



REIMAGINING HIGHER EDUCATION FOR 21ST CENTURY: NEP 2020'S VISION FOR MULTIDISCIPLINARY EDUCATION

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ABSTRACT

Every country tries to form a good educational background to compete with the 21st century's skills. For this, the National Education Policy 2020 recognizes that multidisciplinary education will become a strong pillar of the 21st century. NEP 2020 follows the ancient system of education that introduced the concept of multidisciplinary education through universities like Takshashila, Nalanda, Vikramshila, etc. The policy envisions that over time; all higher education institutions (HEIs) should become multidisciplinary. Students' knowledge is confined to their special subjects, so they do not earn an understanding of various disciplines that help them solve practical life problems. Higher education institutions including colleges and universities should focus on a multidisciplinary approach according to NEP 2020. Researchers represent the concept of multidisciplinary education, its relevance, and the recommendation of NEP 2020 based on the multidisciplinary approach to higher education including restructuring- higher education institutions, structure, curriculum and assessment, quality-based teaching and research, teacher education, etc. Apart from these researchers also discuss the challenges of implementing multidisciplinary education.

Keywords: Multidisciplinary education, NEP 2020, Teacher Education, Higher Education

Introduction

Education plays a vital role in our lives. A well-rounded education equips individuals with the knowledge, values, and abilities necessary to navigate and solve the world's increasing problems. With the help of education educated men and women perform flawlessly in any critical situation and can judge value. National Education Policy (NEP 2020) emphasizes multidisciplinary education so that India's higher education system can properly develop people's personalities. The concept of Multidisciplinary education has come from ancient universities like Takshashila, Nalanda, Vikramshila, etc. The current educational system fosters excessive specialization, creating artificial barriers between humanities, sciences, social studies, and arts. As a result, students possess limited knowledge outside their specific fields and are often unaware of the valuable insights they are missing. Multidisciplinary education is being introduced to rectify this (Wani et al. 2021). Therefore, NEP 2020 supports the multidisciplinary approach that helps learners integrate knowledge among various disciplines. The National Education Policy 2020 recommends 'Holistic and Multidisciplinary Education' as the fundamental structure for the 21st-century knowledge-based economy, with a focus on problem-solving. Although it looks like a simple idea, it is complex. This section will give an



introduction to multidisciplinary education, and encourage teachers to learn more and to create multidisciplinary teaching and research in universities (Kamala,2023). The National Education Policy 2020 seeks to revolutionize higher education by making it more accessible, comprehensive, and interdisciplinary. It promotes a unique learning model where students can explore diverse subjects, transcending traditional disciplinary boundaries. Students get an opportunity to choose different fields of knowledge with the help of a Multidisciplinary approach and learners can compete at the international level. In this 21st century, all the perspectives of education update day by day. A comprehensive, cross-disciplinary education significantly boosts the quality and scope of research. Multidisciplinary research opens the door for scholars to work with various disciplines and implement the knowledge of different disciplines. So, the New Education Policy focuses on students' holistic knowledge and creative thinking. NEP 2020 recommends large multidisciplinary universities will be established. It says three broad categories of universities will be established. Currently, multidisciplinary education is a widely discussed topic. So, researchers seem that this topic is valuable for all. In this research paper, researchers try to reimagine higher education for the 21st century in the light of NEP 2020's Multidisciplinary Education. This paper examines the idea of multidisciplinary education, exploring its importance and practical application within higher education, specifically as envisioned by India's National Education Policy 2020. It also addresses the obstacles encountered when putting this approach into practice.

Methodology

The primary objective of this paper is to highlight NEP 2020's vision for multidisciplinary education in respect of the higher education system of India. As a methodology, researchers have used descriptive and document analysis methods. Researchers have used secondary data from available resources such as books, journals, articles, web resources, etc.

Concept of Multidisciplinary Education

Multidisciplinary education is an educational approach that integrates multiple disciplines to provide a comprehensive learning experience. It aims to enhance students' understanding of the interconnections between various fields and their practical applications in problem-solving. When applied in schools and colleges, this approach enables learners to explore subjects from diverse perspectives, deepening their knowledge. Additionally, it promotes creativity, critical thinking, collaboration, and effective communication skills (Krishnaveni & Purusotham, (2023). It understands that modern global challenges are intricate and require solutions that draw from multiple disciplines. Hence, it strives to merge knowledge and skills from various fields to address real-world issues effectively. A fundamental aspect of multidisciplinary education is its emphasis on collaboration and teamwork. It promotes cooperative learning, where students' problem-solve and exchange knowledge across different disciplines. This method not only enriches their learning experience but also equips them for the modern workforce, where interdisciplinary collaboration is highly valued (Nandeshwar,2023). At the start of the 20th century, the academic landscape was relatively narrow, primarily encompassing fields like the physical sciences, life sciences, social studies, and philosophical inquiry. Over time, specialized applied fields like Engineering, Law, and Medicine emerged. Eventually, a multidisciplinary approach was incorporated even within fundamental



disciplines. For instance, undergraduate Economics education began integrating Mathematics and Statistics, which played a crucial role in its development. The combination of these subjects enabled Economics to evolve into an empirical science, facilitating more accurate modeling, estimation, and forecasting. Mathematics and Statistics thus became essential tools for advancing the field of Economics. During the 20th century, multidisciplinary education expanded, leading to the development of diverse curricula across universities worldwide. In many cases, the emergence of new disciplines was a direct outcome of multidisciplinary learning. Management's establishment as an independent discipline resulted from the merging of concepts from Economics, Finance, Commerce, Accounting, Psychology, and Mathematics. Similarly, multidisciplinary principles are evident in undergraduate Environmental Science programs, which combine elements from “Physics, Chemistry, Ecology, Biotechnology, Biogeography, and Economics”. These examples illustrate how the interaction between various disciplines fosters the development of new multidisciplinary fields (Kamala, 2023).

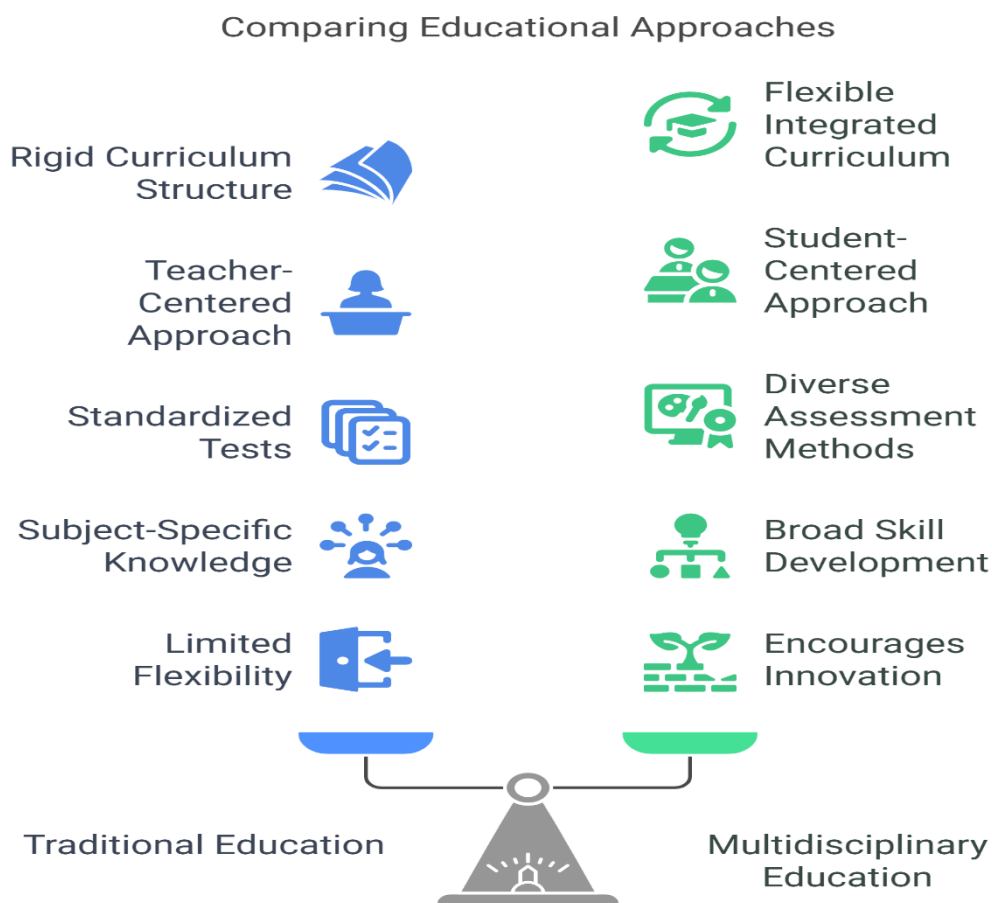


Fig 1: Comparing traditional and multidisciplinary education

Relevance of Multidisciplinary Education

The importance of multidisciplinary education is not limited to the 21st century; its value has been recognized since ancient times. The concept of multidisciplinary education has deep roots



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in India, which is evident from its presence in ancient institutions like Takshashila and Nalanda. The multidisciplinary approach and holistic assessment have transformed not only the perspective of contemporary Indian education but also the broader landscape of higher education. The concept of multidisciplinary education finds strong roots in India's past, as evidenced by the comprehensive learning offered at ancient institutions like Takshashila and Nalanda, and the integration of various disciplines within its extensive literary traditions. Classical Indian texts, such as Banabhatta's *Kadambari*, portrayed quality education as encompassing the 64 *Kalaas* or arts. Education covered diverse areas, including artistic expression (singing, painting), scientific inquiry (chemistry, mathematics), practical skills (carpentry, textiles), professional training (medicine, engineering), and essential communication abilities (discussion, debate). According to Indian tradition, the term 'arts' should be applied to all forms of human creativity, from mathematics and science to practical and interpersonal skills. This idea of a 'knowledge of many arts,' commonly referred to as the 'liberal arts' in modern education, needs to be revitalized in the Indian education system. Such an approach aligns perfectly with the educational needs of the 21st century (Sharma et.al, 2024). The Yash Pal Committee Report (2009) highlighted the crucial need for multidisciplinary education in modern society. It stated that "students, especially at the undergraduate level, must be exposed to various disciplines" (Yash Pal, 2009, p. 21). The report advocated for a fundamental shift in conventional educational practices by underscoring the significance of multidisciplinary learning. In this modern society, every student should gather knowledge of various disciplines so that they can solve a problem with the various sources of discipline. Therefore, the Indian education system emphasizes multidisciplinary education. A multidisciplinary approach helps to study a single topic from more than one discipline. A multidisciplinary approach facilitates students to understand a topic as a whole or in a holistic view. Students get the opportunity to understand any problem, situation, lesson, and learning that has various dimensions. Scientifically it is proven that a multidisciplinary approach emphasizes on concrete development of the cognitive, psychomotor, and affective domains together. This approach is not only effective for students but teachers also benefit from it. NEP 2020 also mentioned multidisciplinary education from a different perspective. In this 21st century, Curriculum is developed following the multidisciplinary approach. With the help of this approach, students' critical thinking and communication skills develop properly and teachers also develop a teaching-learning process scientifically. It encourages teachers and students to think broad perspective on any matter so that they can achieve success in their professional world and survive in this modern society.

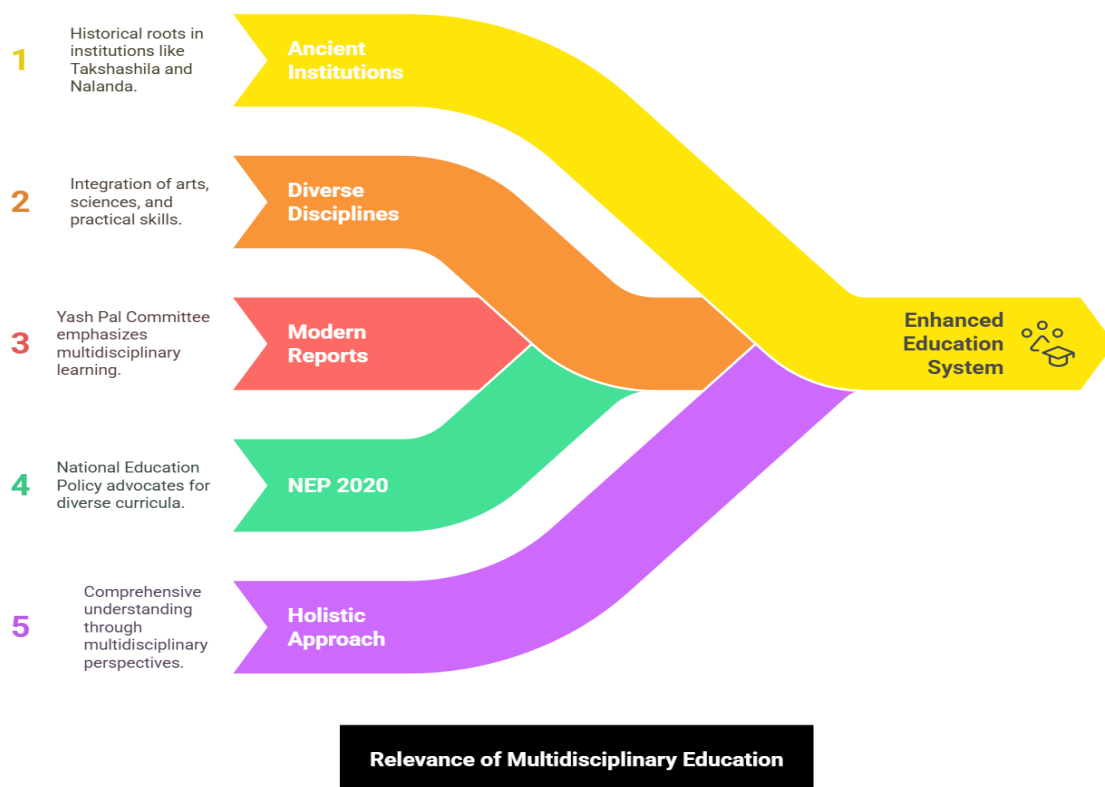


Fig 2: Relevance of Multidisciplinary Education

Multidisciplinary Approach in Higher Education in the Light of NEP 2020

Education is the primary tool for the all-round development of an individual. It helps human beings to develop rational thinking skills, creative thinking, scientific temper, empathy and compassion for others, and ethics and constitutional values. In this modern scenario, the Indian education system plays a significant role in competing at the international level. Therefore, The NEP 2020 is a visionary framework designed to transform India's education system. A significant focus of this policy is promoting a multidisciplinary approach to learning. With the introduction of the NEP 2020, India has made significant progress in modernizing its education system. This approach focuses on fostering holistic development by encouraging the exploration of diverse fields of knowledge. The proactive measures taken by the Government of India to implement a multidisciplinary higher education system significantly benefit students in higher education by enhancing their learning experience. Integrating multidisciplinary approaches within the higher academic framework enables students to gain a broader and enriched understanding by exploring diverse perspectives and interconnected themes on a given subject (Parasar,2023). The main purpose of National Education Policy 2020 is to “ensure inclusive and equitable quality education and promote lifelong learning opportunities



for all” (MHRD, 2020, p. 3). NEP 2020 focuses on the multidisciplinary approach because of technological advancement and globalization. The International Bureau of Education provides three teaching-learning approaches i.e. interdisciplinary approach, transdisciplinary approach, and multidisciplinary approach. These approaches facilitate students to solve a problem with the help of different disciplines. Students can form a single concept from more than one discipline. The interdisciplinary approach combines two or more distinct subjects or fields of knowledge to address and solve problems. This integration allows students to approach challenges from multiple perspectives, finding solutions beyond the limitations of a single discipline. The fundamental principles of interdisciplinarity revolve around the three “C’s”: Collaboration, Cooperation, and Communication among disciplines to tackle a specific issue (Klein, 1993). The transdisciplinary approach goes beyond disciplinary boundaries, merging diverse subjects to create new knowledge. By integrating concepts from different fields, this approach enables learners to explore and connect with new domains of understanding. The multidisciplinary approach has been an integral part of the teaching-learning process since the ancient Gurukul system in India and remains crucial in today’s educational landscape. It involves the integration of various disciplines and perspectives to explore a concept, theme, or topic. In this approach, a single topic is examined through multiple disciplinary lenses, enriching the depth and breadth of learning (Nirmal, 2024). As India's economy and society increasingly shift towards a knowledge-driven model, the demand for higher education is expected to grow. To address this, the proposed education policy aims to expand multidisciplinary higher education rather than focusing solely on specialization, aligning with the envisioned higher education system. The 66-page policy document emphasizes that providing multidisciplinary education through higher education institutions is a fundamental aspect of the restructured higher education framework (Gore, 2022). The NEP 2020 emphasizes the reintroduction of the concept of "knowledge of multiple arts" into the education system. Integrating the Humanities into STEM education leads to the development of key skills such as creativity, problem-solving, communication, and teamwork while also promoting social and moral consciousness and boosting student interest and pleasure in learning.

Recommendations of NEP 2020 regarding multidisciplinary approach in higher education are discussed below:

❖ **Recommendation on restructuring higher education institutions**

According to NEP 2020, higher education institutions should be turned into multidisciplinary institutions. At present, all higher education institutions in India are almost single-disciplinary institutions, for example, medical colleges, engineering colleges, education colleges, etc. Currently, Indian universities primarily handle postgraduate studies, while most affiliated colleges offer only undergraduate degrees, often in a single subject. This narrow approach to college education, with limited postgraduate offerings, has been criticized by government committees, such as the Yash Pal Committee (2009) (Nirmal, 2024). NEP 2020 mentions that large multidisciplinary higher education institutions will be established near every district by 2030. We can say that this is the most significant recommendation of NEP 2020. A multidisciplinary institution introduces multiple departments and innovative programs for students to acquire standard knowledge. It ensures that these innovative programs follow both multidisciplinary and interdisciplinary approaches. In line with the NEP 2020 vision, all



affiliated colleges are expected to achieve autonomous, multidisciplinary, degree-awarding status by 2035. To facilitate this, a strategic plan must be developed, offering options for colleges to transition independently, through collaboration, or as part of a university. To achieve degree-awarding status, affiliated colleges must evolve into either standalone, comprehensive autonomous colleges or collaborate in clusters to form larger, multidisciplinary HEIs. NEP 2020 presents three broad categories of multidisciplinary higher education institutions:

- I. Multidisciplinary research-intensive universities (RUs)
- II. Multidisciplinary teaching-intensive universities (TUs)
- III. Degree-awarding multi-disciplinary autonomous colleges (smaller than a university)

The Student Capacity of RU & TU Universities will be limited to 3000 or more. To promote multidisciplinary education, NEP 2020 calls for the creation of MERUs (Multidisciplinary Education and Research Universities), public institutions that will provide a comprehensive education similar to IITs and IIMs, and set the national standard for this type of learning (Bhusan, n.d.).

❖ **Restructuring Structure, Curriculum, Assessment**

The policy advocates for a multidisciplinary approach in all undergraduate programs, including technical and vocational courses, to ensure holistic student development and equip them with essential 21st-century skills. It recommends that science students gain exposure to the Humanities, while Humanities students should develop an understanding of science. Furthermore, both groups should acquire soft skills and practical vocational knowledge to enhance their overall competencies (Walia, 2023). To support multidisciplinary studies, the policy suggests establishing departments across diverse areas, from the humanities and arts (languages, literature, music) to the sciences and social sciences (mathematics, sociology, economics). Section 11.5 of NEP 2020 introduces a multiple entry-exit system in higher education institutions, addressing the rigidity of traditional academic structures. Currently, undergraduate (UG) programs span three years, while postgraduate (PG) programs last two years. Students must successfully progress from the first to the second and third years within the designated timeframe. Under the choice-based credit system, some flexibility exists, allowing students to advance if they accumulate the required minimum credits per semester or year. This flexibility enables UG program completion within an extended timeframe if needed. Upon earning the required credits, students receive a degree, facilitating their transition into the job market or further studies at the PG level. However, the conventional system allows only a single entry and exit point at both UG and PG levels (Kamala, 2023). The policy states that Science, Vocational subjects, and skills collaborate with arts and humanities. To successfully implement the proposed changes, we need to support imaginative and adaptable curricula that enable students to explore interdisciplinary studies through creative subject combinations. The University Grants Commission (UGC) guidelines allow students to customize their education by choosing a core course within their specialization, completing two Ability Enhancement Compulsory Courses (AECC), at least two Skill Enhancement Courses (SEC), and selecting four papers from both Discipline Specific Electives and Generic Electives. Besides that,



Students get the opportunity to continue their study through online mode. the policy emphasizes regular formative assessment to measure students' progress.

❖ **Recommendation of Quality based teaching and research**

NEP 2020 emphasizes quality-based teaching and research advocacy. The NEP-2020 expects multidisciplinary HEIs to offer “high-quality teaching, research, and community engagement” (MHRD, 2020, p. 34). Multidisciplinary colleges and universities enhance multidisciplinary research at graduate, master’s, and doctoral levels. For enriching quality-based research the policy recommends that one Education department will be established in colleges/Universities/HEI. According to NEP 2020, Education Departments must create education experts (Section 15.6), and all PhD students must take education courses to develop teaching skills (Section 15.9), preparing them for potential academic careers. NEP 2020 (NEP-2020) eliminates the Master of Philosophy (M.Phil.) research degree. However, it encourages multidisciplinary Higher Education Institutions (HEIs) to offer research opportunities at both the undergraduate (UG) and postgraduate (PG) levels. Students who complete a four-year UG degree with a research component or a PG degree are eligible to pursue a Ph.D. To ensure quality education, each institution must develop an Institutional Development Plan (IDP) (Nirmal,2024).

❖ **Recommendation on Teacher Education**

The NEP 2020's recommendation for a multi-disciplinary approach to teacher training is expected to be a key factor in transforming higher education and driving India's future development. The NEP 2020 teacher education policy results from a deliberate process by the drafting committees, which included considering varied opinions, practical knowledge, expert advice, and international best practices (Jadhav, 2022). To successfully implement the holistic and multidisciplinary education envisioned, teachers need to be proficient in multiple subjects. Given that many Indian teachers lack this training, the government must prioritize investing in their development and providing them with the resources necessary for effective multidisciplinary teaching (Yadav & Abhinandan,2023). The minimum qualification for school teachers is set to rise to a four-year integrated Bachelor of Education and subject-specific degree by 2030. Universities with a broad range of subjects will provide these combined degrees (Section 15.5). In addition to the four-year integrated B.Ed., universities will offer two-year B.Ed. programs for existing bachelor's degree holders, and one-year B.Ed. programs for those with four-year undergraduate degrees. According to NEP, the Scholarship will be provided to meritorious students of 4year, 2year, and 1year B.ED. Programmes. Teacher education institutions will seek and retain faculty with expertise in social sciences relevant to schooling (like psychology, child development, and sociology), as well as in specific education fields (science, math, social science, and language education). This will enhance the multidisciplinary training of teachers and ensure strong theoretical foundations (Section 15.8). A multidisciplinary approach to teacher education cultivates critical thinking, problem-solving, and flexibility, empowering educators to think creatively and equip their students with the ability to solve problems unconventionally.

Challenges of Implementing Multidisciplinary Education



National education policy thinks that ancient education policy was an effective method for multidisciplinary educational institutions in India. So, NEP 2020 supports a multidisciplinary approach influenced by ancient educational universities like Takshashila, Nalanda, Vallabhi, and Vikramshila. However, the NEP 2020 recommendation faces many challenges in its implementation. A discussion of the challenges includes the following perspectives-

❖ **Restructuring Multidisciplinary Institution**

According to the last report of the All-India Survey on Higher Education (AISHE), 2021-2022 mentions that there are 1168 universities in the country today, including both public and private, 45,473 colleges and 12,002 stand-alone institutions were registered. “But 1162 universities, 42,825 colleges, and 10,576 stand-alone institutions have responded to the survey. There are 655 general, 192 Technical, 57 Agriculture & Allied, 79 Medical, 27 Law, 19 Sanskrit, and 8 Language Universities and other specialized universities that are challenging to transform into multidisciplinary universities”. Technological universities are now required to incorporate subjects like health, humanities, and social sciences. This necessitates a restructuring of all universities, including those specializing in agriculture, health, and languages. A significant obstacle is the lack of available resources, both physical and personnel, compounded by long-standing faculty vacancies.

❖ **Difficulties to Bridge between Institutions**

NEP 2020 suggests to bridge between govt, aided & private colleges. However, in the case of grouping colleges institutions face difficulties in maintaining proper activity (such as records of students who take admission, division of course fees, exam fees, and other charges) between different management boards of colleges.

❖ **Challenges regarding multi-level entry and multi-level exit**

A New Education Policy allows students can leave the institution for 1 year or 2 years of studying instead of completing 4 years of a bachelor's degree and they can also join the program again to complete the rest of the years. According to NEP 2020, there will be 3 years of degree courses and 4 years of degree courses with research. Those students who complete 4 years of degree courses will have to do one year of postgraduate degree. In this case, colleges easily adapt to the new education system but universities will face challenges due to their predominantly two-year master's programs. If universities want to provide flexibility in multi-level entry and multi-level exit, all courses will be restructured.

❖ **Difficulties regarding subject choosing, credits & Research**

As per NEP 2020 students will get the freedom to select subjects. So, students frequently choose scoring subjects so that they can earn enough credits. It is shown that students do not think about the usefulness of the subjects they are only concerned about the marks and credits. As a result, students do not gather proper knowledge and do not apply it practically. Research always plays a significant role in higher education. NEP 2020 emphasizes 4 years of degree courses with research. So, students are directly promoted to Ph.D. degrees. For this, Suitable infrastructure, well-trained teachers, and proper resources are required but Still India has no



proper resources to form multidisciplinary approaches. Therefore, students face such kind of challenges.

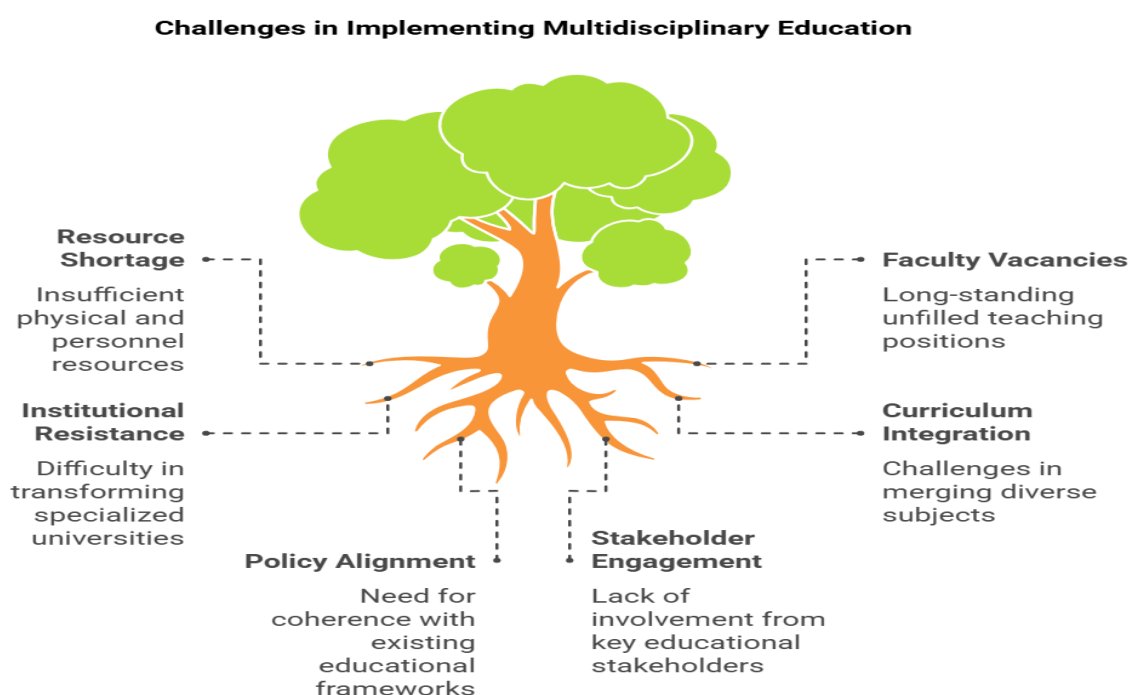


Fig. 3: Challenges in Implementing Multidisciplinary Education

Discussion

This research analysed existing qualitative data to understand the National Education Policy (NEP) 2020, specifically its emphasis on holistic and multidisciplinary education. Essentially, a multidisciplinary approach provides students with opportunities to achieve deeper learning by examining educational content from multiple integrated perspectives (Ghatge & Parasar, 2024). Ancient Gurukuls provided a multidisciplinary education, fostering holistic learning through subjects such as astronomy, medicine, and politics. Students gained practical experience and diverse knowledge. The NEP 2020 advocates for a similar approach in contemporary higher education, drawing inspiration from the success of ancient Indian universities like Nalanda and Takshashila, which also thrived on multidisciplinary teaching (Roy, 2022). This research paper examines NEP 2020's emphasis on multidisciplinary education for the 21st century. Researchers analyze the NEP 2020 recommendations regarding multidisciplinary education and describe the obstacles faced by learners, teachers, the government, and the administration.

Conclusion

Education that combines multiple disciplines, and especially education that blends them into a unified whole, is crucial for developing solutions to society's problems. The Indian



government, through its NEP 2020, has adopted multidisciplinary education, an approach that encourages students to see how different subjects relate and contribute to a fuller understanding. The NEP 2020 enables India to enhance its educational system by adopting a multidisciplinary approach, which is vital for tackling complex issues and ensuring its global economic standing (Krishnaveni & Purusotham, 2023). The Gurukul system of ancient India demonstrated multidisciplinary education, and the New Education Policy provides an opportunity to implement it today. It is a difficult task to implement it. The paper discusses the challenges that face the institution, students, and teachers. Researchers mention multidisciplinary universities that NEP 2020 recommends, NEP 2020 outlines how Higher Education Institutions will integrate knowledge from various disciplines. The COVID-19 pandemic has demonstrated the crucial role of multidisciplinary education in tackling global crises. By bringing together diverse fields of study, we can gain a comprehensive understanding of complex issues and develop effective solutions through collaborative research.

References

- Abhinandan, M., & Yadav, M. K. (2023). Towards A More Holistic and Multidisciplinary Education With Special Reference to New Education Policy 2020. *Dogo Rangsang Research Journal*, 13(4), 43-50.
- All India Survey on Higher Education – Ministry of Education. (n.d.). <https://aishe.gov.in/aishe-final-report/>
- Bashir, L., & Wani, G. (2024). Multidisciplinary and Holistic Education: Achieving Academic Excellence and Bolstering All-Round Development in the 21st Century with NEP-2020. *The International Journal of Indian Psychology*, 12(1), 172-177. <https://doi.org/10.25215/1201.017>
- Bhusan, S. (n.d.). Multidisciplinary Approach in Higher Education.
- Ghatge, S. J., & Parasar, A. (2023). NEP 2020: A Holistic and Multidisciplinary Approach to Education in India.
- Gore, M. M. (2022). Multidisciplinary Approach in NEP 2020- Importance and Challenges. *Jyotikiran Publication, Pune*, 1, 21-24.
- Kamala, K. (2023). Multidisciplinary Approach in Higher Education: A Study on Entry-Exit System. *International Journal of Political Science*, 9(2), 97-104. <https://doi.org/10.21088/IJOPS.2454.9371.9223.8>
- Klein, J. (1993). Presentation on Interdisciplinary. IRDC, Ottawa.
- Krishnaveni, R., & Purusotham, B. (2023). NEP 2020 EMPHASIS ON MULTIDISCIPLINARY AND INTERDISCIPLINARY APPROACH. *Education and Society*, 47(2), 17-22.
- Nandeshwar, P. D. (2023). *Proceeding: National Conference on Research in Bio, Geo, Chemical Sciences: Global Scenario*. Lewa Educational Union's, Dr. Annasaheb G. D. Bendale Mahila Mahavidyalaya, Jalgaon, Maharashtra.



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www.educare.aliah.ac.in

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- National Education Policy 2020 - Ministry of Education. (n.d.). https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English.pdf
- Nirmal, P. B. (2024). Multidisciplinary Approach of NEP-2020: Transforming Higher Education in India. *Twist Journal*, 19(3), 336-338. <https://doi.org/10.5281/Zenodo.10049526#235>
- ROY, K. (2022). Multidisciplinary Approach in Teacher Education Programme: A Study. *Journal of Emerging Technologies and Innovative Research*, 9(4), a645-a649.
- Sharma, A. K., Solanki, S. P., & Chamol, S. (2024). Holistic and multidisciplinary education approaches in higher education NEP 2020. *International Journal for Research in Applied Science and Engineering Technology*, 12(2), 1195-1197. <https://doi.org/10.22214/ijraset.2024.58550>
- Suresh, M. & Parasar, A. (2023). NEP 2020: A holistic and multidisciplinary approach to education in India. https://www.researchgate.net/publication/378144433_NEP_2020_A_Holistic_and_Multidisciplinary_Approach_to_Education_in_India
- University Grants Commission. (2015). Guidelines on Adoption of Choice Based Credit System. New Delhi: UGC. <https://www.suniv.ac.in/upload/UGC%20Guidelines.pdf> | https://www.ugc.ac.in/pdfnews/9682768_Action_plan-new_01.pdf
- University Grants Commission. (2022). https://www.ugc.gov.in/pdfnews/5599305_Guidelines-for-Transforming-Higher-Education-Institutions-into-Multidisciplinary-Institutions.pdf
- Walia, P. (2024). Multidisciplinary Education: Strategies for Implementation. *Gyan Management Journal*, 18(2), 1-4. <https://doi.org/10.48165/gmj.2023.conf1>
- Wani, S. R., Dar, Y. A., & Mir, B. A. (2021). Holistic multi-disciplinary education in light of NEP 2020. *International Journal of Health Sciences*, 5(2), 1032-1039.
- Yadav, S. (2022). REFORMING TEACHER EDUCATION WITH MULTIDISCIPLINARY APPROACH ADHERING TO NEP 2020. *Educreator Research Journal*, 9(5), 35-39.
- Yash Pal. (2009). Report of the Committee on Renovation and Rejuvenation of Higher Education. <https://www.aicte india.org/downloads/Yashpal-committee-report.pdf>
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