
A Step towards Sustainable Development: Multidisciplinary Approach in Curriculum

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ABSTRACT

Of all the aspects, curriculum and teachers play a major role in developing a nation by educating the citizens. The development of a country is not possible without education. A multidisciplinary approach to teaching and learning is a new approach to curriculum making learning fruitful. Sustainability is not attainable without education and education without teachers. To educate the citizens on sustainability, the curriculum must be outlined to include a multi-disciplinary approach to teaching and learning. Sustainable development works for the future of society by helping people lead good lives. Education for sustainable development is viewed as developing learners' skills, knowledge, and attitudes, which will help them be well-informed and make the right decisions for future generations. ESD provides equality in education and focuses on living a quality life. A well-formulated curriculum with a multidisciplinary approach will help sustainability by bringing economic and social development. It helps to reduce poverty, create equitable living standards, and satisfy all people's needs. Sustainable development can be achieved if education is multidisciplinary. NEP 2020 gives stimulus to a multidisciplinary approach to teacher education. Teachers must possess all skills and

knowledge to boost and enhance classroom instruction. A multidisciplinary approach in higher education can open scope and opportunities. The present paper tries to study how sustainability can be achieved through a multidisciplinary curriculum for the holistic development of the upcoming generations. The study finds multidisciplinary is not a new approach for Indians as the ancient Vedic education system focused on a multidisciplinary curriculum where the sishyas (students) were imparted education to face the practical aspects of life and make their living.

1.0. INTRODUCTION:

Education is one of the most significant factors for any nation's expansion. Without education, the life of a human cannot be said to be whole. Teachers play a major role in this process. A responsible and dutiful teacher can diffuse all these to future generations, so a responsible teacher needs to be well-educated (a) Priya,(2022).

A well-structured curriculum with a multi-disciplinary approach to education can help in attaining sustainability in education. Sustainable development is a significant factor in annihilating poverty and hunger and developing socially, politically, and economically. Singh,(2022) Multi-disciplinary approach is a unique method in the process of teaching and learning programmes. It is a way of integrating curriculum. Here, in a multi-disciplinary curriculum, the same content or topic is studied with the help of various disciplines. NEP 2020 gave inducement to a multi-disciplinary approach to teacher education. It emphasised that teachers must possess skills and knowledge in almost all fields which will help to enhance and supplement classroom instruction which is also the need of the hour. This approach is not a new approach but the need of the hour. The ancient Gurukul system of Indian education can be said to be an illustration of a multidisciplinary approach to education. The multi-disciplinary approach can open scope and opportunities for many. The multi-disciplinary approach in Teacher Education is a new concept where trainees will have enough scope and opportunities. The implementation of sustainable development will require multi-disciplinary and cross-disciplinary linkages which will provide opportunities for critical thinking help in reflective learning and develop ethics, values, and employability skills resulting in ending poverty and bringing harmony and affluence for everyone.

NEP 2020 clearly states that education should move towards more critical thinking, and problem-solving, to be creative and multidisciplinary with less focus on content integrated, it states that education must be creative, flexible, and interdisciplinary so only sustainability can be achieved. Experimental, all-inclusive, interconnected, inquiry-driven, discovery-oriented, learner-based, discussion-based, and full of fun with flexibility are stated in the pedagogy to evolve. Sood, Das, & Mishra, (2021)

A multidisciplinary curriculum is needed because the world is becoming hyper-active in challenging the demands. A multidisciplinary curriculum will help to bring flexibility and pragmatism. NEP 2020 aims to end fragmentation and transform higher education institutions into large multidisciplinary universities.

1.1. Concept of Sustainable Development :

Sustainable development is a process of social and economic development in the country that aims to meet existing needs without negotiating the requirements of upcoming groups. In sustainable development, both growth and development take place anticipating to have a society where the living conditions and resources meet human needs without undermining the planetary integrity. In simple terms, sustainable development may mean natural resource management with an aim for the economic development of the country. Sustainable development encompasses in harmonizing the needs of society, economy, and the environment. Sustainable development proposes to culmination of poverty and protecting the planet.

Sustainable development in the field of education aims to empower people through education in values, attitudes, skills, behaviours, and knowledge to live in a way that is good for the environment, economy, and society. It encourages people to make smart and responsible choices which can be accomplished only through education. One of the main aims of sustainable development through education is to teach people to make informed choices and take actions that can create a better future for our planet and the people living on this planet through education.

1.2. Concept of Multidisciplinary Approach in Curriculum:

A multidisciplinary approach is a teaching-learning method involving studying a topic from multiple perspectives. A multidisciplinary approach to learning is also recognized as a cross-disciplinary approach which involves the incorporation of diverse perspectives from various disciplines to illustrate a particular issue or subject. The major focus of the multidisciplinary approach is different disciplines of

learning are used to study one particular topic/issue which helps the learners to gain knowledge perspective in various ways.

2.0. CONCEPT OF HOLISTIC EDUCATION:

A teaching philosophy that focuses on the all-round development of an individual is termed holistic education. Holistic education focuses on young learners to engage their body, mind, and spirit for their physical, mental, social, emotional, intellectual, psychological, moral, and environmental. It emphasizes on environment and community and encourages individuals to become responsible citizens. It focuses on all aspects of an individual rather than academic or intellectual as the key aspects. Holistic education helps a child's physical embodiment along with spiritual prosperity and spiritual development. It also enables the students to understand the different disciplines and differentiate them at the same time respect and regard all branches of education.

2.1.OBJECTIVES OF THE STUDY:

The main objectives of the present study can be stated as :

1. To understand the concept of sustainable development
2. To understand how multidisciplinary education in higher education can help in the sustainability
3. To suggest some possible endorsements to achieve sustainability through a multidisciplinary curriculum and its implementation.

2.2. METHODOLOGY:

The main objective of this paper is to understand sustainability and multidisciplinary curriculum and the implementation of it in higher education to lead a good life such as poverty free, healthy life, and get quality education which will help citizens to be successful and lead a stress-free life. The study is solely based on the data collected from secondary sources such as books, journals, articles, and web resources. The methods followed here are descriptive and analytical. The present study is based on the studies done by other researchers. All the data incorporated in the present study is based fully on secondary sources after a thorough review of the various related literature to establish a viewpoint on Sustainable Development and a Multidisciplinary Approach to Curriculum. The descriptive method of study is more handy for the present paper.

3.0. REVIEW OF RELATED LITERATURE:

Diab&Molinari, (2017) attempted to study, *Interdisciplinarity: Practical approach to advancing education for sustainability and for the Sustainable Development Goals*. The study found sustainable development is identified as an important area of focus for business leaders, government, universities, media, and non-government organizations because of the global financial crisis in 2008, there is a need for a more sustainable world. At the heart of its strategy, education is placed to promote sustainable development along with a drive to entrench sustainability in the curriculum across the world. The study highlighted that interdisciplinary can erase the ability to understand the multifaceted encounters the world is facing. The study further brings forth integrating various disciplines that can help in problem-solving and promote better understanding.

Mahesh, K.M; et al.(2023) attempted to study a *Literature Review on Indian Ancient University in Imparting Holistic and Multidisciplinary: To Create Indian Knowledge System*. The study brings out that the ancient universities of India are an embodiment of a multidisciplinary approach to the Indian knowledge system with subjects like philosophy, music, ayurveda, and warfare skills. The study highlights that the ancient Indian Education system focused mainly on spiritualism, ethics, and values. The ancient Indian universities and scholars were like a goldmine for shaping and imparting higher and vocational learning in all branches. The study also brings forth that to comprehend society, multidisciplinary approaches to education are required the ancient Gurukulas focussed such as life skills for the overall development of the students and make them more holistic.

Mishra & Aithal, (2023) attempted a study on *Ancient Indian Education: Its Relevance and Importance in the Modern Education System*. The study found literature emphasized the Vedas of the ancient learning system including yogic practices, meditation, and chanting of mantras to calm down the mind. The modern methods which include logical methods, spaced learning, and rational memory are all derived from the ancient system of education which the Vedas preached and practiced. Thus, findings highlight that all the modern methods of learning emphasized today were practiced during the ancient times in ancient India and the Vedas highlight all those practices that were prominent in the ancient Indian system of education.

Shukla, J; et al. (2022) attempted a study on *Demystifying Approaches of Holistic and Multidisciplinary Education for Diverse Career Opportunities: NEP 2020*, the study found that a multidisciplinary approach helps learners to escalate their roles and responsibilities flagging a way for a deep

understanding of issues involved and meeting the trials and plights the learners encounter on their lives. The study found that the integration of the various courses makes learning purposeful and joyous while a holistic approach helps to cultivate psycho-social and interpersonal skills in students, a multidisciplinary curriculum enables learners to think critically, have a pragmatic attitude and ideas so that they can select subjects which pave a way for opening up to various career opportunities. Both holistic and multidisciplinary is a disruptive ideology that gives more autonomy to students to choose according to their interests .multidisciplinary curriculum paves the way for the students by developing their physical, social, emotional, and mental skills which helps learners to identify their uniqueness and align it with the world outside. All these aspects are highlighted in NEP 2020 to make India a sustainable society through holistic and multidisciplinary learning.

3.1.FINDINGS AND DISCUSSIONS:

India is moving towards becoming a knowledge economy and society, thus more and more Indian youths are likely to aspire to higher education to sustain a good life. The present requirement is quality higher education which will help aspirants' development and creativity. To fulfill the present requirement and sustain life, the curriculum must be framed so that it moves more towards holistic and multidisciplinary institutions. A multidisciplinary institution of higher education will offer undergraduate and graduate programs. The programs offered by these institutions will be of high-quality teaching, teachers, research and community engagement is what is expected. A multidisciplinary curriculum is not a new concept in the Indian context. A multidisciplinary curriculum is a traditional curriculum. It was followed by the gurukuls during the Vedic period, which helped in the all-around development of sisyas leading to sustainability. Taxila, Nalanda, Vallabhi, and Vikramshilla had thousands of students from abroad as well as India studying in vibrant multidisciplinary environments. India urgently needs to bring back the great Indian tradition to bring all-around development and create innovative individuals to transform India and Indians to sustainability and economic development. (National Education Policy 2020)

The present scenario demands India to be self-reliant which can be possible only if the learning needs of the masses are fulfilled. The sustainable development goal is an urgent need. Restructure of ODL(online distance learning) is also the demand of the 21st century. Various challenges are being faced by developing countries at present such as multi-disciplinary, interdisciplinary, and interconnected challenges in various sections such as social, economic, and environmental. Sustainable development

aims to address these issues which can be possible only through education. Higher educational institutions can play a conclusive role in overcoming these issues and challenges by adopting innovative approaches that can help solve these issues. HEIs can contribute to progress in society through knowledge-building, discovery, research, and innovation and adopting them and cover a wide range of challenges the present society is undergoing. HEIs can help contribute to society's progress through discovery, innovation, research, knowledge building, and adoption of new ideas and techniques. To implement in higher institutions, a multidisciplinary curriculum is the need of the hour and wisely implementing it is the greatest task.

Quality higher education can be developed a with multi-disciplinary curriculum. NEP 2020 stressed education on more critical thinking and less content, problem-solving, innovation, flexibility, and multi-disciplinary. Sood, Das, & Mishra, Sustainable Development Goals for Multidisciplinary Education and Research in Universities, (2021)

Education for sustainable development helps people to develop skills, knowledge, and attitudes which help people to keep themselves well informed about the situations helping them to make the right decisions which eventually will help the present as well as future generations. ESD aims for future sustainability by providing quality education over shared understanding and multidisciplinary approaches to meet future sustainability development. The main concern of education for sustainable development is to equip individuals, society, and the government to understand the environment and live and act to sustain it in the social and economic aspects. The main aim of education for sustainable development is to improve the quality of life with more economic growth. A sustainable society requires well-educated, skilled, healthy, and active citizens who are well-informed and ensure that future generations lead a good and quality life. Anyolo, Karkkainen, & Keinonen, (2018)

Education produces citizens who will be competent enough when it comes to sustainable development with their critical thinking and imagining capacity and participation in the process of teaching and learning. To bring these qualities, the teacher should be a role model to the students in the process of teaching them the cultivation of values leading to sustainability(a) Priya, Role of Teachers in Education for Sustainable Development, (2022).

In a multidisciplinary curriculum, there are certain advantages as students get chances to choose subjects of their choice and learn the subject in which they are interested which will help them to add value to their knowledge and raise the bar of education leading to understanding and new ideas by their

pragmatic attitude. Flexibility in the curriculum helps students to carve their paths and not just follow the pre-decided educational path. Skill development is necessary for future employment and higher education can contribute to educational and non-educational programs that can help to end hunger, and achieve food security with improved nutrition also promotes agriculture which will help in sustainability and well-being for all ages. Thus, the role of higher education and curriculum is central to sustainability.

3.2.CONCLUSION:

The Vedic education practiced two methods of education one oral or verbal and the other based on chinton which means critical thinking. The current higher education shows trends of a multidisciplinary approach along similar lines which NEP 2020 recommends. The ancient Indian system of education is based on three domains of learning which Bloom's Taxonomy defines as cognitive, affective, and psycho-motor this proves India was far ahead in the teaching-learning system than most of the developed countries today. This shows India was far ahead in teaching-learning during the ancient Vedic period. Studies found that when the world did not know teaching-learning, India was way ahead in the process and was focusing on the holistic development of the learners through a multidisciplinary curriculum which is mentioned in the Vedas and Vedic education.

Education is the most important instrument to bring change in the present society, especially in a country like India, education is the only weapon that can bring change and attain sustainability for future generations. Education serves as the bedrock for imparting knowledge and skills and preparing learners for employability. In the existing education system, an individual's all-around development is not possible unless some changes are made in the curriculum. A multidisciplinary approach is the need of the hour in developing countries like India which is not a new system of education, especially in the Indian context. The introduction of a multi-disciplinary system needs all necessary measures to be taken care of. Infrastructural needs and the role of the stakeholders play a crucial role in bringing sustainability through education. As learning is a never-ending process, multi-disciplinary education helps students to understand new ideas and develop a pragmatic attitude and flexibility for today's hyperactive world helping to end poverty and sustain a good life. Higher education has a tremendous impact on one's life and habits contributing to sustainability. Zaleniene & Periera, (2021)

The global urgency today is sustainable progress which can be achieved by integrating its principles into education. At this juncture, in the context of India, a multidisciplinary approach to the curriculum is critical to achieving sustainability goals by offering a holistic way of thinking and working on the

complex issues of environment, economic, and societal. NEP 2020, The National Education Policy emphasises the importance of sustainable practice by reflecting a shift across various disciplines. A multidisciplinary approach encourages the blending of various subjects like science, humanities and social sciences, and vocational subjects to ensure all-rounded development in students in their knowledge and understanding of sustainability because sustainability issues such as climate change, waste management, and biodiversity cannot be addressed by a single discipline, a multidisciplinary curriculum can help to integrate all these subjects of study and ensure that students grasp the complexity of sustainable development and are well equipped to address the real-world challenges. Despite this fact, implementing a multidisciplinary curriculum faces numerous challenges such as lack of capital, consistent content, and teacher training across various states of India. Policymakers must focus on capacity-building initiatives, encourage for the development of content based on region, and promote collaborative efforts between academia, industries, and civil society to ensure the success of sustainability education.

Incorporating sustainable development through a multidisciplinary curriculum is not only feasible but necessary because it promotes understanding of global issues. For India, it is crucial to continue cleansing the educational agendas and emphasizing multidisciplinary approaches with the active engagement of sustainability themes.

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