

Chapter

The Impact of Technology on Indian Knowledge System

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1.0 Introduction:

India is a land of ancient knowledge wisdom and it has a rich history that dates back to ancient times. The ancient texts of India, such as Vedas, Puranas, and Upanishads, are considered to be pillars of a rich source of knowledge and wisdom. In ancient India, both formal and informal ways of education system existed. Indigenous education was imparted at home, in temples, pathshalas, tols, chatuspadis and gurukuls. There were people in homes, villages and temples who guided young children in imbibing pious ways of life. Temples were also the centres of learning and took interest in the promotion of knowledge of our ancient system. Students went to viharas and universities for higher knowledge. Teaching was largely oral and students remembered and meditated upon what was taught in the class.

Gurukuls, also known as ashrams, were the residential places of learning. Many of these were named after the sages as shown in **Fig. 1**. Situated in forests, in serene and peaceful surroundings, hundreds of students used to learn together in gurukuls. Women too had access to education during the early Vedic period. Among the prominent women Vedic scholars, we find references to Maitreyi, Viswambhara, Apala, Gargi and Lopamudra, to name a few.

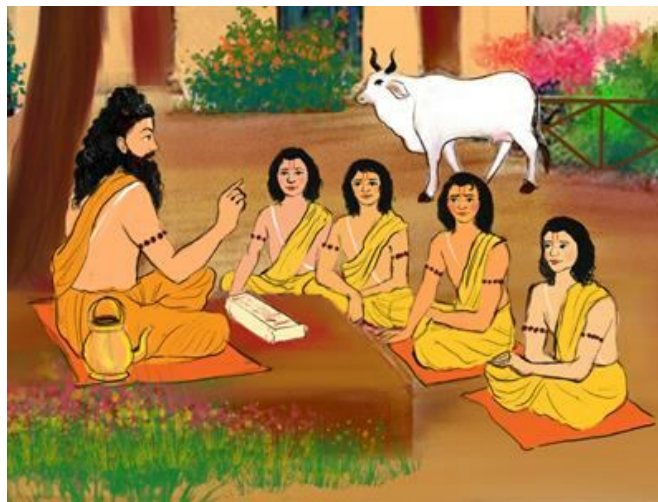


Figure-1: Gurukul Education

During that period, the gurus and their shishyas lived together helping each other in day-to-day life. The main objective was to have complete learning, leading a disciplined life and realising one's inner potential. Students lived away from their homes for years together till they achieved their goals. The gurukul was also the place where the relationship of the guru and shishya strengthened with time. While pursuing their education in different disciplines like history, art of debate, law, medicine, etc., the emphasis was not only on the outer dimensions of the discipline but also on enriching inner dimensions of the personality. As a result many famous educational centres came into existence from 2000 BC until the coming of Islamic invaders in India. Among the most notable universities that evolved during this period were situated at Takshashila, Nalanda, Valabhi, Vikramshila, Odantapuri and Jagaddala. These centres of learning have been attracting students and travellers from all over the ancient world from North to South, East to West. The famous Takshashila was located in today's Pakistan, Nalanda in Bihar, Valabhi in Gujarat, Pushpagiri in Odisha, Varanasi in Uttar Pradesh, Sharada Peeth in Kashmir, Kanchipuram in Tamil Nadu, Brihadেশ্বরar temple University in Tanjavur, Ujjaini in Madhya Pradesh and so on and on.

Takshashila was thought to have existed around the 5th century BC. At this location, theologies of Buddhism and Hinduism as well as political science, hunting, medicine, law, and military tactics were all taught here. The most notable teachers and students were Chanakya, Charaka, Panini, Jivaka, Prasenajit, and others. Chanakya is said to have written the Arthashastra.

Nalanda was an ancient center of higher learning in Bihar, India from 427 to 1197. Nalanda was established in the 5th century AD in Bihar, India, more than 500 years before Oxford University. It founded in 427 in northeastern India, not far from what is today the southern border of Nepal and survived until 1197. At its peak Nalanda hosted over 10,340 students from around the globe. It was one of the great centres of learning of the ancient world. The university was destroyed towards the end of the 12th Century AD. Its legendary library burned to the ground and much of its ancient knowledge was lost. Now, 800 years later, the university is being revived for the modern age.

These universities developed in connection with the viharas. Those at Benaras, Navadeep and Kanchi developed in connection with temples and became centres of community life in the places where they were situated. These institutions catered to the needs of advanced level students. Such students joined the centres of higher learning and developed their knowledge by mutual discussions and debates with renowned scholars

Over time, the Indian knowledge system has evolved and diversified, covering various fields such as mathematics, astronomy, medicine, and philosophy. With the advent of technology, everything around us has changed, including the Indian Knowledge System. Technology has revolutionized the way we acquire knowledge and has brought numerous changes in the Indian educational system. The impact of technology on Indian knowledge system has been vast and multifaceted. In the past few decades, India has seen a significant transformation in terms of technology adoption and integration into its educational and intellectual systems. With the advent of digital technologies and increased connectivity, Indian universities and

institutions have increasingly leveraged technology to enhance the delivery of education and research.

One of the primary impacts of technology on Indian knowledge system is the democratisation of knowledge. Technology has enabled greater access to information and education, breaking down traditional barriers such as geographic location and financial affordability. This has led to the emergence of new learning platforms and tools, including online learning management systems, Massive Open Online Courses (MOOCs), and virtual classrooms.

Another critical impact of technology on Indian knowledge system is the expansion of research and development. Technology has facilitated the creation of new research tools and methodologies, such as data analytics, machine learning, and high-performance computing. This has enabled Indian researchers to conduct research more efficiently and effectively, leading to significant advancements in various fields such as medicine, engineering, and agriculture.

Furthermore, technology has also brought new modes of communication and collaboration. Indian researchers and scholars can now collaborate with peers from across the globe through video conferencing, online forums, and other digital platforms. This has led to the exchange of ideas, best practices, and knowledge, and has helped develop a global community of researchers and scholars.

However, the impact of technology on Indian knowledge system has not been without challenges. There are concerns regarding the quality of online education and the potential for technology to create disparities in access to education. Additionally, there are concerns regarding the dominance of Western technologies and the potential for them to overshadow and replace traditional Indian knowledge systems.

Therefore, technology is playing a significant role in transforming the Indian knowledge system. Its impact on Indian education and research has been both positive and negative. Moving forward, it is crucial to address the challenges associated with the impact of technology on Indian knowledge system and to ensure that technology is used to augment, rather than replace, traditional knowledge systems.

2.0 Importance of Indian Ancient Knowledge

India is a land of ancient wisdom, and it has contributed significantly to the world in terms of knowledge and techniques. The ancient texts of India, such as Vedas, Puranas, and Upanishads, are a rich source of knowledge and wisdom. They cover various aspects of life, such as philosophy, spirituality, ayurveda, yoga, mathematics, astronomy, and architecture. The importance of Indian ancient knowledge is not limited to India, but it has a global significance. The Indian knowledge system has influenced many cultures and civilizations all over the world. Here we will discuss the importance of Indian ancient knowledge in various fields. The teacher is called as a Guru and the students are called as Shishyas. They were situated in a serene environment such as a forest. Students consider the gurukul as a second

home as they stayed there for many years. The education imparted in gurukuls is not just restricted to men. Women like Maitreyi, Viswambhara, Apala, Gargi and Lopamudra went on to become famous Vedic scholars. Education consisted of learning about basic skills such as wood gathering, cooking along with the Vedas. They learnt subjects like arts, history, law on a practical basis and not just with respect to definitions.

2.1 Philosophy

The ancient Indian philosophy has a deep impact on the world view of many people. The Indian philosophy is based on the concept of dharma, karma, and moksha. Dharma means duty or righteousness, karma means action and its consequences, and moksha means liberation from the cycle of birth and death.

The Indian philosophy emphasizes the importance of self-realization and inner peace. It teaches us how to lead a life of harmony, balance, and contentment. The philosophical works of ancient India, such as Vedas, Upanishads, and Bhagavad Gita, have influenced many thinkers and philosophers all over the world.

2.2 Spirituality

India has a rich spiritual heritage, and it has given birth to many spiritual traditions, such as Vedanta, Yoga, Tantra, and Buddhism. These traditions emphasize the importance of spiritual development and self-realization.

Yoga, which originated in India, is a comprehensive system of physical, mental, and spiritual practices. It has gained popularity all over the world due to its effectiveness in promoting health and well-being.

2.3 Ayurveda

Ayurveda is an ancient Indian system of medicine that has been practiced for thousands of years. It emphasizes the importance of harmony between the body, mind, and spirit. Ayurveda treats patients by balancing their doshas, which are the three bio-energies that govern the body's functions.

Ayurveda includes various therapies, such as herbal remedies, massage, and detoxification techniques. It has gained worldwide recognition due to its effectiveness in treating various ailments and promoting overall health.

2.4 Mathematics and Science

India has contributed significantly to the field of mathematics and science. Ancient Indian mathematicians developed the decimal system, which is the basis of modern mathematics. They also developed algebra, trigonometry, and calculus.

India has also made significant contributions to the field of astronomy. The ancient Indian astronomers accurately calculated the length of a year and the distance between the earth and the sun. They also developed the concept of zero, which is a fundamental concept in mathematics.

2.5 Architecture

India has a rich architectural heritage, and it has given birth to many styles of architecture. Ancient Indian architecture is characterized by the use of intricate carvings, domes, and

minarets. The ancient Indian architects also developed the concept of Vastu Shastra, which is the Indian system of architecture.

Thus, the ancient Indian knowledge system has made significant contributions to various fields, such as philosophy, spirituality, ayurveda, yoga, mathematics, science, and architecture. The Indian knowledge system has influenced many cultures and civilizations all over the world. The importance of Indian ancient knowledge is not limited to India, but it has a global significance. The Indian knowledge system provides us with a wealth of knowledge and wisdom that can be applied to lead a better life in today's world. Therefore, it is essential to preserve and promote the Indian ancient knowledge system to benefit future generations.

3.0 Defining Indian Knowledge System

3.1 Concept

The Indian knowledge and system is grounded in the philosophy of Vedanta, the ancient wisdom texts of Hinduism. The philosophy stipulates that the universe is a manifestation of the ultimate reality, or Brahman, and thus, the unity of all existence is of utmost importance (Das, S. 2013). The Indian knowledge system therefore takes on a comprehensive perspective of concepts and principles, transcending mere practical skills and encompassing an understanding of the interconnectedness of everything.

One of the significant principles of the Indian knowledge and system is the emphasis on self-realization and self-awareness. According to this belief, genuine knowledge comes from introspection and attuning oneself to the inner self. By gaining insights into the nature of ourselves, we can understand the world better (Mittal, S. 2018). This inner exploration is facilitated by practices such as meditation and yoga, which allow individuals to connect with their inner selves and achieve a sense of calmness and clarity. Along with self-realization, Indian knowledge system is also based on the idea of morality and ethics. The concept of dharma, or right conduct, is the underlying principle which governs all actions. The focus is on following our unique path and acting in accordance with our dharma, and ultimately achieving moksha, a state of spiritual liberation.

The Indian knowledge system is also grounded in interconnectedness and interdependence. The concept of karma is rooted in this principle, which explains the idea that our actions have consequences, and we are all interconnected in a web of cause and effect. Furthermore, the emphasis is placed on the idea of working together in harmony as a community, ensuring that the greater good is achieved.

Holistic thinking is another fundamental feature of Indian knowledge system, which concurs with the concept of unity. The Indian philosophy views the world as a whole, rather than as distinct components. Significant emphasis is placed on the connection between the mind and body, where mental and physical well-being are interconnected with one's spiritual and mental state. Thus, the Indian knowledge system draws on the ancient wisdom of the Vedanta philosophy, basing its concept on self-realization, morality, interconnectedness, and holistic thinking. These ideas and principles have had a profound influence on Indian culture and society and have also transcended to the rest of the world. In the ever-changing dynamic world of today, the knowledge system provides valuable guidance and principles on attaining a purposeful and satisfying life.

3.2 Definitions

India has a rich legacy of knowledge systems that are diverse and multifaceted. These knowledge systems have been developed through centuries of experience and observation, and are deeply rooted in the country's cultural and spiritual traditions. The Indian knowledge system encompasses various branches of knowledge, including philosophy, art, literature, science, and spirituality. In this chapter, we delve deeper into understanding the Indian knowledge system and its various components.

The Indian knowledge system has been shaped by several factors, including religion, geography, society, and history. This system encompasses a vast body of knowledge that has developed over millennia, and has been transmitted through oral and written traditions. The Indian knowledge system is intrinsically linked with the country's culture and heritage, and reflects the diversity and complexity of Indian society.

The Indian knowledge system is characterized by its holistic approach to learning and understanding the world. In this system, knowledge is not seen as a collection of isolated facts, but as an interconnected body of knowledge that spans diverse fields, including science, art, spirituality, and philosophy (Santrock, J. W. 2010). This holistic approach is evident in traditional practices such as Ayurveda (Indian traditional medicine) and yoga, which combine physical and spiritual well-being.

Another aspect of the Indian knowledge system is its emphasis on experiential learning. This approach emphasizes the importance of practical experience and observation in gaining knowledge, and is reflected in traditional arts such as music, dance, and literature. These art forms are not only a means of expression but also a way of acquiring knowledge about the world.

The Indian knowledge system is also characterized by its inclusiveness and openness to diverse perspectives. This is reflected in the country's rich history of intellectual exchange with other cultures, dating back to ancient times. India has a long tradition of welcoming scholars and ideas from different parts of the world, and has assimilated them into its own knowledge system. This openness to diversity and inclusiveness is reflected in Indian philosophy, which recognizes the interconnectedness of all living beings and emphasizes empathy and compassion.

However, the Indian knowledge system has also been subject to colonization and marginalization. The colonial era saw the systematic erasure and suppression of traditional knowledge systems, as European powers sought to impose their own scientific worldview on the Indian subcontinent. This legacy of marginalization has resulted in the loss of a vast body of knowledge and the displacement of various communities that have been custodians of this knowledge.

In recent times, there has been a renewed interest in reviving and rediscovering traditional knowledge systems in India. This has been driven by a growing recognition of the value and potential of these knowledge systems in addressing contemporary problems. Efforts are being made to document and preserve traditional knowledge, and to integrate it into mainstream education and research. *This has been seen during COVID-2019, when entire global society got benefitted with yoga education and our traditional medical philosophy.*

Thus it can be said that the Indian knowledge system is a rich and diverse legacy that reflects the complexity and diversity of Indian society. It encompasses various branches of

knowledge and is characterized by a holistic, experiential, and inclusive approach to learning. While the Indian knowledge system has faced marginalization and erasure in the past, efforts are being made to revive and integrate traditional knowledge into contemporary education and research.

4.0 Educational (Literacy Rate) Population Growth in India Since 1872 to 2011

4.1 Pre-colonial period

Prior to the colonial era, education in India typically occurred under the supervision of a guru in traditional schools called gurukulas. The gurukulas were supported by public donations and were one of the earliest forms of public school offices. According to the work of historian Dharampal [32] based on British documents from the early 1800s, pre-colonial education in India was fairly universal. Dharampal noted that the Hindu temple and/or mosque of each village had a school attached to it and the children of all communities attended these schools.

4.2 British period

In the colonial era, the community-funded gurukul system and temple-based charity education began to decline as the centrally funded institutions promoted by the British colonial administration began to gradually take over.

From 1881 and 1947, the number of English-language primary schools grew from 82,916 to 134,866 and the number of students attending those institutions grew from 2,061,541 to 10,525,943. Literacy rates among the Indian public, as recorded rose from an estimated 3.2 per cent in 1872, to 16.1 per cent in 1941 (Jayant Pandurang Nayaka & Syed Nurullah 1974).

4.3 Post-independence period

The provision of universal and compulsory education for all children in the age group of 6–14 was a cherished national ideal and had been given overriding priority by incorporation as a Directive Policy in Article 45 of the Constitution, but it is still to be achieved more than half a century since the Constitution was adopted in 1949. Parliament has passed the Constitution 86th Amendment Act, 2002, to make elementary education a Fundamental Right for children in the age group of 6–14 years. In order to provide more funds for education, an education cess of 2 percent has been imposed on all direct and indirect central taxes through the Finance (No. 2) Act, 2004.

In 2000–01, there were 60,840 pre-primary and pre-basic schools, and 664,041 primary and junior basic schools. Total enrolment at the primary level has increased from 19,200,000 in 1950–51 to 109,800,000 in 2001–02. The number of high schools in 2000–01 was higher than the number of primary schools at the time of independence (Jayant Pandurang Nayaka; Syed Nurullah, 1974).

The literacy rate grew from 18.33 percent in 1951, to 74.04 percent in 2011 as shown in **Table-1 and Fig. 2**. During the same period, the population grew from 361 million to 1,210 million.

Table-1: Growth of literacy- rates (age 7+) in India

Year	Male %	Female %	Combined %
1872			~3.25
1881	8.1	0.35	4.32
1891	8.44	0.42	4.62
1901	9.8	0.6	5.4
1911	10.6	1.0	5.9
1921	12.2	1.8	7.2
1931	15.6	2.9	9.5
1941	24.9	7.3	16.1
1951	27.16	8.86	18.33
1961	40.4	15.35	28.3
1971	45.96	21.97	34.45
1981	56.38	29.76	43.57
1991	64.13	39.29	52.21
2001	75.26	53.67	64.83
2011	82.14	65.46	74.04

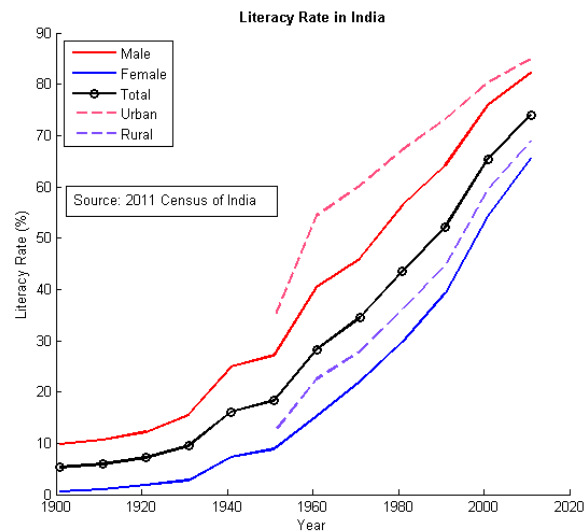


Figure-2: An acceleration in the rate of literacy growth found from 1991 to 2001
(Source: Census of India 2011)

In 1944, the British colonial administration presented a plan, called the Sargent Scheme for the educational reconstruction of India, with a goal of producing 100% literacy in the country within 40 years, i.e. by 1984. Although the 40-year time-frame was derided at the time by leaders of the Indian independence movement as being too long a period to achieve universal literacy (Amartya Sen, 2009). India had only just crossed the 74% level by the 2011 census and divisions are shown in **Fig. 3**. The British Indian censuses identify a significant

difference in literacy rates, by: sex (Hunter, William Wilson, Sir, et al. 1908) as given in **Table-2**:

Table-2: literacy rates by: sex, religion, caste and state of residence

1901 census – literacy rate Male % Female %

Madras	11.9	1.1
Bombay	11.6	0.9
Bengal	10.4	0.5
Berar	8.5	0.3
Assam	6.7	0.4
Punjab	6.4	0.3
United Provinces	5.7	0.2
Central Provinces	5.4	0.2

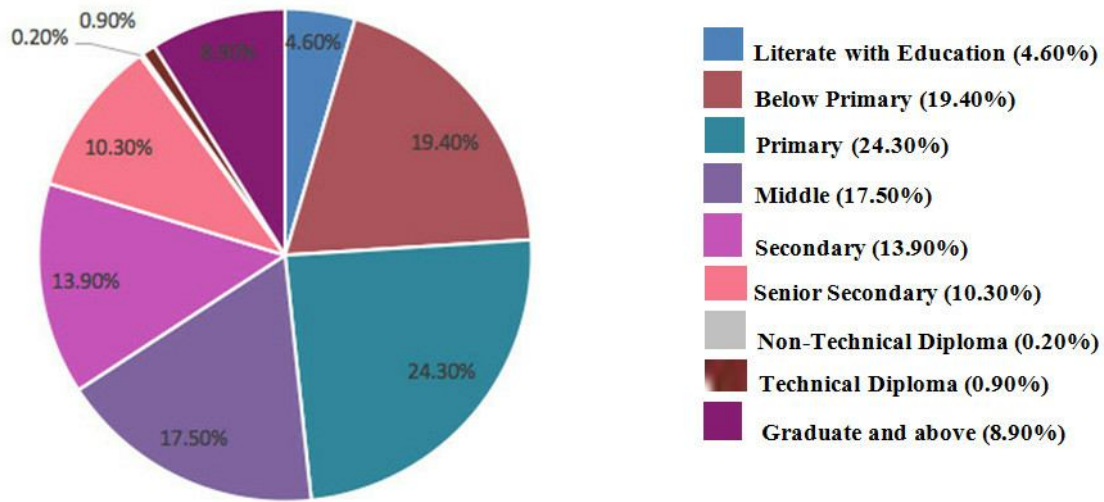


Figure-3: Education Level for Literate Population

5.0 Transformation of the Indian Knowledge System

The Indian knowledge system has undergone a significant transformation in the past few decades due to the widespread adoption of technology. The impact of technology on Indian knowledge system has been multifaceted, including the democratisation of knowledge, the expansion of research and development, and the evolution of communication and collaboration norms. This literature review seeks to examine the existing research and publications on the impact of technology on Indian knowledge system, identify the key themes, and critically assess the implications of this impact.

5.1 Democratisation of Knowledge

One of the significant impacts of technology on Indian knowledge system has been the democratisation of knowledge. Digital technologies and increased connectivity have resulted

in greater accessibility to information and education, which has broken down traditional barriers such as geography and financial affordability. One of the most significant recipients of this democratisation has been the Indian rural population. The E-Pathshala portal, launched by the government in 2015, provides over 10,000 textbooks, audio books, and educational videos to rural schools and students free of cost (Mishra, 2015).

Additionally, MOOCs have emerged as a popular platform for online learning. These courses can be accessed by anyone with an internet connection, and completion certificates are often available at nominal charges. The Indian government has also launched the Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) programme with the vision of providing affordable education to every Indian citizen. Accordingly, MOOCs and other digital learning platforms have played a critical role in the democratisation of knowledge, making education accessible to a wider population.

5.2 Expansion of Research and Development

Technology has also facilitated the expansion of research and development in India. The adoption of digital technologies and the development of research tools such as data analytics, artificial intelligence, and high-performance computing have helped Indian researchers conduct research more efficiently and effectively. Furthermore, collaborations between Indian and foreign researchers have been strengthened by digital communication platforms, such as video conferencing, email communication, and online collaboration tools.

Medical research is one area where Indian research has excelled. The Indian Council of Medical Research (ICMR) has launched a programme to build a digital health ecosystem in the country. The programme aims to leverage technology to build a national repository of health information to facilitate medical research and healthcare delivery (Government of India, 2018). The expansion of research and development in India has been facilitated by the extensive use of technology, increasing the competitiveness of India's knowledge system.

5.3 Communication and Collaboration

Technology has revolutionised communication and collaboration in the Indian knowledge system. Online discussion forums, video conferencing, online collaboration tools, and social media have all become crucial channels for research and learning. The use of these tools has led to the exchange of ideas, best practices, and knowledge, resulting in a vibrant and diverse community of Indian scholars and researchers.

Furthermore, technology has facilitated international collaborations between Indian and foreign researchers. For example, a recent collaboration between Indian and Israeli researchers resulted in the development of a new diagnostic tool for the detection of the Zika virus (Hindu, 2019). Online collaboration tools and video conferencing enabled real-time data sharing and analysis, speeding up the research process.

5.4 Challenges Associated with the Impact of Technology

While the impact of technology on the Indian knowledge system has been significant, there are several concerns associated with this impact. One of the most significant concerns is the quality of online education. While the democratisation of knowledge has resulted in greater accessibility, the quality of online education is still a concern. A 2019 study by the Indian Institute of Technology, Kharagpur, found that there were significant gaps in the quality of online course content across MOOCs (Hindu, 2019).

Another concern is the potential for technology to create disparities in access to education. While technology has made education accessible to a wider audience, not all students have equal access to technology. The digital divide between urban and rural India is still a significant issue, with rural India lacking basic infrastructure such as electricity and internet connectivity (Sarkar & Nath, 2016). Furthermore, the dominance of Western technologies and the potential for them to overshadow and replace traditional Indian knowledge systems is a concern.

Thus, the Indian knowledge system has undergone significant transformations in the past few decades due to the impact of technology. Technology has facilitated the democratisation of knowledge, the expansion of research and development, and the evolution of communication and collaboration norms. However, there are several concerns associated with this impact, including the quality of online education and the potential for technology to create disparities in access to education. Future research should examine these concerns, while exploring ways to leverage technology to augment and enhance Indian knowledge systems.

Therefore, Indian Ancient Knowledge gives the practical and meaningful impact that contains a list of four prime factors:

- a) **Identity:** Knowing about Indian Knowledge System helps young Indians feel connected to their heritage. This, in turn, helps strengthen our sense of identity.
- b) **Culture:** From a social perspective, culture is important as it is a set of ideas and customs. The prevailing knowledge and literary traditions play a significant role in shaping our culture. If the underlying knowledge systems are abruptly withdrawn from society, the cultural practices will be rudely jolted.
- c) **Received Wisdom:** Ancient knowledge plays a valuable role in 'received wisdom'. This is the continuity of thoughts and ideas passed down by previous generations. It also consists of ideas formed as a result of studying our history, heritage, and the culture of the past. This knowledge encourages the creation of new ideas and innovation. This is since modern cultures build upon the knowledge that is passed down to them.
- d) **Economic value:** The current global economy puts greater emphasis on knowledge. The economic value of knowledge is evident from the global intellectual property rights regulations and patent laws. Therefore, the ancient knowledge system will be beneficial to a country like India where we have a wealth of ancient scientific knowledge.

6.0 The Impact of Technology on Indian Knowledge System:

Over a period of time, the Indian knowledge system has evolved and diversified, covering various fields such as mathematics, astronomy, medicine, and philosophy. Technology has played a significant role in transforming the Indian Knowledge System. With the advent of computers and the internet, access to information has become easier and more convenient. These technologies have also revolutionized the way we learn and communicate.

6.1. Easy Access to Information:

Technology has opened up new avenues for acquiring knowledge. The internet has made it possible for students and researchers to access vast amounts of information from all over the

world. The use of search engines such as Google has made it easier to find information on any topic. Today, a student in a small village in India can access the same information as a student in a large city. However, this has also led to the problem of plagiarism. Many students tend to copy and paste information from the internet without understanding it. This has led to a decline in the quality of education.

6.2. E-learning:

Technology has also made it possible to learn from anywhere and at any time. E-learning platforms such as Coursera, Udemy, and edX have made it easier for students to learn new skills and acquire knowledge. This has eliminated the need for physical classrooms and has made education more accessible. The growth of e-learning has also led to the development of Massive Open Online Courses (MOOCs). These courses are offered by some of the world's top universities and are available for free. This has made it possible for students to get a world-class education for free.

6.3. Digital Libraries:

Digital libraries have also become more prevalent in India. These libraries offer access to digital versions of books, journals, and other educational resources. They also provide access to rare and out-of-print books that may not be available in physical libraries. This has made it easier for researchers to access information and has led to new discoveries and advancements.

6.4. Mobile Technology:

The use of mobile technology has also had a significant impact on the Indian knowledge system. Mobile phones have become the primary mode of communication in India. Today, there are more than 1 billion mobile phone users in India, and this number is expected to grow in the coming years. Mobile technology has made it possible for students to access educational content on their phones. This has made education more portable and convenient. Many educational apps are also available on mobile phones, which help students improve their skills and knowledge.

6.5. Distance Education:

Distance education has also become more prevalent in India. With the help of technology, students can now earn degrees from universities that are located in different parts of the country or even different countries. This has made higher education more accessible and affordable. However, distance education also has its challenges. Students who opt for distance education have to be self-disciplined and motivated. They also miss out on the social interactions that are an essential part of traditional education.

7.0 Conclusion:

Although, Indian Ancient Knowledge System has had its own values and culture with practical knowledge but now in the current scenario, technology had a profound impact on the Indian knowledge system. It has made education more accessible, portable, and convenient. The use of technology has also led to the development of new educational tools

and resources that were previously unavailable. Following tools and technology has now been adopted in villages too:

- a) The internet has made it possible for students and researchers to access vast amounts of information from all over the world. The use of search engines such as Google has made it easier to find information on any topic.
- b) E-learning platforms such as Coursera, UdeMy, and edX have made it easier for students to learn new skills and acquire knowledge. That does not need physical classrooms and made education more accessible.
- c) The growth of e-learning has also led to the development of Massive Open Online Courses (MOOCs). These courses are offered by some of the world's top universities and are available for free.
- d) Digital libraries offer access to digital versions of books, journals, and other educational depositories, even rare and out-of-print books that may not be available in physical libraries.
- e) Mobile technology have become the primary mode of communication and more than 1 billion mobile phone users in India, which is expected to grow in the coming years. It made possible for students to access educational content on their phones.
- f) Distance education has become more prevalent in India and aspirants can now secure degrees from universities located within the country or even from abroad universities.

However, the growth of technology also brings new challenges, such as plagiarism and the need for self-discipline in distance education. Overall, technology has had a positive impact on the Indian knowledge system, and it will continue to shape the future of education in India.

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