
**RELEVANCE OF MODERN TECHNOLOGY IN INDIAN
KNOWLEDGE TRADITIONS AND EDUCATION**

***Dr. Tupesh Kumar Kosma**

Guest-Assistant Professor, Govt. Veer Gend Singh College Pakhanjore Distt- U. B. Kanker
(C.G.)

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***Corresponding Author: Dr. Tupesh Kumar Kosma**

Guest-Assistant Professor, Govt. Veer Gend Singh College Pakhanjore Distt- U. B. Kanker (C.G.)

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ABSTRACT

The Indian Knowledge Tradition (IKT) is an initiative under the Ministry of Education, Government of India, aimed at promoting indigenous Indian knowledge systems. This tradition spans thousands of years and holds a vast treasure trove of insights applicable to all fields, including modern science and scientific management. By studying this knowledge tradition from an Indian perspective, we can once again emerge as a Vishwa Guru (global leader/teacher). We need to shift our mindset and embrace the essence of 'Indianness' in our lives. Indian knowledge traditions and education are deeply interconnected; the former serves as a vital source of learning, acquainting students with ancient Indian culture, values, and wisdom. India is a culturally rich nation, and its knowledge traditions have played a pivotal role in cultural preservation and national development. These traditions encompass a vast body of knowledge, including the Vedas, Upanishads, Smritis, philosophy, Arthashastra (economics), and Shikshashastra (pedagogy). Our knowledge traditions have helped transform the Indian population into human capital, thereby contributing significantly to the country's holistic development. In contrast, modern technology—through computing and networking—equips users with tools and information, enhancing efficiency and accuracy in our work. Consequently, technology is making education more engaging and effective, benefiting both teachers and students. Today, with the aid of technology, teachers create personalized lesson plans, while students utilize online resources to learn at their own pace and become self-reliant.

KEYWORDS: Culture, knowledge tradition, education, technology, techniques, teaching methods.

Indian Knowledge Tradition

- The Indian Knowledge Tradition is a vast repository of India's ancient knowledge systems, cultures, and traditional practices.
- It encompasses diverse subjects such as philosophy, literature, art, science, medicine, mathematics, yoga, and architecture.
- This tradition has been passed down through generations in both oral and written forms—via texts, manuscripts, and oral communication.
- The objective of the Indian Knowledge Tradition is not merely to impart knowledge to students but also to acquaint them with ethical, social, and cultural values.
- The National Education Policy (NEP) 2020 emphasizes integrating the Indian Knowledge Tradition at all levels of education.

Characteristics of the Indian Knowledge Tradition – The characteristics are as follows:

- The Indian Knowledge Tradition aids in character building among students.
- Our tradition strengthens the self-confidence of future generations.
- These traditions have evolved through experience, observation, experimentation, and rigorous analysis.
- Our knowledge tradition drives societal progress.

Education

- Education is the process of acquiring knowledge and putting it into practice.
- It is a broad term that encompasses both formal and informal modes of learning.
- The Indian Knowledge Tradition is a vital component of education, helping students develop knowledge, skills, and values.
- Through education, students not only acquire knowledge but also develop the skills necessary to understand and contribute to the world around them.

The Relationship Between Indian Knowledge Traditions and Education

- Indian knowledge traditions and education are inextricably linked.
- Indian knowledge traditions serve as a vital source of education, aiding students in cultivating knowledge, skills, and values.

- The National Education Policy (NEP) 2020 aims to incorporate Indian knowledge traditions into education to connect students with their cultural heritage and prepare them for a better future.

Modern Technology: The term "modern technology" is a combination of two concepts:

"Modern" refers to what is new or contemporary, while "technology" signifies the application of scientific knowledge for practical purposes or in everyday life. It encompasses everything from the wheel to computers, and from medicines to clothing, whether in industry or daily existence. Technology is defined as the application of scientific knowledge for practical objectives; it utilizes scientific principles to transform the environment in which humans live.

Thomas Edison established the world's first industrial research laboratory and is regarded as the father of technology. Thus, modern technology can be described as the convergence of computing and networking, empowering users by giving them centralized control over advanced tools and the knowledge required to use them. Furthermore, technology involves using scientific knowledge to produce new machines and devices, enabling the provision of various services or facilitating further planning for the creation of additional equipment. The goal of technology is to enhance efficiency and speed, enabling individuals to work proficiently and rapidly across all fields. Characteristics of modern technology:

Modern technology enables the study process to be conducted in an objective manner.

- Modern technology allows us to carry out our work in a personalized and systematic way.
- Technology makes the teaching process purposeful.
- With the help of technology, tasks are performed more rapidly.
- With the help of computers, teachers can demonstrate the practical aspects of theories to students.can teach and demonstrate.

Educational technology, therefore, refers to the use of digital tools and resources to enhance teaching and learning, that is, when we use software, apps, online courses, etc. to make the teaching process interesting and simple. Educational technology helps teachers teach more effectively and students learn more efficiently. The purpose of educational technology is to use information and communication technology tools in any type of classroom to result in better teaching and learning.

The relationship between Indian knowledge: tradition and modern technology: When technology or technology is integrated into the education process, it has a direct impact on our teaching process. When machines and programmed instruction are used in teaching, it is called educational technology. Similarly, the practical formulation of educational objectives and the use of audio-visual aids to achieve them are also educational technologies. Defining educational technology, S.S. Kulkarni wrote, "The application of the inventions and principles of technology and science to the educational process is called educational technology." India's integration of technology into the developing world of education stands as a significant force shaping the future of teaching. First and foremost, technology has made education more accessible. With online learning platforms and educational apps, students can access learning materials and coursework from anywhere with an internet connection.

Modern Education: Modern technology has transformed our education, bringing it out of the classroom and setting an example for everyone through online courses. Technology has made education accessible to students, working women, and professionals alike.

The most significant change in the field of education is that it has transformed knowledge. has been brought to everyone's doorstep. In today's world, students can access education from anywhere, achieve their set goals, and make their lives easier.

Regarding the government's initiative to modernize Indian education: education is the ladder of societal development that enables our society to progress and flourish. In this process of development, modern technology and digital learning platforms serve as the foundation, making the entire educational process objective and engaging. The government plays a crucial role here, as the country's holistic development is impossible without its support. In this context, the facilities provided by the government are as follows:

1. National Digital Library of India (NDLI): This is a government initiative—completely free of cost—designed to provide students with access to a vast collection of educational resources, including textbooks, scholarly articles, research theses, and other academic materials. It was launched by the Indian Institute of Technology (IIT) Kharagpur. Currently, the NDLI hosts over 80 million digital resources.
2. DIKSHA (Digital Infrastructure for Knowledge Sharing): "DIKSHA" is a groundbreaking digital platform developed in India by the National Council of Educational Research and

Training (NCERT). This platform is significant for students, teachers, and parents alike. Currently, more than 15 million teachers and over 20 million students from across India are connected to DIKSHA. The platform offers over 20,000 educational resources and learning materials (Kumar, 2024).

CONCLUSION

Education is a vital building block of our society, essential for constructing a progressive community. Through education, individuals discover their innate potential and, by developing it, infuse society with the energy of progress. Education fosters positive societal changes and helps eliminate negativity within society. When we integrate technology with education, we witness remarkable results in society, as technology enables us to make education modern, engaging, accessible, organized, and simple. A prime example of this is the availability of educational videos online, which bring education to everyone's doorstep while making the learning process engaging. Therefore, it is essential for everyone to embrace this as much as possible and promote modern education.

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