

Transformative power of Multidisciplinary approach in Teaching-An explorative study.

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Abstract: *A Multidisciplinary approach to teaching is undoubtedly an innovative idea to make the teaching-learning process more inclusive and dynamic as per the demands of the changes occurring in the educational arena. The multidisciplinary approach to teaching is not an attempt to separate disciplines or disturb the essence of specialisation. Instead, it tries to impart knowledge of the basics of each domain for the holistic development of personality. It is an efficient approach to teaching that goes beyond the confines of a specific field or curriculum in order to broaden the student's horizons and increase their level of understanding. Therefore, it is anticipated that the multidisciplinary approach is an essential academic exercise to make teaching professionally upgraded and developed. In the context of the north-eastern region, a multidisciplinary approach to teaching is of utmost importance to drive the education system towards excellence in terms of employability, communal harmony, geographical connectivity, socio-political upliftment, and so on. This paper is a conceptual paper based on secondary sources to explore the multidisciplinary teaching approach, understand its significance in today's changing educational scenario, and satisfy the rising demands of the educational sector for rejuvenating it. The discussion method is utilised here for the logical summarization of the findings of the paper.*

Keywords: *Teaching, Professional Development, multidisciplinary approach.*

Introduction-

It is well recognised that teaching is not everybody's cup of tea, as it is a very strenuous and progressive process to satisfy the enormous demands of the heterogeneous global social order. Change is a natural law. Everything in this universe changes at different levels and in other ways, except for some universal realities. Therefore, we must prepare well for all the challenges

caused by the various changes for the sustenance of the professional aspects of life in totality. Teaching is such an important process, with the help of which the total transformation of human life becomes practical. Education itself is a process of composite discipline, for which it has a relationship with different disciplines or areas of study. Therefore, teaching must maintain connectivity with different disciplines without disturbing the uniqueness of each discipline for the successful implementation of the teaching-learning process. The teaching approach is to be multidisciplinary in nature to perform its functions in an orderly and holistic manner. By adopting a multidisciplinary approach, a teacher can enable the students to understand the basics of different disciplines for developing their genetically transmitted attributes to the fullest, as well as enhance their adaptability in this diversified world.

It is an innovative approach to the Integration of curricula is the practise of illustrating a topic, subject, or issue using elements from a variety of subjects. The same subject or body of knowledge is approached from several different angles or perspectives within a multidisciplinary curriculum. It is an effective form of education that goes beyond the confines of a specific field or curriculum in order to broaden and heighten one's understanding of the topic being taught. This strategy is extremely practical and pertinent for integrating teacher education programmes and improving their overall quality and acceptability (Roy, K. 2022). Multidisciplinary refers to an approach to a topic or problem that combines or involves a number of academic disciplines or professional specialisations. With the help of various methods from various academic disciplines, a multidisciplinary approach aims to redefine problems outside of their typical parameters and find solutions based on a fresh understanding of complex situations. Students are considered marginalised when they are confined to, or relegated to, a lower or outer limit of society for reasons such as domestic violence, mental health issues, being parentless, behavioural problems, learning difficulties, substance abuse, cultural discrimination, sexual identity, material poverty, etc. (Palaniyandi, 2018)

Objectives of the study: This study aims to explore the importance of a multidisciplinary approach in teaching and proposes remedial measures for achieving academic excellence. By delving into the transformative potential of multidisciplinary teaching, the research seeks to contribute to the ongoing discourse in the field of education.

Significance of the Study

We are living in an era of a multidisciplinary world where knowledge from various disciplines is essential to meet personal and professional needs. The integration of ICT tools has transformed the world into a global village, enabling people to access information instantly. The availability and accessibility of knowledge enhance the teaching-learning process, promoting a multidisciplinary approach in education. This approach, which combines knowledge and skills from different fields to solve problems, is crucial for academic growth and understanding society realistically. NEP 2020 emphasizes the implementation of multidisciplinary teaching in higher education to foster collaboration and creativity among students, facilitating their holistic development. This focus on multidisciplinary teaching is a significant step towards promoting collaboration, creativity, and holistic development among learners, preparing them for future challenges. Educators and policymakers should prioritize the implementation of this approach in higher education to support students' growth and understanding of society.

The significance or rationale of the present study can be outlined by the following points:

1. The present study is significant for teachers, students, academicians, and other stakeholders to acquaint them with the ever-evolving educational landscape. Hence, the researcher acknowledges the importance of a multidisciplinary approach to teaching to overcome the traditional subject-related limitations.
2. The study also highlights the potential benefits and challenges of multidisciplinary teaching and its successful implementation. Thus, the study is crucial to developing insight among the readers, especially policymakers.
3. The study is justified on the grounds of its contribution to the successful implementation of NEP 2020, as this newly launched policy has laid emphasis on multidisciplinary education.
4. This study emphasizes the importance of empowering students with the skills and knowledge needed to prosper in a multidimensional workforce.

5. The study on the transformative power of multidisciplinary teaching will certainly help to understand the strategic planning for optimizing the learning outcome from this innovative approach.

Literature review:

The following studies have been consulted by the investigator to carry out the present work---

Lombardo, T. (2010). In his paper entitled “Multidisciplinary and interdisciplinary approaches to futures education” In this paper, he described the importance of integrating various fields of study to provide a comprehensive and holistic learning experience for students. The paper clearly stated that both interdisciplinary and multidisciplinary approaches can be used in collaboration with each other in different educational areas to improve overall learning outcomes.

Jehlička, V., & Rejsek, O. (2018) in their research article discussed the utility of multidisciplinary approach to teaching mathematics and ICT so as to increase the students’ interest in STEM studies. The paper highlighted this approach not only to improve understanding but also to develop critical understanding and logical reasoning.

Sharma, S (2022) _in his study highlighted the significance of multidisciplinary studies in the higher education system of India. Besides, the study also revealed the benefits of incorporating different disciplines to enhance learning outcomes and foster holistic development of students.

Methodology -

The present study is a conceptual study based on secondary sources of data, and the researcher used the discussion method to interpret the data. Necessary data and information were collected from various secondary sources like books, journals, research papers, and government websites.

Discussion-

A multidisciplinary approach to teaching has emerged as an innovative pedagogical strategy for the holistic development of students' personalities. Understanding various disciplines enables students to integrate their knowledge for more effective work. This approach makes the teaching-learning process dynamic and goal-oriented, satisfying learners' academic curiosity and diverse needs. It is important for both teachers and students, fostering a more inclusive and collaborative academic environment. By incorporating ideas, experiences, knowledge, and tactics from various disciplines, this approach enhances the teaching-learning process to unleash students' potential to the fullest (Pathak, 2023). In the study "Multidisciplinary Approach in the Field of Helping Professions," the author emphasizes blending various academic subjects or specializations to address psychological, physical, cognitive, and emotional issues. The study explores the functions of social work, counseling, psychology, and special pedagogy, highlighting the benefits of collaboration with shared goals. It also discusses the advantages and disadvantages of multidisciplinary work and the importance of acquiring a wide range of skills. Overall, the study focuses on the positive impact of a multidisciplinary approach in facilitating professions (Lahoz, 2022).

The discussion on the importance of multidisciplinary teaching may be summarized by the following points ----

1. Multidisciplinary teaching is important for the learners for ensuring the collaborative learning environment where knowledge will be treated from a broader perspective.
2. Addition of multidisciplinary teaching in the sector of higher education can equip the students with necessary skills for the diversified professional areas.
3. A multidisciplinary to teaching to teaching is instrumental for the students for holistic development as it allows the students to learn from various academic disciplines.
4. NEP 2020 emphasises the implementation of multidisciplinary education by adopting interdisciplinary studies, the linkage of traditional Indian knowledge with the modern era, the integration of various subjects, and so on.
5. Multidisciplinary approach to teaching enriches the learning experiences of the students by facilitating them with broader understanding of different subjects. Thus, it helps to equip the students for the diversified world-order in future.

6. In today's heterogeneous world scenario, multidisciplinary teaching is anticipated to help students know the world in a better way and increase their employability in different areas of work.

Proposed remedial measures for the effective implementation of Multidisciplinary approach to teaching:

For the successful implementation of this innovative approach in teaching, each of the stakeholders have to internalize the future benefits of a well-grown academic culture. Therefore, the researcher has proposed some of the important remedial measures for doing academic excellence in the educational sector. the effective implementation of a multidisciplinary approach to teaching for the successful implementation of a multidisciplinary approach to teaching, collaboration and interactions among teachers from different disciplines are indispensable. For the effective realization of this innovative approach in teaching, each of the stakeholders has to internalize the future benefits of a well-grown academic culture. Therefore, the researcher has proposed some important remedial measures for achieving academic excellence in the educational sector. This remedial measure encompasses different aspects such as curriculum, methods of teaching, teacher's training, and student support services. These remedial measures explore diverse learning experiences and aim to cater to the individual needs and strengths of students. Some of the important remedial measures can be specified by the under mentioned points:

1. An interdisciplinary cell in each of the educational institutions should be established for the implementation of cross-curricular projects and activities.
2. An adequate model for an interdisciplinary approach can be proposed to ensure collaboration with different academic disciplines and foster holistic development among students.
3. It is anticipated that seminars and workshops should be well organized by the educational institutes to provide opportunities for students to engage in multidisciplinary learning and gain a comprehensive understanding of various disciplines.

4. Provision for teacher's training and orientation programmes should also be made to ensure the teachers are professionally upgraded and well-equipped with the necessary skills to implement the multidisciplinary teaching approach successfully.
5. Imaginative and flexible curricular structures will allow creative combinations of subjects for study, and will offer multiple entry and exit points. Thus abolishing currently prevalent rigid limitations and fostering new avenues for life-long learning. Graduate-level, master's and doctoral education in large multidisciplinary universities, while providing rigorous research-based specialization, would also provide possibilities for multidisciplinary work, including in academia, government, and industry. (<https://shikshan.org/nep-2020/holistic-multidisciplinary-education/>).
6. A multidisciplinary approach to teaching can be utilized in educational institutes by integrating various departments and faculties to accommodate the evolving needs of students and prepare them for diverse career prospects.
7. Explore the academic benefits of a multidisciplinary approach among teachers and students so that they may develop an optimistic attitude towards its implementation.
8. There is a need to conduct a pilot study about the requirements and effective implementation of the multidisciplinary approach to teaching in a systematic manner. This will help all the stakeholders to elicit its potential challenges for better preparation.
9. The utilisation of available resources is crucial for the successful implementation of the multidisciplinary approach to teaching.
10. Educational institutes should be well acquainted and equipped with the necessary online facilities, technological tools, human resources, and training facilities to support multidisciplinary teaching towards its grand success.

Thus, a multidisciplinary approach to teaching requires proper planning, orientation programme resources, curriculum, interdepartmental linkage, collaboration, research, supportive institutional environment, continuous monitoring and most importantly a positive attitude of all the stakeholders for its successful implementation.

Conclusion:

The outcomes of the present study highlighted the basics of a multidisciplinary approach to teaching and its educational implications, considering the changed academic scenario. The

study also focused on strategies for its successful implementation to meet the diverse learning needs of the student community. By merging various disciplines like arts, commerce, vocational subjects, and others, we may develop a roadmap to academic excellence to diversify our career opportunities for a better and more prosperous future in this multidisciplinary world. Overall, the present study attempts to explore the transformative power of multidisciplinary teaching in terms of creating a conducive academic environment for the students to respond to the ever-evolving challenges of this global society.

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