INNOVATIVE APPROACH TO EDUCATION: A HEAD- HEART - HANDS MODEL FOR HOLISTIC LEARNING IN THE INDIAN CONTEXT

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Abstract

The educational landscape in India is marked by both significant challenges and promising opportunities. The conventional emphasis on the 3Rs—Reading, Writing, and Arithmetic—has historically served as the foundational focus of the Indian education system. However, with the evolving demands of the 21st century, there is a growing need to rethink and revitalize educational paradigms. To address the demands of a rapidly changing job market, skill-based education is crucial. Upskilling initiatives can equip individuals with the technical and soft skills needed for future employment. This involves not only vocational training but also integrating skills development into mainstream education. This paper explores innovative approaches to education in the Indian context, drawing on historical perspectives, modern recommendations, and the potential of emerging technologies.

Keywords: 3H, Models of learning, Learning, Innovative Approach, Holistic Learning The National Education Policy (NEP) 2020 offers a comprehensive approach designed to address these challenges and capitalize on opportunities for educational transformation. NEP 2020 emphasizes holistic, multidisciplinary education that fosters critical thinking, creativity, and life skills. This policy represents a substantial shift from rote memorization to a more nuanced and flexible educational approach. Historically, both Mahatma Gandhi and Tagore have contributed immensely towards building a perspective on education in the Indian context. Mahatma Gandhi's Nayee Taleem (Basic Education) emphasized learning through productive work and self-reliance. This model advocated for an education system that is rooted in the local culture and environment, promoting holistic development. Tagore advocated for an education that nurtures both the intellect and the soul. John Dewey, an American philosopher and educator, championed experiential learning and democracy in education. Dewey's ideas align with the need for education systems that prepare individuals for active participation in a democratic society.

A balanced educational approach should interlink theoretical knowledge with practical skills and storytelling. This integrated model can promote holistic learning, where students can apply theoretical concepts in real-world scenarios and understand their practical implications through narratives and case studies. The Head-Heart-Hands model represents an innovative approach to education that combines intellectual, emotional, and practical learning. This model emphasizes Cognitive development through rigorous academic instruction and critical thinking, represented by the head; Emotional and social learning through arts, storytelling, and community engagement, represented by the heart; and

Practical skills development through hands-on activities, vocational training, and experiential learning, represented by hands.

Changing Paradigms in the Indian Context

The National Education Policy (NEP) 2020 offers a complete plan to tackle these challenges and take advantage of opportunities for change. The common narrow sense of the term 'education' for students denotes the educational institutional system. In this process, society strives to teach students a set of predetermined aims for a specific time period through a pre-structured curriculum and a set method of teaching. The goal is to help students develop mentally and gain knowledge when they enter educational institutions. Education was once seen as the same as instruction, involving a planned curriculum in schools or colleges to pass on knowledge. When India adopted this education system, the same approach was followed. The curriculum was designed to prepare students for jobs in industries and offices. This system focused on rote learning, so more importance was given to theoretical subjects than to practical skills. White-collar jobs became more valued than blue-collar jobs, and hands-on work was considered less important. However, skill-based learning with a hands-on approach is also connected closely with experiential learning and creativity and has a critical role to play in the overall development of the child. This has been recognized in the recent National Education Policy NEP 2020,

India's National Education Policy (NEP) 2020 aims to transform higher education by making it more inclusive and flexible to meet the needs of the 21st century. It proposes a multi-disciplinary institution where students can select subjects across disciplines, leading to broad-based, holistic education. (Ministry of Human Resource Development, 2020). The policy further advocates for vocational education and skill development to go hand-in-hand with formal academic learning, providing more practical exposure through projects, internships, or research-based approaches while allowing the students ample space for critical thinking and making room for innovation. The National Council of Education, Research and Training (NCERT) in India has been working towards reforming the education system. The latest National Education Policy 2020 emphasizes creativity and innovation at all levels of education. It recommends practice-based learning, focusing on hands-on and skill-based learning. The policy encourages blending arts and sciences and emphasizes vocational training and skill development through real-world experiences.

Continuous lifelong education

According to John Dewey, educational institutions are designed to provide a special environment for the early stages of human life. These institutions are intentionally created with the main goal of educating children. This unique environment is important for understanding our complex society and civilization. The educational goals within these institutions are carefully planned and chosen by the community to benefit the younger generation. Education helps people better adapt to their surroundings. In a narrower sense, education is seen as the

process of gaining knowledge or information about a subject. However, many educationists have also argued that the acquisition of knowledge cannot be the only objective of education. In its wider sense, education is the total development of the personality. Thus, education is the process by which an individual develops himself in multiple dimensions. In this way, education is a lifelong process of growth. It begins with the birth of a child and ends with his death. It is a continuous process. According to this perspective, education is not limited to the classroom or a period of life. We keep learning all through life. A person learns through their experiences, which they gather throughout their life. Education is not just about collecting information; it's about gaining experiences over time. Therefore, education is the sum of all the experiences a student has, both inside and outside of school. In this way, anything that expands our thinking, deepens our understanding and encourages us to think and act is part of our education. Continuous lifelong education not only includes direct instruction-based learning but also informal learning.

Direct instruction is the most common method used in formal education. It involves transferring knowledge from someone who knows to someone who doesn't. This method dates back to Socrates over two thousand years ago and is still widely used today. On the other hand, hands-on learning is experiential and is considered one of the oldest forms of learning. It's also one of the most effective ways to learn. Today, many alternative educational methods focus on experiential and hands-on learning approaches. We also find interesting instances of educational methods in this area being developed in different parts of the world. Such alternate education systems include the Froebell and Montessori method, which emphasizes a learner-centric activity-based approach. In the Indian context, the philosophy and approach of Tagore and Gandhi emphasized creativity and a hands-on approach to learning. (Montessori, 1912).

Informal learning often happens unintentionally. Many things that students naturally learn, like language, social skills, and adapting to cultures, happen informally. This kind of learning occurs through participation, with new knowledge gained each time a child engages in an activity. It includes learning skills, apprenticeships, and more, often through observation and involvement in social activities. Informal learning is closely connected to real life and tends to be intuitive, spontaneous, and creative. Traditionally, in artisan and crafts communities, students learned through this informal, hands-on system, passing down craft knowledge from one generation to the next.

Pedagogical approaches

Currently, the world is aware of the need to reform the education system. Education is associated with educational institutions, and the word educational institution itself means different things in different countries and cultures. Friedrich Wilhelm August Fröbel was a German educator and a student of Johann Heinrich Pestalozzi. Pestalozzi was an innovative educator who believed that students need to engage in physical activity / active learning and not just engage

in rote memorization or repetition. Froebel worked for some time at an educational institution based on Pestalozzi's principles and seemed to be influenced by what he learned there while also evolving his own ideas about the way students should be taught. Froebel laid the groundwork for modern education by recognizing that each student has unique needs and abilities. Froebel believed that students should be nurtured and nourished "like plants in a garden". (Froebel, 1887). The pedagogical approaches of both Gandhiji and Tagore have a close connection with the Indian scenario and are especially relevant in this context.

Gandhi - Nai Taleem

"The principal idea is to impart the whole education of the body, mind, and soul through the handicraft that is taught to the students" — Mahatma Gandhi Mahatma Gandhi was one of the founders of modern Indian education. He is well known as the father of the nation, a country reformer, a freedom fighter, pillar of the nation. Apart from politically influencing, he also contributed to Indian education policy to build a New India. He believed that education is a vital pillar to developing a nation. He realized that a good and independent education system can make a strong and independent nation. For that, he introduced an education system that is unique and self-sufficient in nature and also connected to the root of the socio-economic culture of India. Mahatma Gandhi initiated Nai Taleem with its emphasis on hands-on, value-centric education. Though it was established a long time ago, Gandhi Ji's point of view on education is still relevant to the current situation. His vision and philosophy on education still make sense in the contemporary situation. His pedagogy is helpful for a better understanding and direction for Indian education policies. Gandhi's pedagogy, which is well known as Nai taleem initiated at Tolstoy farm in Africa as an experiment. Later in Sevagram, while engaged in freedom fighting, Gandhi wrote about his pedagogy in his famous article Harijan. In his article, he mentioned that -"I believe that the highest development of the mind and soul is possible through a system of education that teaches not just the mechanics of a craft, but also the reasons behind each process. For example, I have personally taught sandal-making and spinning in this way, with good results. This method doesn't exclude subjects like history and geography, but I find that these are best taught through oral communication rather than reading and writing. By speaking, you can convey much more information. The alphabet can be taught later. Students also learn mathematics through their craft. I place great importance on primary education, which, in my view, should be equivalent to the current matriculation level, but with less emphasis on English." -Harijan, July 31, 1937 (Gandhi, 1937). This shows his in-depth understanding of hands-on activities, including craft, and his concept of integrated education. Nai Taleem follows the principles mentioned below.

In his pedagogy, one of the basic ideas is learning things by doing. (Patel, 2015). The process of learning requires experience in doing things with hands-on or practical knowledge. As per Gandhiji, through hands-on learning, the student gains not only practical knowledge but also multiple areas of knowledge, which is

not possible by rote learning. 'Work and knowledge should go together' is the Gandhian principle of education. The trend in modern primary education is to give students a package where students can learn various subjects in one activity rather than separate classes for separate subjects. It helps students to connect different subjects in real-life situations. There are pedagogies like STEM or STEAM that follow the same principle to give students a wholesome education. In Gandhi's Nayi taleem students learn through their hands to make a craft, is not only covers the skill learning part but also learning science to the cultural part of it. While learning through making a craft from a craftsman, students learn the technical part of it and also learn the spiritual, philosophical, and way of living life.

During the apprenticeship, students stay with a craftsman and learn how to do things hands-on. Students learn different cultures related to crafts and craftsmen along with the skills and scientific part of it. This process makes students humble and good citizens. Working with hands and acquiring a meditative skill, students develop their patience. Gandhi's Nai Talim, a pioneering educational approach in India, focuses on practical learning and holistic development. However, its implementation across India has been less effective for several reasons: The hands-on learning component, essential to Nai Talim, has not been adequately updated to remain relevant in today's more modern educational and technological context. This makes the curriculum seem less applicable to contemporary needs. Integrating hands-on skills with the scientific theory behind crafts presents significant challenges for educators. This dual focus requires a unique set of teaching skills and knowledge, which can be difficult to find. Parents could not realize the importance of navee talim over rote learning, which led to certificates and jobs. Navee Talim was more cooperative in nature than competitive and emphasized gaining skills and understanding towards self-employment rather than getting jobs. Many of the basic aspects of Nayee Talim are still relevant in the current context.

Tagore- Shantiniketan and Shriniketan

Rabindranath Tagore set up Shanti Niketan to include a value-based, creative, and culturally rich learning environment. When he started the institution as Brahmacharya Ashram, his idea was to get inspiration from ancient Indian philosophies of education. Like Swami Vivekananda, Sri Aurobindo, and Mahatma Gandhi, he opposed the British philosophy of education. He criticized the Western educational approach in India and felt that India should have a more contextually relevant education system. Education should be a process of self-realization irrespective of the socio-economic status of caste, creed, and religion. Tagore's educational philosophy is based on four key principles: naturalism, humanism, internationalism, and idealism. Shantiniketan and Visva Bharathi were founded on these ideas and beliefs. (Sen, 1960).

His idea of education, which he tried to implement, is reflected in his literature. He says: "We are here in this world not just to understand it, but to embrace it. Knowledge can make us powerful, but true fulfillment comes from compassion.

The best education is one that not only provides information but also helps us live in harmony with all of existence."However, we find that this education of sympathy is not only systematically ignored in educational institutions, but it is severely repressed. Tagore realized that understanding of their own art and culture can take youth to understand the true meaning of India. From his childhood, Tagore was brought up in an environment where family members expressed themself with some kind of art form or cultural activity. He believed that proper education should enable students to express themself properly. For that, they should develop their emotions and senses. Many other forms of expression, like lines, colors, sounds, and movements, are important for satisfying a person's artistic desires and creative self-expression. Tagore made arts, crafts, music, drawing, and drama central to his education system. He believed that "handwork and arts are the natural expression of our deeper nature and spiritual meaning." Along with academic subjects, he emphasized the importance of fine arts, crafts, drawing, painting, music, dancing, and leatherwork in education. By blending artistic expression with scientific disciplines, students engage in a multidisciplinary learning experience. This integration allows them to explore connections between creative processes and scientific or mathematical concepts. The educational impact of this approach is profound. It stimulates critical thinking and creativity among students. They learn to approach problems from multiple perspectives and to innovate by drawing on both artistic and analytical skills. Ultimately, this approach prepares students for the challenges of the modern world, where interdisciplinary thinking and creative problem-solving are highly valued in diverse fields.

Theoretical Model

The following model is based on educational theories and pedagogical approaches. It places skill-based, hands-on learning on equal footing with traditional cognitive learning, while also considering the emotional aspects of learning. This theoretical model, represented in a diagram, integrates educational strategies into preparatory education through the concepts of Head, Heart, and Hands. Inspired by holistic education, it focuses on cognitive development (Head), emotional engagement (Heart), and practical skills (Hands). It integrates three core aspects: cognitive development (Head), emotional engagement (Heart), and practical skills (Hands), each enhancing different facets of learning.

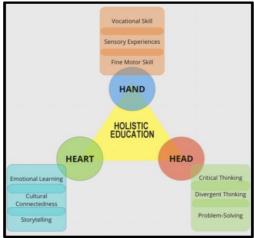


Fig1: A Head- Heart - Hands model for holistic learning

Cognitive Development (Head): Focuses on developing analytical, reflective, and divergent thinking. It aims to improve critical thinking abilities, encourage independent learning, and foster self-esteem and problem-solving skills through an integrated curriculum. Critical thinking allows people to engage in reflective and independent thinking. Another important factor is to have divergent thinking—the ability to create many ideas and solutions that promote creativity. Lastly, problem-solving in and of itself is a significant mental capacity where one recognizes issues, assesses them, and finds ways to solve those problems with the help of reasoning with logic and through strategic planning.

Emotional Engagement (Heart): Emphasizes emotional and social learning, aiming to foster joy, confidence, appreciation for diversity, and a strong personal and social identity. This supports the development of emotionally intelligent and empathetic individuals. This is the part of learning that really matters for our own self-esteem and how we relate to others. Storytelling also plays an important role in dialogue as through narrative, individuals are able to share experiences, values, and knowledge, providing empathy along with cultural transfer. It also stresses cultural connectedness and the need for belonging in a state of culture.

Practical Skills (Hands): Enhances fine motor skills and sensory experiences through hands-on activities with various materials. This is a part of embodied learning, the actual interaction with and manipulation of physical matter that leads up to gaining knowledge. This helps students apply theoretical knowledge in real-world context and helps towards develop relevant vocational skills.

Ultimately, this framework offers a richer and more systemic view of learning and development. It involves the activation of hands, brains, and hearts: practical skills, intellectual development, and social-emotional insight. This approach to development recognizes that people need a diverse set of capabilities if they are

going to do well in the world, not just functionally at be top of their knowledge or skill – but also emotionally and socially able. One of the features of this approach is that it nurtures not just academic talents but holistic human beings who are intellectually competent and emotionally intelligent to responsibly participate in an ever-changing world.

The structure of the Head-Heart-Hands model, which combines cognitive development with emotional engagement and practical application, promotes a new approach to higher education. Applying the Head-Heart-Hands framework to higher education could serve as a model for forming an educational system that is more just and adaptive. This model sees all students as being diverse - with a range of learning needs and capabilities, raising the possibilities for an education system that accounts for this diversity instead of a one-size-fits-all approach to knowledge. Both vocational Training and Skill-Based Learning are focused on moving beyond academic learning to practical application, helping further achieve accessibility in higher education. In conclusion, this model proposes an innovative approach to education in India, integrating historical wisdom with modern innovations to create a dynamic and inclusive learning environment. By integrating cognitive, affective, and psychomotor dimensions of learning, this model is able to better increase student achievement yet also build personal development, supporting the creation of a more inclusive responsive educational system. Given the changing needs of 21st-century skills and the workforce, this new model may bring an interesting dimension to learning and fulfill the need to keep education relevant

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