



Multidisciplinary Approach in Teacher Education Programme: A Study.

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Abstract:

Multi-disciplinary approach is a unique method in teaching- learning programme. It is a unique way of curriculum integration to illustrate a theme, subject or issue with the help of divergent subjects. In a multi-disciplinary curriculum, multiple disciplines are used to study the same topic or content. It is a powerful method of teaching that crosses the boundaries of a discipline or curriculum in order to enrich and enhance the subject area. This approach is very useful and relevant to integrate teacher education programme and enhance its quality and acceptability. Hence, the National Education Policy-2020 has given impetus on multi-disciplinary approach in teacher education in the country. Multi-disciplinary approaches in teacher education programme will surely developed well rounded individuals that possesses critical 21st century capacities in various filed of studies such as arts, science, humanities, commerce, social sciences, professional and vocational and other filed of education. Teachers must possess almost all skills and knowledge related to enhance and enrich the classroom instruction with the help of this approach. Hence, this paper highlights different pros and cons of multi-disciplinary teacher education programme with special reference to NEP-2020 and make relevant suggestions.

Key Words: Multi-disciplinary approach, curriculum integration, teacher education, special education.

Introduction:

Multi-disciplinary approach in teacher education is the need of an hour. This approach is not a new one in Indian perspective. Ancient gurukul system of education in the country in different periods set the best example of multi-disciplinary education. The students who studied in these institutions have gathered wide knowledge from the divergent subjects such as science, medicine, health, yoga, meditation, history and even almost all types of knowledge. The guru (teacher) imparts his or her knowledge and experience to the disciples for their fullest development and hence they were well equipped with multidisciplinary approach of instruction and learning.

The National Education Policy -2020 urges to all the higher education institutions of the country to introduce multidisciplinary approaches in their arena. Different report on this issue reveals that this method or approach of education easily compete with the present days criteria and competencies and helps to enhance and enrich teaching-learning process. Thus, multi-disciplinary approach in teacher education program opens the various scopes and opportunities to the stakeholders particularly the teachers and the students. Here, we will discuss different aspect of this approach in education and particularly in teacher education with its possible limitations and prospects.

NEP 2020 envisages for a holistic and multidisciplinary education that aims to develop all round capacities of human beings, that is intellectual, social, cultural, physical, emotional and moral in an integrated manner. NEP also envisioned a large multidisciplinary higher education institution in every district by the end of 2030. According to UGC such education will help to develop well –rounded individuals that possess critical 21st century capacities in various fields, including arts, science, humanities, and languages, social sciences, professional, technical and vocational. Social engagement, communication, discussion, debate and rigorous specialization will also fall under holistic education. In the long run, this will be the approach of all undergraduate programmes.

Objectives:

- This paper is based on the following objectives. Such as
- To give a clear cut concept of the multi-disciplinary education or multi-disciplinary approach in education;
- To study the different aspects of multi-disciplinary approach in education;
- To highlight different aspects of multi-disciplinary approach in teacher education as proposed in NEP-2020;
- To find out the relevance and importance of this method in teacher education programme and finally
- To recommend the necessary suggestions in association with it.

Methodology:

The main objective of this paper is to highlight different aspects of multi-disciplinary approach in teacher education. This study is solely based on secondary data collected from the available resources such as books, journals, articles, magazines, web resources etc. The methods are followed here descriptive and analytical.

Discussion:

International Bureau of Education (IBE-UNESCO) specifies three major types of contemporary approach to curriculum integration such as - multidisciplinary, interdisciplinary and trans-disciplinary approach in education. Multidisciplinary approach is a whole or comprehensive method that covers an idea, topic or content by integrating divergent knowledge domains. It is a very strong and relevant way of teaching that crosses the boundaries of a discipline or curriculum in order to enhance or develop the area and depth of learning experience. It is an approach of curriculum integration which focuses primarily on the different disciplines and the diverse perspectives while illustrating a topic, theme or issue.

Here the same topic is studied from the scope of more than one discipline and integrates these divergent knowledge to enrich the learners' community. It is a unique in nature that allows students to enrich their personal and academic experiences by citing examples and experiences from divergent areas of study. For example we can say that a student of humanities can take a subject from the engineering courses and a student of management can easily take the subject from social science subjects. Multidisciplinary curriculum is studying a topic from the viewpoint of more than one discipline and solving a problem using a different disciplinary approach (Klaassen, 2018). It is very easy for a student to gain variety of skills such as problem solving, critical thinking, time management, self management, communication, analysis and data interpretation, research methodologies, team work etc.

To know the basics of multidisciplinary approach in education, it is necessary to know other approaches in education such as interdisciplinary and trans-disciplinary. Interdisciplinary approach is the method of bringing together the knowledge of two different disciplines and implementing it into a child's learning. Here, integration of two different subjects is happened and makes a hybrid content or topic or subject in order to enrich the students' learning experiences. On the other hand, trans-disciplinary curriculum is the method of removing the boundaries of different subjects and integrating them to create or construct complete and new sets of knowledge to fulfill the aspiration of the new societal phenomenon.

Multidisciplinary approach in teacher education is relatively a new concept when we speak about the field of teacher education. Here educators or trainee teachers are well matured to impart knowledge and skills with the help of this new way of teaching and learning. Trainee teachers have enough opportunity to develop this new method of teaching and they can easily impress the learners and enrich their multidimensional skills and experiences. Educator or trainee teachers will illustrate a lesson with the experiences gathered from the multiple disciplines. This method is very important and relevant for the present era of development and hence the NEP-2020 strongly recommended introducing it with our national framework. The aim of education will not only be cognitive development, but also building character and creating holistic and well round individuals with the key 21st century skills. (4.4 of NEP 2020). Recognizing the need for more holistic education, the NEP -2020 urges to render teacher education to multidisciplinary colleges and universities by 2030. All multidisciplinary higher educational institutions will provide B.Ed, M.Ed. and even Ph.D degrees by establishing dynamic and well equipped education departments.

As per NEP-2020, bachelor degree of education will include most recent and relevant teaching techniques such as pedagogy with related to basic arithmetic and mathematics, multi level teaching as well as evaluation techniques, teaching children with disabilities and special needs, uses of educational technology and learner-centered or collaborative learning.

Ancient gurukul system of education is an example of this method of education. This ancient system was enriched with multidisciplinary courses and subjects. Students from various levels and categories were resided in these institutions and gathered experimental and holistic learning experiences. They learnt divergent and relevant subjects like astronomy, medicine, philosophy, politics, economics, yoga, physical education, defense studies etc. In the introductory part, NEP-2020 also emphasized on this issue and urges different higher institutions to start multidisciplinary approach including teacher education institutions. Similarly various data revealed that multidisciplinary teaching -learning methods were flourished in ancient Indian universities like Nalanda, Takshashila and such other reputed higher educational institutions.

Advantages of multidisciplinary approach in teacher education programme:

- This method is student friendly. Here each and every student will get ample opportunity to choose his or her subject from the divergent areas. It also provides scope to choose or left any subject during the entire course period;
- This method is teacher friendly. It provides a platform for pragmatic and flexible teaching-learning experiences. It allows students to understand the power of new concepts and ideas. By choosing from their own requirements they actually trigger pragmatic way of life. This opens the door of pragmatism and realistic ideas and thoughts in the mind of the students.
- This approach helps students to utilize their mind powers and make correct decisions. It helps to grow integration and adaptation of divergent thoughts among them and enrich them through critical thinking.
- The multidisciplinary approach in education provides more holistic understanding of the world and enhances the student's personality and character building process. The rare and necessary social values and ethics will be adopted by the students through this method of teaching.
- This method emphasizes the importance of collaboration and integration of knowledge and information. It helps to create twenty-first century individual by incorporating and integrating new ideas and concepts.
- This approach is very much relevant in present day global system and enhances the scope of employability and jobs for students within the country and in abroad. This method helps student to work as managerial way and enhances the managerial and corporative skills and techniques. They can easily synthesize different ideas and thoughts collected from different sources;
- Students learn different skills of evaluation and assessment through this approach. By studying different logical methods and approaches, students can easily choose their desired subjects. This, it enhances logical thinking and analyzing power in them.
- It motivates the students as it linked with practical knowledge, given authentic purposes of the learning. It helps students to draw conclusion from the divergent field of knowledge and subjects.

Disadvantages of multidisciplinary approach in teacher education programme:

- Students get distracted from the ultimate learning goal in multi disciplinary mode of education as there is a chance of lost of hope and desire having presence of various subjects and disciplines.
- Teacher needs to enrich with various skills and instructional experiences to deliver in front of the students and hence expertise knowledge and experience is very much needed to acquaint with this approach of teaching. It is very difficult to get expert and skilled teachers at all level of education.
- This approach is followed in foreign universities and academic institutions where there is abundant scope for faculty improvement and orientation. These institutions have well equipped with infrastructural facilities to adjust with the teaching-learning process. The same environment is not visible in most of the regions of India and particularly in the state of Tripura;
- There is a necessity to mass aware and to grow consensus about this approach among the stakeholders of teacher education programme.

Suggestions:

It is suggested to start multidisciplinary institutions and academic institutions throughout the country as envisioned by the NEP-2020. This policy also suggested to introduce four years integrated teacher education programme in multidisciplinary colleges and universities. By incorporating this program, students from divergent fields such as arts, humanities, commerce, science etc. get benefited. This will save their time and enhance the opportunity to join with teaching-learning process in a well befitted manner.

There is a necessary to popularize the ancient gurukul system in accordance with the present system of education. The gurukuls were the academic places where most of the Indian boys and girls enriched and equipped with all necessary skills and knowledge. In that system, students were acquainted divergent filled of knowledge in a given time. Hence there is a necessity to recall this ancient system of education.

As suggested by the NEP-2020, this approach is relatively modern, well equipped with latest skills and techniques and hence students joined with this method will easily coop up with the latest advancement of the global system of education and set competitive mind as a global citizen.

It is mandatory to introduce different subjects in a same platform and hence the success of this method depends upon the latest infrastructural and skilled developments and huge funding from the various levels. In absence of any one component from this arena will responsible for the loophole of the entire education system.

There is a necessity to establish more and more integrated teacher education centre throughout the country to provide multidisciplinary method of teaching at every level of education in the country. Hence it is very urgent to follow the suggestions of NEP-2020 in this regard.

A well versed and well maintained curriculum is necessary to input in teacher education programme to enrich and enhance with this new and innovative method of teaching. Thus, more and more orientation and refresher courses are needed to be introduced more the exiting faculties of the teacher education institutions throughout the country.

Conclusions:

It can be concluded that the all round development of the individual is impossible in existing system of education. For citing examples of ancient gurukul system of education, we can say that multidisciplinary education and teacher education in particular is the need of an hour. It is impossible for the central or state governments to take all necessary measures for the interlocution and success of this method but the active involvement of all stake holders are needed very much. As suggested by the NEP-2020, there is an urgent necessity to start integrated teacher education programme throughout the country and to convert all academic institutions and places into the multidisciplinary centers for education.

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