education system post-independence.
(3) To assess the function of educational technology and the internet in the current educational system.
(4) To debate the benefits of a paradigm shift in re-defining the educational system using educational technology and the internet.
(5) To evaluate the education system in terms of educational technology and internet by use of SWOC.

6. METHODOLOGY :

This paper is a study on secondary data gathered from several paradigm shifts in educational technology sources. Sources of information for this article include research articles, journals, publications, and books. The SWOC analysis was used to analyze the role of technology and paradigm shift in the education system.

7. PARADIGM SHIFT :

Paradigm shift is a progressive change it is a dramatic change in methodology or practice. According to Thomas Kuhn, science does not progress progressively toward truth. When present theories fail to explain a phenomenon and someone suggests a new explanation, science has a paradigm that remains constant until it undergoes a paradigm shift.
A scientific revolution occurs when:

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

(1) The new paradigm better presents the findings and provides a framework that is more in line with objective, external reality.
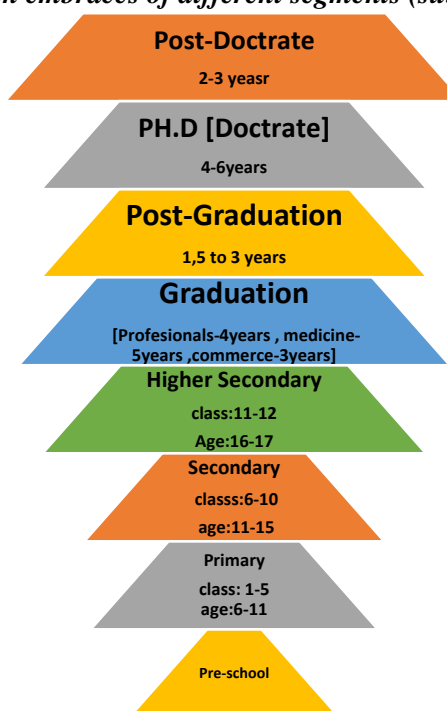
(2) The new paradigm is incomprehensible to the old [16].

8. PARADIGM SHIFT IN EDUCATION: PAST, PRESENT AND FUTURE :

In the past, there was no formal education in India. Education in ancient India was considerably different from that of the rest of the world. There was no influence from society or the state in the administration's curriculum. To receive an education, a youngster had to leave home and live with a teacher in a gurukul for the duration of his study. If we go back far enough, say 4000-5000 years, we had a knowledge transmission system in which a father passed on his knowledge to his offspring, mostly connected to work. There was no schooling system, but there was mouth-to-mouth education. Much later, two educational systems emerged: Vedic and Buddhist. The Vedic system focused around the Vedas, Vedangas, and Upanishads, and the Vedic system's language of teaching was Sanskrit. The Buddhist system preached the ideas of the major Buddhist schools, and Pali was the language of instruction. Some was given to women's education in ancient India. There was instruction in housekeeping, dancing, and singing. Physical labour was of the utmost importance in this system. So, even if a youngster was interested in learning philosophy, he would still have to do some manual labour every day, and the teacher would take care of everything, including food, clothing, and housing [17].

During the eighth century A.D., a large number of Mohammadians invaded India. In the mediaeval period, the education system was primarily oriented on the Islamic and Mughal systems. Mahmud Ghaznavid conquered India and established numerous schools and libraries. The ancient educational system was substantially altered. The Arabs and Turks introduced new cultures, traditions, and institutions to India that were based on an Islamic form of education that differed from the Buddhist education system. During the mediaeval period, the primary goal of education was to promote knowledge and propagate Islam.

In the midst of the mediaeval period, the British entered and began to conquer India. Lord Thomas Babington Macaulay introduced the English language in the 1830s. Education began to evolve and join the modern period of the twenty-first century, the era of science, technology, and innovation. The industrial sector grew by the day. The school system must adapt to the changing environment as demand rises. Instilling ideals like equality, secularism, education for everyone, and environmental preservation in pupils was the aim of modern education. [18].

The Education System embraces of different segments (sub systems) like

Fig 1: Indian Education System

Source: Compiled by the Author

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

Primary objective of Modern Education System:
The goal of modern education was to instil in students' values like humanism, equality, education for all, and environmental preservation, among others. For each student to comprehend the culture and people of our nation, they must have at least a basic level of education. to open up education to individuals with little means. To prepare kids effectively for the higher expectations.

Curriculum: A student's entire curriculum is separated into three components.
(1) **Primary education:** (from 1st to 10th standard) History, geography, mathematics, science, Hindi, and Kannada are among the subjects taught in primary school. Languages may differ from one state to the next.
(2) **Secondary education:** (from 11th to 12th standard) In secondary school, students have the option of choosing between science and commerce. Students were given education based on their preferences.
(3) **Graduation**: Students were admitted to universities through entrance examinations and were admitted to universities for graduation based on their entrance examination scores**.**

The educational system is entering a new phase, with the purpose of integrating educational technology and the internet, to meet the demands of modern educational practice. The significant impact of technology on education is one of the twenty-first century's triumphs. We have seen a transition in education from the Ancient to the Medieval to the Modern ages in our society. Significant changes occur when one's usual way of thinking about or doing something is replaced by a new and different way. New life-long learning systems must keep up with rapid advances in related patterns, technologies, tools, and processes. Education, like anything else, has basic steps such as primary education, secondary education, and further education. Without these fundamental steps, a man cannot claim to be educated [19] [20].

The education system embraces of different segments (sub systems) like:

8.1 PRE-PRIMARY EDUCATION: Pre-primary education is the preliminary step of organized instruction, with the primary goal of introducing very young children to a school-like atmosphere, i.e., to provide a link between the home and the school-based environment.

8.2 BASIC (PRIMARY AND MIDDLE EDUCATION): The first step of basic education is primary education. Typically, these programmers are aimed to give kids with foundational abilities in reading, writing, and arithmetic, as well as a strong foundation for learning.

8.3 LOWER SECONDARY: The second step of basic education is lower secondary education. The first level of secondary school expands on primary education, usually with a more subject-oriented curriculum.

8.4 GRADUATION: Education after secondary school. Secondary education's final step, preparing students for university education or offering job-related skills. Typically, there is a greater variety of subject selections and streams.

8.5 POST-GRADUATION: A course of study pursued after completing an undergraduate degree, particularly one leading to a degree below the level of doctorate to become skilled in a specialized field.

8.6 RESEARCH DOCTORATE: A short first-tier tertiary curriculum that is often practical in nature, occupationally focused, and prepares students for entry into the labour market. These programmes may also serve as a stepping stone to other tertiary programmes.

8.7 POST-DOCTORATE: First stage of tertiary education. The first level of post-secondary education, consisting of shorter, more practical/technical/occupationally oriented programmes that lead to professional degrees.

9. EDUCATIONAL POLICY IN INDEPENDENT INDIA :

Since the country's independence in 1947, the Indian government has backed a number of programmes aimed at reducing illiteracy in both rural and urban areas. Following independence, India's first constitution was enacted in 1950. Both state and federal governments were given education. Maulana Abul Kalam Azad, India's first Minister of Education, envisioned a unified educational system with

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

strong central government control over education across the country. The construction of high-quality scientific education facilities such as the Indian Institutes of Technology was pushed by the Nehru government. It was the year 1961 [21].

Prime Minister Indira Gandhi's government issued the first National Policy on Education in 1968, based on the report and recommendations of the Kothari Commission (1964–1966), which called for "radical restructuring" and equal educational opportunities to achieve national integration and greater cultural and economic development. As required by the Indian Constitution, the policy included compulsory schooling for all children up to the age of 14, as well as specialised teacher training and certification. As required by the Indian Constitution, the programme mandated compulsory schooling for all children up to the age of 14, as well as specialised teacher training and certification [22].

In 1986, Rajiv Gandhi's government introduced a new National Education Policy. The new strategy called for a "special emphasis on addressing imbalances and equalising educational opportunity," especially for Indian women, Scheduled Tribes (ST), and Scheduled Castes (SC) people (SC). Scholarships, adult education, recruitment of more instructors from SCs, incentives for poor families to bring their children to school on a regular basis, the establishment of new institutions, and the supply of housing and services were all part of the agenda. The 1986 education policy called for education spending to amount to 6% of GDP [23].

In 2019, the Ministry of Human Resource Development launched a draught of the New Education Policy 2019, creating a series of public disputes. Which will be applied until the year 2026 in India [24] [25]. The Strategic Framework on Education (NPE) is a government of India policy aimed at promoting and managing education in the country. In both rural and urban India, the policy encompasses primary, secondary, and higher education. Prime Minister Indira Gandhi issued the first NPE in 1968, Prime Minister Rajiv Gandhi issued the second in 1986, and Prime Minister Narendra Modi released the third in 2020 [26].

EDUCATION POLICY IN INDIAN EDUCATION SYSTEM

It replaced India's past educational policy, which was implemented in 1986. This policy has a significant positive impact on Indian education. It is a framework that covers primary through higher education, as well as vocational training in both urban and rural locations. The National Education Policy 2022 was created with the primary goal of reforming India's education policy. Nobody is obligated to study any particular language under the new national education policy. Students can now select a language based on their interests [27].

Table 2: Indian Education Policy Post Independence.

Post-Independence UNIVERSITY EDUCATION COMMISSIONS		
Year	Commission	Purpose
1948	Radha Krishnan commission	Improvement in the higher education.
1952	Secondary education commission	Recommendations for the improvement of secondary education.
1958	The national committee on education of girls and Women's	Recommended education for girls and to close the existing gap between men's and women's education.
1961	NCERT	Quality improvement in primary and secondary education.
1964	Kothari commission	Recommendation to the government in favour of quality change in the fields of education.
1968	First National education policy [NEP]	To create basic ground for the integrated development of education
1979	National education Adult education Programme	Functional education to those aged 15 to 35 years.
1979	Informal education scheme	To provide higher education for children aged 6 to 11 who are not enrolled in formal school.
1985	Indira Gandhi National open University	Provision for distance education in higher studies.
1986	Second National Education Policy	Modify the goals of education as per new challenges and demands.
1987	Operation Black Board Scheme	Provision for basic needs in primary school.

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

1988	National Literacy Mission	Functional Literacy for those aged 15 to 35 years old.
1988	Mas Literacy programme	Create atmosphere for mass literacy
1989	National Open School	Education programme for those who have left schools.
1992	Dr. Yashnl committee	To reduce the burden of school bags.
1994	District primary education programme	Universalisation of primary education
1995	National Teacher Education council	Arrangement of effective teaching programmes
1995	Mid-day meals Programme	Provision for mid-day meals in primary schools.
1999	Education guarantee scheme	To open at least one primary school in every panchayat.
2000	Subhash Chandra Bose national literacy Mission	Special programme launched to spread literacy at the National level.
	Universalisation of education	To enrol all children in the primary schools, who have left schools due to some reasons.
	SSA	To face the educational problems of the 21st century.
2003	Vidya vahini launched	It enabled the students to use tools like distance education, computer - aided learning and technology assisted education.
2004	Environment studies syllabus approved	To monitor the implementation of environment studies upto class 12 across the country.
2016	RPWD ACT	To ensure that people with disabilities have the same right to equality, dignity, and respect for their own integrity as everyone else.
2020	NEP	The objective of this reformation of the Indian education system is "No child will be left behind".

10. ROLE OF EDUCATIONAL TECHNOLOGY AND INTERNET IN CURRENT EDUCATION SYSTEM :

Internet is the most influenced technology in today's daily life. It is widely used for educational purposes and professional lives in today's generation. It has been improving day by day with new features. Internet plays a vital role in education [28]. It makes children as well as students easy to gather and understand information on various platforms. Within short period of time. Something and gathering information make the students more active and to create their own. It can improve quality of education in many ways. Now a days, online education has become more essential [29].

10.1 Enhanced online Teaching: Technology and internet-based courses and programmes are used to improve online teaching. It is an umbrella phrase that encompasses all forms of distance learning. It is related with content that is easily accessible through the use of the internet [30].

10.2 Encourage learner participation: Educational technology examines the learning process and related theories. It allows students to study more in less time. Online degrees are becoming increasingly popular. People are interested in taking online courses for the purpose of education and certification. Top universities provide great online programs that incorporate a variety of applications and the internet. As more people support and become aware of this approach, it will generate interest. Students who work and seek flexible learning alternatives all across the world are increasingly turning to online degrees. [31] [32].

10.3 Enlarge information access: Accessing and disseminating information has never been easier or more accessible thanks to educational technology. Teachers and students can join online practice communities based on their interests rather than their geography [33].

10.4 Digital books: Access to a greater depth and range of resources and information is made possible through educational technology [34].

10.5 Creating digital content: When it comes to technology and education, the use of electronic media in the classroom has grown. This infiltration has resulted in trainees being monitored 24 hours a day, as well as a plethora of career and support forums. There are and will be more applications to support kids in their learning and growth as the power of digital expands. [35].

10.6 Easily Accessible long- Distance learning: Distance education that allows students to extend into global market place. It can be easily available from any part of globe at the low cost [36].

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

10.7 Blended learning environment: Blended learning refers to a fundamental shift in educational design that involves combining digital learning objects with active learning approaches to improve the learning experience and outcomes. [37]

11. PARADGIM SHIFT IN ACTUAL EDUCATION TO VIRTUAL EDUCATIONAL SYSTEM :

This study assesses recent innovations in the delivery of education and educational technology, the distribution of multimedia content for mobile education and learning, and the impact on learning experiences. One of the challenges for teacher educators is finding out how to use Information and Communications Technology (ICT) tools most effectively to help teacher candidates acquire both required subject matter and ICT content, and then learning to apply that knowledge in their own classrooms. [38] [39].

The overarching concern and ongoing issue is how to redefine teaching and learning activities and goals to accommodate these numerous duties. Sub-questions that are arising are:

(1) What are the current trends in knowledge representation?

(2) How are conceptual understandings of teachers and teacher candidates changing within their domains?

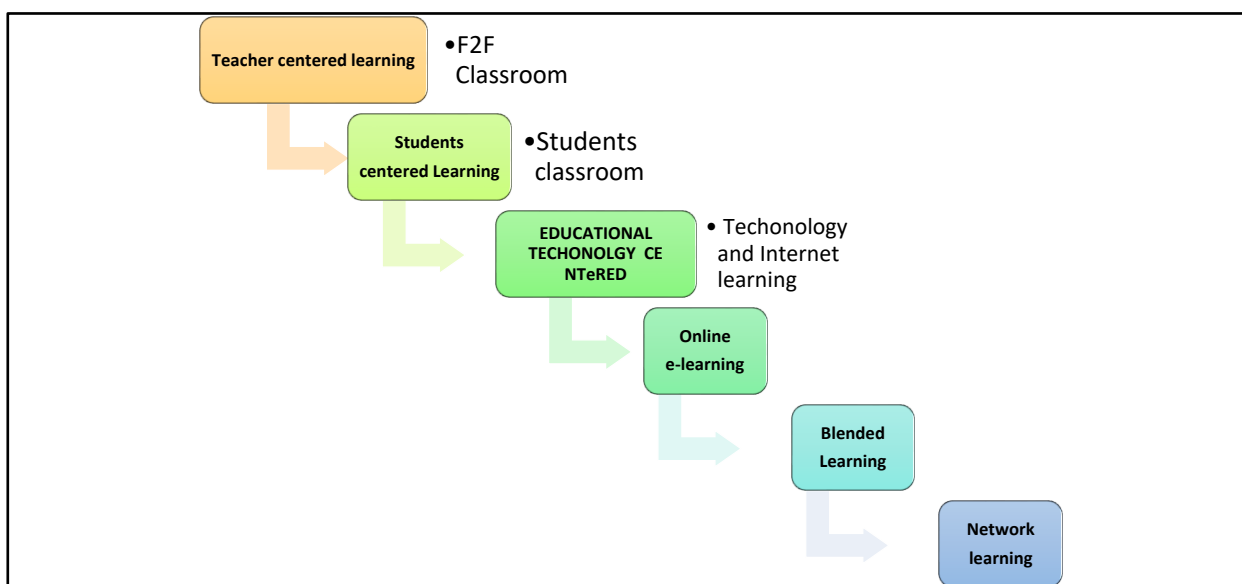(3) What is the representation of teaching changing with educational technology?

Fig 2: *Paradigm Shift in Indian Education System*

Source: Compiled by the Author

There is new paradigm in education system and there are many reasons because of which we have to shift to this new paradigm and we could say that many perspectives actually that have been the drivers of this change.[40][41] Teaching and learning have undergone significant transformations, from lecture to role learning to internet-enabled learning to knowledge-based education to technology innovation-based education. Education has shifted from teacher-centered learning to F2F classrooms, then from students-centered learning to students-only classrooms, with a major shift to EDUCATIONAL TECHNOLOGY-CENTERED LEARNING, TECHNOLOGY, AND INTERNET LEARNING, which is available in multiple styles in the education system, such as online e-learning, Blended Learning, and Network Learning [42] [43].

(1) The focus of schooling has shifted. Education was once limited to a select few, but with the introduction of virtual education, knowledge is now available to the masses/all. Shift in focus of education has changed. [44]

(2) Previously, education was restricted to a specific location and time, but now it may take place at any time and from any location to any place globally. [45]

(3) Traditional courses have been drastically converted into web-based courses. [46]

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

(4) Shift from a single source of education to various sources of learning, including the large source of the internet. [47]

(5) Due to adoption new change with educational technology, Face-to-face mode of education has been switched to distance and/or digital mode. [48]

12. SWOC ANALYSIS OF EDUCATIONAL TECHNOLOGY AND INTERNET IN EDUCATION SYSTEM :

Internal factors over which you have some control are referred to as Strengths (S) and Weaknesses (W) by definition. Furthermore, by definition, Opportunities (O) and Challenges (C) are external factors over which the organization has little control [49] [50].

Table 3: SWOC Analysis of Educational Technology and Internet in Education System.

STRENGTH	WEAKNESS
- It Increase access to quality education - It Improving learning outcomes - It Saves time and energy. - To Use of personalized learning instruction. - Goal oriented staff. - Flexibility to add newer subjects.	- Lack of e-learning planning. - Not reachable to every student in rural area. - Non-acceptance of complicated technology by teachers. - Lack of right infrastructure (electricity, internet, connection). - Lack of focus on teaching writing skills. - Not much effective as classroom teaching. - Invention training is lacking. - Discovery training is lacking. - Teachers' lack of expertise.
OPPORTUNITIES	**CHALLENGERS**
- Many degrees can be obtained in multiple streams - Can choose the streams which we are interested - Can reached out globally - Can be more useful during the time of uncertainties (covid pandemic) - Depth in a current sub-discipline. - Certification courses. - Hands on training in use of tools.	- Lack of access to quality education. - Availability of right content for teachers. - Absence of a dedicated portal for students. - Absence of right EdTech content for the teachers to teach with. - Learners that are disinterested or have bad study habits may fall behind. - Non-availability of experts physically in rural areas for expert knowledge. - Not every technology tool will work for all subject and students - Catering to students plans for career. - Training for different future plans.

Source: Compiled by the author

13. FINDINGS :

(1) Initially, the Indian education system began with an ancient education system in which fathers had to pass on their knowledge to sons, a method of passing on their Mediaeval education system to Modern education system, and now online educational technology and internet is in cultural shift; in this way, the method of delivering education system has expanded progressively and there is a drastic Paradigm shift in Indian education system.

(2) Following independence, the Indian government has always supported and encouraged the development of the educational system, with educational technologies such as online teaching and learning now receiving more attention. There appears to be a fundamental shift when the educational system's practices and practices have undergone a major adjustment.

(3) Educational Technology has increased the enjoyment of the teaching and learning processes, according to related studies. The current educational paradigm is based on developing knowledge stores, transferring that knowledge to others, and then confirming that the learning has been

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

successfully transmitted. Adopting innovative concepts in educational institutions can help the country reach its human development goals by boosting education while also empowering individuals, improving governance, and organizing activities.

(4) Indian education is a now system of education technology. Teaching & Learning has seen a major shift from lecture to role learning to internet-enabled learning to knowledge-based education to technological innovation-based education.

(5) It was also found that there was a huge paradigm shift in Indian education system post-independence. The emphasis of schooling has shifted. Previously, education was limited to a select few, but with the advent of virtual education, knowledge is now available to the masses or all.

(6) Although some educational sectors have already implemented blended learning, many others are taking their time for a variety of reasons. Perhaps institutional leadership is required for teachers to acquire sufficient assistance in order to implement changes in the teaching process.

(7) Educational technology playing major and important role in reaching out for all students and benefited in many ways which saves a lot of time and is makes all the information available at their finger tip.

(8) In today's educational system, technology-assisted learning is becoming increasingly vital. Because of the essential role that technology plays in education, teachers have the chance to create relevant learning experiences that use technology.

(9) Educational technology aids in the detection of problems in a variety of educational settings. It also helps to overcome disadvantages. The evaluation of the teaching and learning process is also increased and improved since things are comprehensively improved through feedback and there is more control over the educational process.

14. RECOMMENDATIONS :

(1) Every educational sector must make better plans for E-learning.
(2) To improve education for everybody, the Indian government should place a little more emphasis and attention on rural areas.
(3) To conduct more educational technologies awareness programs and webinars.
(4) Every educational sector requires its own teaching platform, as well as college-specific tools or software (such as the Teach Mint app). Which can then be accessible without needing to be connected to the internet.
(5) The government must make every effort to ensure the personal and financial safety and stability of poor students, especially in this pandemic crisis.
(6) Our education sector must create innovative ecosystem for sustainable Entrepreneurship.

15. SUMMARY AND CONCLUSION :

The adoption and implementation of new educational technologies into teaching and learning has had a tremendous impact on the educational environment. Technology's invention and fruition have improved education and learning by incorporating various augmentations, substitutes, or blending of new paradigm approaches and technologies that have improved education and learning, but still there is lack access to quality education because there is a lack of adequate EdTech content for teachers to teach with, In addition, there is a scarcity of experts in rural areas who can provide competent advice.

REFERENCE :

[1] Aithal, P. S., & Aithal, S. (2020). Analysis of the Indian National Education Policy 2020 towards achieving its objectives. *International Journal of Management, Technology, and Social Sciences (IJMTS), 5*(2), 19-41. Google Scholar↗

[2] Ashutosh Ankita & Aggarwal Das. (2020). http://www.progressiveteacher.in/a-paradigm-shift-in-the-education-system/ retrieved on 1/12/2021.

[3] Kalyani, P. (2020). An empirical study on NEP 2020 [National Education Policy] with special reference to the future of Indian education system and its effects on the Stakeholders. *Journal of Management Engineering and Information Technology (JMEIT), 7*(5), 1-17. Google Scholar ↗

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

[4] The paradigm shift in technology enabled education available. Retrieved from https://www.thehighereducationreview.com/opinion/in-my-view/the-paradigm-shift-in-technology-enabled-education-fid-56.html on 1/12/2021.

[5] National policy on education. (2022). https://en.wikipedia.org/wiki/National_Policy_on_Education/ retrieved on 12/12/2021.

[6] Saettler, P. (2004). The evolution of American educational technology. *IAP*. (pp88-106). Google Scholar↗

[7] Desai, M. S., Hart, J., & Richards, T. C. (2008). E-learning: Paradigm shift in education. Education, *129*(2), 327-334. Google Scholar↗

[8] Evans-Greenwood, P., O'Leary, K., & Williams, P. (2015). The paradigm shift. Redefining education. Centre for the Edge, Deloitte Australia. *Accelerating the world's research*. (pp. 25-30). Google Scholar↗

[9] Kalyani, D., & Rajasekaran, K. (2018). Innovative teaching and learning. *Journal of applied and advanced research, 3*(1), 23-25. Google Scholar↗

[10] Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. *Journal of Applied and Advanced Research*, *3*(1), 33-35. Google Scholar↗

[11] Aithal, P. S., & Aithal, S. (2020). Implementation strategies of higher education part of national education policy 2020 of India towards achieving its objectives. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, *5*(2), 283-325. Google Scholar↗

[12] Heider, K., Laverick, D., & Bennett, B. (2009). Digital textbooks: The next paradigm shift in higher education? *AACE Review (formerly AACE Journal), 17*(2), 103-112. Google scholar↗

[13] Mikre, F. (2011). The roles of information communication technologies in education: Review article with emphasis to the computer and internet. *Ethiopian Journal of Education and Sciences, 6*(2), 109-126. Google Scholar↗

[14] Li, X. (2022). The Mixed Teaching Mode of Preschool Education Major in the Era of "Internet Plus". *Wireless Communications and Mobile Computing,1*(1), 1- 7. Google scholar↗

[15] Allahyarova, T. (2022) Search for A New Paradigm in the Educational system in The Era of Artificial Intelligence and Digital Technologies: Challenges, Opportunities. Actual Problems in the System of Education: *General Secondary Education Institution–Pre-University Training–Higher Education Institution*, *1*(2), 179–190. Google Scholar↗

[16] National policy on education. (2022). https://en.wikipedia.org/wiki/National_Policy_on_Education Retrieved on 12/12/2021

[17] Naraginti amareswar reddy (2022) http://shillongeducation.blogspot.com/2019/03/ednc-402-higher-education-in-india.html Retrieved on 09/12/2021.

[18] National portal India (2022) https://www.india.gov.in/spotlight/rashtriya-madhyamik-shiksha-abhiyan#tab=tab-1 retrieved on 01/01/2022.

[19] AnamikaChauhan(2021)https://www.researchgate.net/publication/302907738_EDUCATION_LEVEL_OF_INDIA_IN_PRESENT Retrieved on 19/12/2021.

[20] Gupta, D., & Gupta, N. (2012). Higher education in India: structure, statistics and challenges. *Journal of education and Practice, 3*(2), 17-24. Google Scholar↗

[21] Bhattacharjee, J. (2015). Progress of Teacher Education in India–A Discussion from Past to Present. *International Journal of Humanities & Social Science Studies*, *2*(1), 213-222. Google Scholar↗

[22] Jha, P., & Parvati, P. (2020). National education policy, 2020. (pp14-16) *Governance at Banks, 55*(34), 14-17. Google Scholar↗

International Journal of Case Studies in Business, IT, and Education (IJCSBE), ISSN: 2581-6942, Vol. 6, No. 2, December 2022

SRINIVAS PUBLICATION

[23] Lv, Y. (2022). A Novel Online Education Reform Model Based on Risky Decision-Making under the Situation of Internet Plus. *Mobile Information Systems*, *2022*. Google Scholar↗

[24] Al Musawi, A. S. (2011). Redefining technology role in education. *Creative Education, 2*(02), 130-135. Google Scholar↗

[25] Qureshi, M. A., Shirazi, R. A., & Wasim, M. P. (2007). Perspective and Prospects of Commencing New Education Policy (NEP) of Pakistan: A Review of Conference. *Indus Journal of Management & Social Sciences,2*(1*)*, 167-176. Google Scholar↗

[26] Ostrowicka, H. (2022). Economization of discourse on education and pedagogization of economic problems: media debate on higher education reform in Poland. *Discourse: Studies in the Cultural Politics of Education*, *43*(1), 86-100. Google Scholar↗

[27] Chand, B., & Das, K. (2022). Professional Development of Redefining Teacher Education During Post Independent India. *International Journal of Advanced Multidisciplinary Research*, *9*(6-2022), 96-105. Google Scholar↗

[28] Fullan, M. (2000). The three stories of education reform. *Phi Delta Kappan*, *81*(8), 581-584. Google Scholar↗

[29] Pandya, D. R. N. (2014). Indian education system–a historical journey. *Education, 3*(3), 46-49. Google Scholar↗

[30] National education policy (2022) https://en.wikipedia.org/wiki/National_Education_Policy_2020 retrieved on 15/12/2021.

[31] National education policy (2022) https://en.wikipedia.org/wiki/Education_in_India retrieved on 21/12/2021.

[32] National portal India (2022) https://www.india.gov.in/spotlight/rashtriya-madhyamik-shiksha-abhiyan#tab=tab-1 retrieved 01/01/2022.

[33] Taha, n. m., Aziz, s. f. a., Elias, s., & Akmal, n. a. z. (2022) students'engagement on the use of technology in the classroom: a study of private university students in petaling jaya. *Seybold report 17*(10) 1513-1533. Google Scholar↗

[34] Cheney, G. R., Ruzzi, B. B., & Muralidharan, K. (2005). A profile of the Indian education system. *Prepared for the New Commission on the Skills of the American Workforce,1*(1) 228-53. Google scholar↗

[35] Krnic Martinic, M., Malisa, S., Aranza, D., Civljak, M., Marušić, A., Sapunar, D., ... & Puljak, L. (2022). Creating an online educational intervention to improve knowledge about systematic reviews among healthcare workers: mixed-methods pilot study. *BMC Medical Education*, *22*(1), 1-11. Google Scholar↗

[36] Lazar, S. (2015). The importance of educational technology in teaching. *International Journal of Cognitive Research in Science, Engineering and Education, 3*(1), 111-114. Google Scholar↗

[37] Jagadesh Kumar, M. (2020). National Education Policy: How does it Affect Higher Education in India?. *IETE Technical Review, 37*(4), 327-328. Google Scholar↗

[38] Davis, M. A. (1999). Integrating Educational Technology into Teaching, by MD Roblyer and J. Edwards (Book Review). *Contemporary Education, 71*(1), 60-61. Google Scholar↗

[39] Mikre, F. (2011). The roles of information communication technologies in education: Review article with emphasis to the computer and internet. *Ethiopian Journal of Education and Sciences*, *6*(2), 109-126. Google Scholar↗

[40] O'Donoghue, J., Singh, G., & Dorward, L. (2001). Virtual education in universities: a technological imperative. *British Journal of Educational Technology, 32(*5), 511-523. Google Scholar↗

[41] Smigelski, M., Movassaghi, M., & Small, A. (2020). Urology virtual education programs during the COVID-19 pandemic. *Current urology reports*, *21*(12), 1-4. Google Scholar↗

[42] Burn, J., & Thongprasert, N. (2005). A culture-based model for strategic implementation of virtual education delivery. *International Journal of Education and Development using ICT*, *1*(1), 32-52. Google Scholar↗

[43] Hussain, I. (2007). A study of student's attitude towards virtual education in Pakistan. *Turkish Online Journal of Distance Education*, *8*(2), 69-79. Google Scholar↗

[44] Al-Nofaie, H. (2020). Saudi University Students' perceptions towards virtual education During Covid-19 PANDEMIC: A case study of language learning via Blackboard. *Arab World English Journal (AWEJ)*, *11*(3), 1-20. Google Scholar↗

[45] Thamraksa, C. (2003). Student-centered learning: *Demystifying the myth. Studies in language and language teaching, 12*(1), 59-70. Google scholar↗

[46] Twigg, C. A. (2003). Models for online learning. *Educause review, 38*(1), 28-38. *Google Scholar↗*

[47] Middlehurst, R. (2002). Quality assurance and accreditation for virtual education: a discussion of models and needs. *The Virtual Challenge to International Cooperation in Higher Education, a Project of the Academic Cooperation Association*, *1*(1), 99-109. Google Scholar↗

[48] Judi, H. M., & Sahari, N. (2013). Student centered learning in statistics: Analysis of systematic review. *Procedia-Social and Behavioral Sciences*, *103*(1), 844-851. Google scholar↗

[49] Aithal, P. S., & Kumar, P. M. (2015). Applying SWOC analysis to an institution of higher education. *International Journal of Management, IT and Engineering, 5*(7), 231-247. *Google Scholar↗*

[50] Noreen, K., Umar, M., Sabir, S. A., & Farooq, A. (2020). SWOC analysis of e-learning educational services at Rawalpindi Medical University in the midst of COVID-19. *Journal of Rawalpindi Medical College, 24*(1), 37-43. Google scholar↗

****