Rethinking education: Why ancient wisdom might be the future?

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ABSTRACT

This paper draws inspiration from the ancient wisdom of the Bhartiya (Indian) Knowledge System to propose a framework for educating the next generation of learners. Bharat boasts a rich tapestry of knowledge traditions that have flourished for millennia. This ancient knowledge system, often called Bhartiya Jnana Parampara, ranges from mathematics and medicine to philosophy and spirituality. Far from being relics of the past, these traditions hold profound virtues and offer valuable applications for future generations. Unlike the compartmentalized approach of modern education, it views the human being as an interconnected whole, encompassing the intellectual, emotional, physical, social, and spiritual dimensions. Today, we grapple with redefining well-being for a generation facing a unique technological landscape and dependence. As technology fosters digital addiction, leading to a reduction in human intelligence, experiential learning, self-awareness, and value-based life must be recognized as keys to future success. Holistic education, as outlined in the Bhartiya Knowledge System, integrating outer and inner pursuits, is the need of the hour. This paper argues for a holistic approach, encompassing a human's intellectual, emotional, physical, social, and spiritual dimensions. Building upon the concept of the Vidya Chakra (a model for holistic education), the paper explores the distinction between "outer knowledge" (facts and skills) and "inner knowledge" (self-awareness and personal growth). While the National Education Policy 2020 represents a positive step, ongoing discussions are necessary to refine and adapt it for the future. By integrating this ancient wisdom with modern technology, we can create well-rounded learning experiences that prepare individuals to navigate the complexities of the 21st century.

Keywords: Holistic Education, NEP 2020, Bhartiya Knowledge System, Outer Knowledge, Inner Knowledge, learners, Vidya Chakra

BUILDING THE CONTEXT

In education, the idea of a "holistic" approach aims to encompass both external knowledge (facts and skills) and internal knowledge (self-awareness and personal growth). However, due to the vast amount of information and ongoing processes involved, achieving a complete holistic education for everyone seems unrealistic. A more attainable goal might be "contextual holism." This consists of identifying the fundamental building blocks of knowledge and tailoring them to each student's personal and professional needs and aspirations. This personalized approach allows for a more holistic learning experience, even though it cannot cover everything. Similarly, "value" in education is often subjective and influenced by the cultural upbringing of both teacher and learner. Values represent foundational, inspiring, consistent qualities distinct from fluctuating professional accomplishments.

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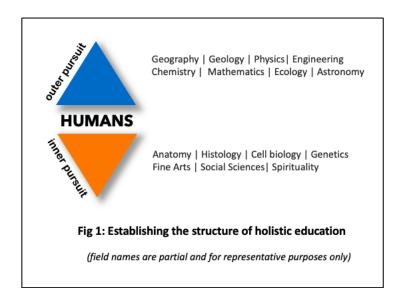
Education has primarily focused on transmitting knowledge and developing intellectual skills for centuries. While this approach has yielded valuable results, we must address human potential's multifaceted nature. Holistic education emerges as a powerful approach to cultivating well-rounded individuals equipped to navigate the complexities of life.

At its core, holistic education recognizes the interconnectedness of humanity's intellectual, emotional, physical, social, and spiritual dimensions. Learning goes beyond memorization and rote learning, encompassing critical thinking, creativity, problem-solving skills, and the ability to collaborate effectively. The need is to foster emotional intelligence, allowing students to understand and manage their emotions, build healthy relationships, and develop a sense of responsibility for fellow human beings and society.

Let us explore the concept of holistic education and the key elements that make it well-rounded. Traditionally, education focused heavily on memorization, leading to the flawed idea that intelligence equals a good memory. Students with high grades were considered the most intelligent, while those with lower grades were considered less capable. This misconception may have persisted due to the lingering influence of the British education system, even after India's independence.

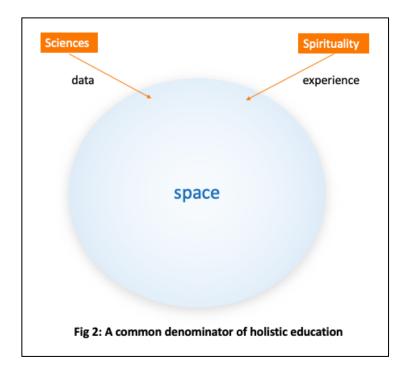
The introduction of the NEP 2020 (New Education Policy 2020) marks a shift from this memorycentric approach. It recognizes a broader definition of intelligence, combining memory with imagination. In the future, we might see an even greater emphasis on "perception," which is crucial in understanding and interacting with the world around us (Aithal & Aithal 2020; Yenugu 2022).

Fueled by memory and imagination, technological advancements have driven discoveries in numerous fields. Pursuing "outer knowledge" led to breakthroughs in physics, chemistry, electronics, history, mathematics, geography, engineering, ecology, and social sciences (Figure 1). On the other hand, exploring "inner knowledge" led to advancements in anatomy, genetics, histology, cell biology, molecular biology, and biochemistry at the physical level. Delving even more profoundly, this inner exploration fostered the development of psychology, philosophy, fine arts, music, painting, poetry, literature, religion, and so on.



Science often employs a "reductionist" approach. This involves breaking down complex systems into fundamental components to understand their work. If we start from gross morphology, we reach the atomic space while traveling through gross anatomy, histology, cell biology, molecular biology, biochemistry, and fundamental physics. By applying reductionism to the physical world, scientists have gathered vast amounts of data, going from large-scale structures to the atomic level. Interestingly, the deeper we delve, the more we encounter vast emptiness in the form of space that makes up roughly 99.99% of the atom.

Similarly, when we apply a reductionist approach to the mind, we first encounter the realm of thoughts, then emotions, and finally, a fundamental state of pure "nothingness" that transcends the material world. In essence, nothing is at the core of something. Therefore, holistic education must integrate the physical and non-physical worlds.



Our current education system often focuses on transmitting knowledge in a compartmentalized way. We teach the brain but not the mind. We remove life to study organisms and call it "Life Sciences." Our terminologies and approach need an upgrade. The traditional education system prepares students for a job market that values specific skills like cogs in a machine. Higher-performing students receive better rewards using identical testing methods, while others fall behind. This historical method of training the body and the mind needs to change.

The NEP 2020 (New Education Policy 2020) is a much-needed step towards acknowledging the limitations of the previous system and proposing a roadmap for future generations (Yenugu, 2022). However, to truly achieve holistic education, we must identify the core components of external knowledge (outer sciences) and internal exploration (inner sciences) and customize delivery so that it generates personalized experiences and value-based life. Traditional education often relies heavily on

memorization, creating a cycle of rote learning. To move beyond this, education must become more experiential. Students need to engage with the world around them, not just memorize facts from textbooks.

WHAT IS HOLISTIC EDUCATION?

Holistic education goes beyond academics to encompass the development of all aspects of a student's being. It aims to cultivate well-rounded individuals who are knowledgeable, emotionally intelligent, physically healthy, socially responsible, and connected to a sense of purpose. Here, the focus is on hands-on learning experiences that involve projects, field trips, simulations, and other activities that lead to exploration, discovery, and problem-solving. Given that every student learns differently, education must be personalized and integrated, catering to students' unique strengths, interests, and learning styles. The purpose is to use education to create a seamless connection between mental and physical well-being.

THE BHARTIYA (INDIAN) KNOWLEDGE SYSTEM

The Bhartiya (Indian) Knowledge System refers to the vast collection of indigenous knowledge traditions developed in Bharat over millennia (Kapoor & Singh, 2005). It encompasses many fields, including natural sciences, medical sciences, architectural sciences, philosophy, fine arts, and spirituality. Bharat's traditional knowledge system emphasizes interconnectedness, viewing the universe and the human being as a whole, emphasizing observation and experience. In the conventional system, knowledge was often gained through observation, experimentation, and introspection, promoting sustainable living practices and respect for nature. Much knowledge was transmitted orally from generation to generation, often through stories, songs, and rituals, emphasizing improving daily life and well-being. Many Bhartiya practices of sustainable agriculture or holistic medicine have gained recent prominence.

Bharat boasts a rich and ancient knowledge system that has thrived for millennia. This vast knowledge encompasses various fields, forming a holistic view of the universe and the human experience. The key feature of the Bhartiya Knowledge System is a seamless connection between finite and infinite. It views the universe, including the human body and mind, as a unified whole. As science deals with the physical dimensions and does not have concepts or tools to fathom non-physical dimensions, the Bhartiya Knowledge System emphasizes harmony with nature and innate experience, not memorization. Much knowledge was transmitted orally through stories, songs, and rituals from generation to generation for use in daily life and well-being. Unlike in the West, in Bharat, questions of existence, consciousness, and liberation are routinely discussed in families, Schools, colleges, and universities. The highest goal is liberation, not God. Practices and beliefs aimed at self-realization and freedom are central to the Bhartiya Knowledge System with modern education Policy 2020 emphasizes integrating the Bhartiya (Indian) Knowledge System with modern education systems for a more well-rounded learning experience (Biswas & Srinivasan, 2024).

VIDYA CHAKRA - A FRAMEWORK FOR HOLISTIC EDUCATION

Holistic education aims to develop the whole person, not just the mind. Here, a novel approach to holistic training is proposed. The Vidya Chakra (illustrated in Figure 3) provides a promising framework for holistic learning. It integrates the study of the external world (outer sciences) with inner exploration (self-understanding).

To implement the Vidya Chakra effectively, educators need to identify relevant topics at each of its four levels: body, thoughts, emotions, and life energy. For instance, science students study more than just science subjects; they must also explore social sciences (thoughts), humanities (emotions), and yogic practices (life energy). This well-rounded approach fosters a deeper understanding of the world and oneself, generating questions and opportunities at every step.

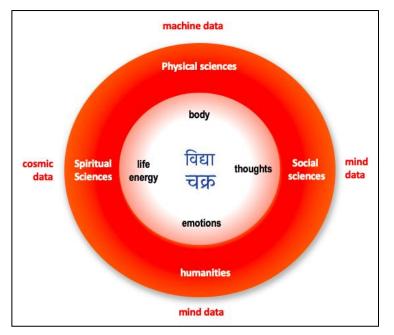


Fig 3: Vidya Chakra - a holistic wheel of education

Implementing courses like creative thinking, innovation, communication, social outreach, and yogic practices is essential. To ensure holistic education generates positive outcomes, we must instill a robust value system in the students. It is good to know rights, but it is also reasonable to understand responsibilities.

Every student must be taught the Indian Constitution, regardless of the stream they belong to. It is necessary to make people aware of the enormous intelligence and efforts that have gone into making the Constitution. They need to know the vision and revision of the human mind that makes the nation.

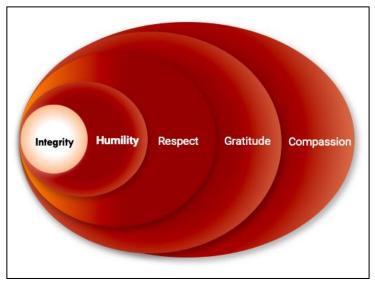


Fig 4: Key components of the value-based education

We must develop courses that formally train students in gratitude, humility, respect, integrity, compassion, and so on (Fig 4). A perfect education would be one where students master movement (outer world) and stillness (inner world). Based on their orientation, they will do their best in whatever fields they get into. A holistic and value-based education will be ideal for a student's physical, mental, and spiritual growth.

NATIONAL EDUCATION POLICY 2020

The National Education Policy (NEP) 2020 marks a significant shift in India's educational landscape. Burdened by rote learning and rigid structures, India's British education system has long requested reform. Recognizing this, the government rolled out the National Education Policy (NEP) 2020, aiming for a holistic overhaul.

The NEP 2020 envisions an education system "rooted in Indian ethos" that fosters critical thinking, lifelong learning, and global citizenship. It emphasizes universal access to quality education to higher education, bridging socio-economic and geographical disparities to ensure inclusive education, enhancing the quality of education across all levels and curriculums with emphasis on experiential learning, making education accessible and affordable for all, and establishing robust mechanisms for monitoring learning outcomes and ensuring systemic improvement.

The NEP 2020 proposes several significant reforms across various educational stages: (i) a renewed focus on developing strong foundational skills in language and mathematics through play-based and activity-oriented learning, (b) a shift towards a flexible, multidisciplinary curriculum focusing on core competencies like critical thinking, problem-solving, and creativity. Introduction of vocational training at the secondary level (c) moving away from rote learning and high-stakes examinations towards continuous, comprehensive evaluation, (d) enhanced training programs focusing on pedagogy, child psychology, and continuous professional development for teachers, and (e)

introducing a flexible credit system with multiple entry and exit points allows students to pursue diverse learning pathways. Increased focus on research and innovation.

In the context of this paper, NEP 2020 promotes a holistic learning approach that fosters critical thinking and creativity alongside subject knowledge, equipping students with essential 21st-century skills. There is a focus on accessibility and affordability, and early childhood education promises to bridge the educational gap between social and economic classes. Furthermore, NEP 2020 emphasizes strong foundational skills in language and mathematics as fundamental to success across academic disciplines. The NEP can potentially improve graduate employability by integrating vocational training and aligning curriculum with industry needs.

The National Education Policy 2020 presents a comprehensive vision for transforming India's education system. Its focus on accessibility, equity, holistic learning, and skill development promises to empower future generations. However, successful implementation hinges on effective resource allocation, robust teacher training programs, and a pragmatic approach to bridging the digital divide.

GLOBAL TRENDS IN HIGHER EDUCATION

In general, the focus is on skills and employability. The competency-based education approach shifts the attention from credit hours to achieving specific skills and competencies relevant to the job market. Universities collaborate with industries to identify required skills and design curricula accordingly. One of the highlights of the emerging trends is micro-credentials and stackable credentials. These smaller, focused learning modules allow students to gain specific skills and build towards larger certifications or degrees. This caters to the growing demand for lifelong learning and upskilling. As expected, AI is used for personalized learning experiences, adaptive learning platforms that adjust to individual student needs, and automated grading and feedback. Virtual Reality (VR) and Augmented Reality (AR) technologies create engaging learning simulations and experiences, particularly in fields like medicine, engineering, and design. Using big data and learning analytics, institutions identify areas where students struggle, personalize learning pathways, and improve overall program effectiveness.

The rise of online learning platforms and MOOCs (Massive Open Online Courses) provides greater accessibility for geographically dispersed students or working professionals. Blended learning combines online modules with in-person classes for a flexible learning experience. Micro-degrees and alternative credentials are shorter, focused programs that cater to learners seeking specific skills or qualifications without the time commitment of a traditional degree. Universities are increasingly recognizing the importance of mental health support services for students. This includes providing access to counseling services and promoting healthy coping mechanisms. Also, a great deal of attention is paid on the development of soft skills like communication, collaboration, critical thinking, and problem-solving to prepare students for a complex workplace.

With rapid technological advancements, the demand for continuous learning throughout one's career is growing. Universities are adapting to offer flexible learning options for working professionals and

increasingly collaborating with educational institutions, corporations, and industry experts to offer interdisciplinary programs and bridge the gap between academia and the professional world. Despite this, top universities globally are open to higher education challenges. For example:

- (i) The cost of attending a top university has skyrocketed in recent decades, putting a strain on students and families. This can lead to increased student loan debt, burdening graduates for years. Additionally, rising costs can limit access to top universities for talented students from lower socioeconomic backgrounds.
- (ii) The rapid pace of technological advancement and societal change can challenge top universities to ensure their curriculum remains relevant. Equipping students with the skills and knowledge necessary to thrive in a dynamic job market requires continuous curriculum evaluation and adaptation.
- (iii) There is a growing concern that graduates from top universities may not possess the specific skills employers are looking for. This can be due to a mismatch between theoretical knowledge taught in universities and the practical skills needed in the workplace. Universities seek ways to bridge this gap by incorporating internships, practical projects, and industry collaborations into their programs.
- (iv) The rise of top universities in other countries has intensified competition for students, faculty, and research funding. This pressure can lead to a focus on rankings and prestige, potentially overshadowing the core educational mission.
- Universities face increasing pressure to address the mental health needs of their students. The demanding academic environment, coupled with financial pressures and social isolation, can contribute to rising rates of anxiety and depression among students. Universities are looking at ways to provide better support services and promote student well-being.

Despite progress, universities still need help to attract and retain students and faculty from underrepresented backgrounds. Creating a truly diverse and inclusive campus environment requires ongoing efforts to address issues of unconscious bias and ensure equitable opportunities for all. The rise of online learning platforms and alternative credentials challenges the traditional model of top universities. Institutions must adapt to effectively leverage technology to enhance the learning experience without compromising quality.

EMERGING MENTAL HEALTH CONDITIONS

The National Mental Health Survey of India conducted in 2015-2016 (NMHS 2015-16) identified a significant burden of mental illness in the adult population. Nearly 15% of Indian adults require intervention for at least one mental health concern, with depression being particularly prevalent, affecting approximately 5% of the population. Suicide rates in India are also concerning, with estimates suggesting over 258,000 deaths by suicide in 2012, disproportionately impacting the 15-49 age group. Depression is recognized as the leading cause of global disability, accounting for 7.5% of all years lived with disability in 2015. In its most severe form, depression can culminate in suicide. Globally, over 800,000 people die by suicide each year, making it the second leading cause of death

among individuals aged 15-29 years old (<u>https://www.who.int/india/health-topics/depression</u>). Mental health concerns are widespread in the United States, affecting over 57.8 million adults in 2021 – that is more than one in five. (<u>https://www.nimh.nih.gov/health/statistics/mental-illness</u>). Factors like growing income inequality, social isolation, and job insecurity could contribute to an increase in depression. Furthermore, excessive social media use and screen time have exacerbated stress, loneliness, and anxiety with an unfavorable impact on the students (Pascoe et al., 2019).

THE FUTURE OF WORK

Predicting the future with certainty is challenging, but given how values are mutating and societies are changing, here are a few possibilities for how future human professions and minds may evolve. From the technological perspective, we will see many changes. For example, advancements in neuroscience and technology will lead to tools that enhance memory, focus, and processing power. Likewise, brain-computer interfaces could become more sophisticated, blurring the line between human and machine capabilities.

The rapid pace of change might necessitate a focus on adaptability and lifelong learning skills. Automation is replacing many jobs and routine tasks, creating new opportunities in areas requiring creativity, critical thinking, and social skills. Jobs that require emotional intelligence, empathy, and problem-solving skills in human interactions might become more valuable. Technological advancements could create entirely new professions in fields currently unimaginable.

The increasing capabilities of AI raise questions about job displacement, automation bias, and the potential for autonomous weapons systems. Gene editing and other biotechnologies pose ethical dilemmas related to human enhancement, designer babies, and unintended consequences. As our lives become more interconnected, cybersecurity threats and data privacy concerns will continue to evolve. The ongoing climate crisis will necessitate significant societal changes and international cooperation to mitigate environmental damage and ensure sustainable resource management. The unequal distribution of resources and the increasing impacts of climate change could exacerbate social inequalities and lead to conflict. The rise of antibiotic-resistant bacteria and other unforeseen pathogens highlights the need for global cooperation on pandemic preparedness. Automation and technological disruption will continue transforming the workforce, necessitating educational and social safety net adaptations.

To handle emerging employment and social scenarios, learners must be trained in ethical solid practices, renewable energy sources, adopting sustainable consumption patterns, and encouraging upskilling and lifelong learning.

DEFINING HUMAN DEVELOPMENT

Human development is a continuous process that focuses on a long and healthy life, measured by life expectancy at birth, a knowledge-driven approach, measured by years of schooling and learning, and a decent standard of living, measured by Gross National Income (GNI) per capita. It is an ongoing journey requiring a multi-pronged approach. Despite phenomenal advances in ensuring the quality of living, some of the significant challenges are poverty and hunger, inequality, conflicts and violence, and lack of access to hygiene and quality healthcare. For these reasons, investments in education and

healthcare, sustainable development, governance, and employment opportunities are required to create a vibrant society.

The concept of human development in the traditional Bhartiya perspective differs from the Western model in several ways. The focus is on using education as a means of self-realization and liberation. In the traditional Bhartiya school of thought, the ultimate goal of human development is not just material well-being but achieving moksha, liberation from the cycle of rebirth. This journey involves self-knowledge, spiritual growth, and fulfilling one's dharma (duty) according to one's caste and stage in life. Unlike the Western model that often compartmentalizes physical, mental, and spiritual well-being, the Bhartiya perspective emphasizes the interconnectedness between the physical and non-physical world by bringing in yogic concepts and practices. Human life is believed to be influenced and driven by karma, the law of cause and effect. Due to a strong component of karma in daily life, the emphasis is on Duty (Dharma) to build a harmonious social order and individual development. Traditional Bhartiya society emphasizes the importance of teachers and spiritual guides in guiding individuals to self-realization through knowledge, direction, and support in navigating the complexities of life. Towards this goal, ancient texts like the Vedas, Upanishads, and Bhagavad Gita offer philosophical frameworks and guidance for human development. These religious texts emphasize virtues like self-control, compassion, and living a meaningful life.

The question is: Is the traditional Bhartiya concept still valid in modern times? Clearly, yes, as the traditional Bhartiya perspective offers insights into holistic well-being, self-knowledge, and the importance of spiritual growth. Principles like living in harmony with nature and fulfilling one's potential are extremely valuable today.

HOLISTIC EDUCATION – THE WAY FORWARD

Based on the current social situation and emerging trends, holistic education has become all the more important. Going beyond the economic parameters of evaluating humans, the key is to promote inner journeys along with outer knowledge and skills. Education is a powerful tool in handling mental health conditions on multiple levels. In the present situation, the holistic approach would educate learners on mental health conditions and coping mechanisms and empower them to identify potential issues early toward effective intervention. Training learners in stress management, emotional regulation, and social connection equips them with tools to navigate challenges and build resilience against mental health issues. Creating a safe space in schools to discuss mental health openly and honestly can help reduce stigma and encourage help-seeking behavior. Educating students about the prevalence of mental health conditions can normalize these experiences and help students feel less alone. Equipping educators and staff with primary mental health training can enable them to recognize better and respond to student needs. The need of the hour is to train students for university and the universe.

Academic institutions must identify learners' inborn talents and train them to further develop their natural skills and likings. By customizing training to suit innate strengths, learners show the least resistance to knowledge and build motivation to learn. It is essential to review the format of the current system and plug-in courses to sensitize students to gratitude, humility, respect, integrity, compassion, sustainability, and other values. A concise study of the "Indian constitution" must be

mandatory for all students, irrespective of their stream. This will help them connect with the foundations of the legal system and adapt to various situations in life. The hour needs to design courses on the 'sustainable development of human beings', focusing on inner sciences (moving beyond the current consumerism model).

The University curriculum needs to be revised to include role models and those who receive national awards every year (e.g., on Republic Day / Independence Day). Students will be given a deep sense of pride in the accomplishments of our people in all fields (through storytelling). It is time to globalize Indian values and best cultural practices. Special counseling hours must be allocated to learners to help them orient themselves toward the goal and identify their optimum career path. Students must be caught at a young impressionable age where asking questions is encouraged. Outreach activities must be essential to their training process for optimum physical and mental development.

In conclusion, knowledge must be experiential and lead to self-realization, as *humans are beings*, not machines. The pressing need of the hour is to focus on developing *Homo sapiens*, not *Robo sapiens*. In the current scenario, self-realization is more important than theoretical knowledge of life. All this and more is achievable if the approach is holistic and based on the ancient wisdom of developing human beings at the physical, mental, and cosmic levels. We need to prepare learners for the universities and the universe.

REFERENCES

Aithal PS and Aithal S. (2020) Analysis of the Indian National Education Policy 2020 towards Achieving its Objectives, Int J Manage Technol Soc Sci: 5, p.19–41.

Biswas NR and Srinivasan AR. (2024) Integrating Bhartiya Knowledge System with Higher Education. University News. 62, p.74–78.

Kapoor K and Singh AK (2005) Indian Knowledge Systems, D. K. Print world. New Delhi.

Pascoe MC, Hetrick SE and Parker AG (2019) *The Impact of Stress on Students in Secondary School and Higher Education, Int. J. Adolesc. Youth*, 25, p.104-112.

Ministry of Education. (2024, Feb.) Government of India - Indian Knowledge Systems: https://iksindia.org/

Yenugu S. (2022) *The New National Education Policy (NEP) of India: Will it be a paradigm shift in Indian higher education? Perspect. Policy Pract. High. Educ.* 26, p.121–9.
