



Future Taxonomy of Teacher Education towards a Transdisciplinary Approach: Issues and Challenges

SAHID ANOWAR MOLLA¹

Independent Research Scholar.

Email: sahidresearchpurpose@gmail.com

Dr. TAUSIF BISWAS²

Assistant Professor,

Jadavpur University.

Kolkata, West Bengal, India.

Email: tbiswas.edu@jadavpuruniversity.in

Abstract

Now teacher education is a discipline which is not only interdisciplinary nor multidisciplinary but transdisciplinary also. In teacher education, the educator plays a vital role for all round development of the student-teachers, teaching and how to manage classroom environments where learners are coming from different social backgrounds. So, classroom administration is one of the core responsibilities of the educators. That's why teacher education is a vital part of our education system. But New Education Policy 2020 emphasizes teacher education as a transdisciplinary approach. So, in the context of the paradigm shift of teacher education from multidisciplinary and interdisciplinary to transdisciplinary is very challenging. So, the main objective of this research is to explore the different challenges and prospects of shifting teacher education towards a transdisciplinary approach. This study also tries to find out the ways and strategies for overcoming the different issues and challenges. This study is basically a review based study where the researcher used a qualitative research approach depending upon the nature of research questions and objectives. To fulfill the objectives of this study the researchers followed the exploratory and descriptive research design. In this study the researchers used the semi-systematic literature review method for the purpose of the content analysis of the related literature. And the data have been gathered from various primary and secondary sources like websites, textbooks and journals for the purpose of content analysis of this study.

Keywords

“Teacher Education”, “Transdisciplinary Approaches”, “Challenges & Opportunities”, “ITEP” “Overcoming Strategy”, “NEP 2020”.

Introduction

In the traditional flow and history of teacher education, teacher education was known by way of teacher training programme; that's why the teacher education programme was continued according to the objectives such as developing some teaching skills for producing skillful professional teachers. Thus, scope of teacher education was limited as training was programmed.

But the latter concept of teacher training programme is shifted into the teacher education programme which refers to widespread scope of teacher education courses like- foundation of education, curriculum and pedagogy, school internship etc (NPE-1986, NCFTE-2009). In this programme teacher education is organized and categorized in a sequential and logical way to develop teacher's capacity, competency, knowledge and humanistic view point (NEP- 2020). While those capacities are organized and categorized in the teacher education programme it is considered as a taxonomy of teacher education. Taxonomy of teacher education is nothing but categorization and organizations of teacher education programme objectively. When we come to the point of objectives it indicates bloom's taxonomy. Bloom taxonomy is mainly divided into three main categories which are-

- Cognitive Domain
- Affective Domain
- psychomotor Domain

Taxonomy of teacher education mainly depends on the above three domains. In teacher education cognitive domain replaces in fact the base of teacher education, affective domain replaces in humanistic expansion of pupil teachers and psychomotor domain related near competency base of teacher education.

Therefore, the main aims of taxonomy of teacher education are-

- ✓ Knowledge acquisitions or content mastery which means cognitive development of a student teacher.
- ✓ Development of humanistic view points among trainee teachers.
- ✓ Skill acquisition or development of competency among student teachers.

Bloom's Taxonomy		Taxonomy of Teacher Education
Cognitive Domain	⇒	Knowledge Base of Teacher Education
Affective Domain	⇒	Humanistic View Point of Teacher education
Psychomotor domain	⇒	Competency Base of Teacher Education

Fig. 1 Shift of Bloom's Taxonomy into Teacher Education.

So, the taxonomy of teacher education consists mainly in three domains. These three domains are organized and categorized by logical and sequential ways in the taxonomy of teacher education. Which are highly expected from good teachers which are....

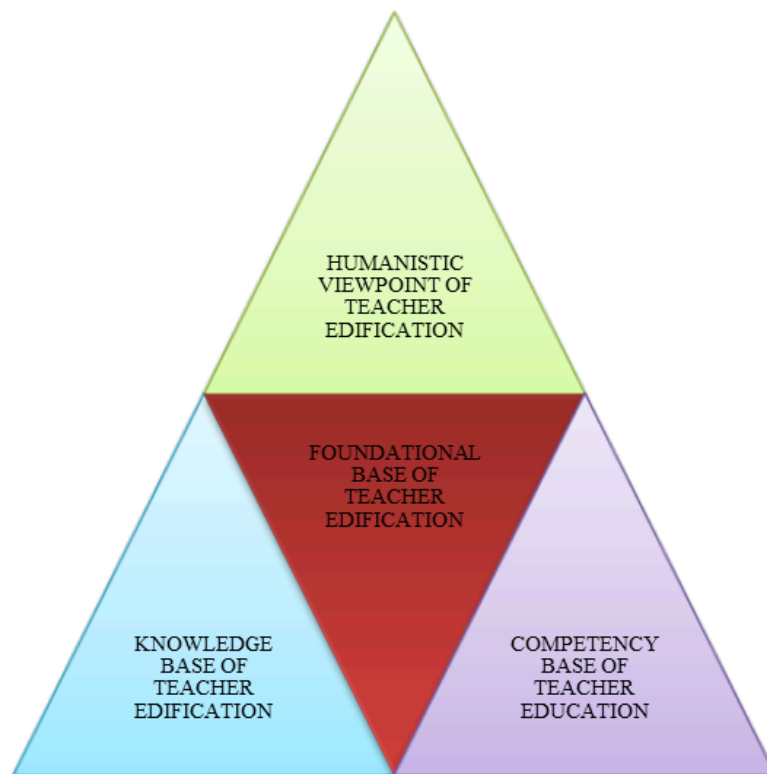


Fig. 2 Conceptual Framework of the study.

Background of the study

“The Destiny of India is being shaped in her classroom.” (Kothari Commission,1964) So everybody knows that shaping destiny in the classroom is the core accountability of teachers. But the quality of teacher education in India is very poor, which is stated – “a majority of stand-alone TEIs – over 10, 000 in number are not even attempting serious teacher education but are essentially selling degrees for a price.” (Justice J.S verma Committee,2012). So, the thing is very significant for India to give importance to teacher education. Because teachers are the key factors for promoting the educational system. Especially for developing lifelong learners, as well as ensuring education for all. Which is mentioned in SDG- “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030.” (SDG,2015-30) Teacher education has a very important role for the development of our future generation of teachers because “teachers truly shape the future of our children and, therefore, the future of our nation.” (NEP2020, page20,5:1) Teacher has the responsibility of maintaining the class, intervention in the learner's problem and combining knowledge of subjects' matter. So now teacher education is not only work on multidisciplinary approach but interdisciplinary and now it goes to transdisciplinary. Because now teacher education works beyond the disciplinary boundaries. So, teacher education recommended as “by 2030 the minimum degree qualification for teaching will be a four-year integrated B.Ed.(ITEP) degree that teaches a range of knowledge, content and pedagogy and includes strong practical training in the form of student-teachers at local school.” (NEP2020, page23, 5:23) So in the future scope of teacher education will be vast because of the integration of teacher education with degree courses. So, the every along stand teacher training organizations have to become multidiscipline colleges or universities within the time

bound. In India most of the teacher education programme will be conducted by multidisciplinary institutions and those Institutions will have to establish a Department of Education which will provide Bachelor of Education (B.Ed.), Masters of Education (M.Ed.) and Doctor of Philosophy (Ph.D.) in Education also degree programme in education subject. So, the teacher or educator should be well trained because in integrated teacher education programme, the training programme with bachelor degree course have to covering a variety of content knowledge, subject matter, pedagogical knowledge as well as teaching capacity. So, the disciplinary study/ approach/ boundary of teacher education shall break down and shift to transdisciplinary approach from multidisciplinary and interdisciplinary approach because cooperation with experimental Schools, involvement of community, participation of society in teacher education programme would be essential in future teacher education programme. So, the educators have to perform a vital role in the future transdisciplinary approach of the teacher preparation programme. But in the taxonomy of teacher education, a transdisciplinary approach would be very challenging. So, in this study the researcher tries to highlight those challenges as well as opportunities in the transdisciplinary approach of the teacher preparation programme. And by this research, the researcher also suggests ways for overcoming those challenges.

Rationale of the study

Though teacher education is a professional course, in comparison to other professional degree courses it is quite different. Because in others professional course there is hands on experience or practical training or field based activity but in traditional skill-based teacher training programme there is no effective practical utility or applicability beyond the disciplinary boundaries. So based on theoretical aspect and lack of utility or collaboration with community hinders the professionalism of teacher education. So students of other professions are being employed but compared to teacher education in India, special reference to Bengal unemployability of teaching profession is being increased day by day. So, teacher education transcends the disciplinary boundaries because change of policy framework, encouragement of co-operation and collaboration local school as well as community also. So, now Traditional skill base training programme is transformed. And teacher education integrated interdisciplinary and transdisciplinary aspect, it is transformed in holistic approach. In this comprehensive aspect of teacher education deals with nurturing creativity among the learners, tailored life-long learners and all-round development of the learner. So now growing up inclusive and holistic approach of global teacher education is facing more comprehensibility. So, it is the rethinking about the policy, curriculum and pedagogy. So, this research paper will address---

- The key challenges faced by the learners, educators, institutions and policymakers in adopting a transdisciplinary approach of teacher education.
- Analytical discussion of various opportunities arises in the transdisciplinary approach of teacher education.
- Suggestion overcoming strategy of various challenges in transdisciplinary approach of teacher preparation programme for quality improvement of teacher education.
- This research will indirectly highlight the role of teacher educators in shaping our future generation of teachers.
- This study helps the teacher training institutions by providing a roadmap for identifying the challenges and opportunities and overcoming strategy.

- This study needs to help the policymaker to modify a supportive outline for integrating the transdisciplinary approach of teacher education programme.
- To highlight the requirement of immediate professional development of teacher educators to deal with the transdisciplinary approach of teacher education.
- This study will emphasize on promotion of inclusivity. Because this study helps to break down the barrier between discipline and it also helps to promote the inclusive setup in teacher education programme.
- This study gives the impactful role on promotion of holistic development of trainee teachers, educators and teacher education institutions.

Statement of the problem:

The teachers have to perform a vital role in the Transdisciplinary Approach of Teacher Education. But Teacher education faces various problems due to the shift of Teacher education from multidisciplinary and interdisciplinary to a transdisciplinary approach. So what problems and challenges occur, what the opportunities in the Transdisciplinary Approach of Teacher Education provide and how to overcome those challenges for enrichment of teacher education programmes are not identified objectively. So to fulfill the above not addressing objectives of teacher education, the researchers propose the problem of the present study as “**Future Taxonomy of Teacher Education towards a Transdisciplinary Approach: Issues and Challenge**”

Objectives of the study

O₁: To explore the different types of challenges for shifting teacher education towards a transdisciplinary approach.

O₂: To identify various opportunities in the transdisciplinary approach of teacher education.

O₃: To find out various ways for overcoming the challenges and barriers in the transdisciplinary approach of teacher education.

Research questions

- What are the key challenges being faced by stakeholders in the transdisciplinary approach of teacher education?
- What are the opportunities occurring in the transdisciplinary approach of teacher education?
- How to overcome various challenges of transdisciplinary approach to teacher education?

Methods and Materials

This research is basically a review based study where the researchers used a content analysis method for the comprehensive understanding of this topic. For the purpose of intensive understanding of the study the

researchers followed the semi-systematic literature review methodology, where the researchers used various sources of data such as journals, textbooks, and websites. In this research the researchers effectively explore, analyze and synthesize the collected data related to the field of teacher education for the completion of the objectives of this study.

Research design

For the purpose of this study, the researchers have followed a qualitative research approach. The researchers used the exploratory and descriptive research design for exploration of the issues and challenges in the future perspective of transdisciplinary approach of teacher education.

Data source

All those types of data which are directly and indirectly related to teacher education and its transformations towards transdisciplinary approach are considered data sources for study.

For the purpose of this study the data is being gathered from primary and secondary sources. Where primary data include various policy documents and governmental reports such as---

“Justice J.S Verma committee report 2012”

“Kothari Commission 1964”

“National education policy 2020”

Secondary data source includes various research papers, books and articles which are considered by the themes---

- The theoretical frameworks for transdisciplinary education.
- Challenges and barriers of teacher’s education in the Indian context.
- Opportunity emerging from policy reformation towards transdisciplinary approach.

Sampling technique

In this research, the researchers used purposive sampling technique to select the data and documents which are related to the research questions. The selections of the data and documents based on the criteria--

- Related policy, documents and literature in teacher education published within the last few decades.
- Emphasis on multidisciplinary and interdisciplinary to transdisciplinary education.
- Related to teacher education especially in the Indian context.

Data collection techniques

In this study, the researchers composed data from various databases such as Google scholar, ERIC, PsycINFO, Scopus, Web of science, ResearchGate and relevant reports and publications from Governmental websites. The range of these gathered data is from 1964 to 2024 which are directly and indirectly related to the objectives of this study. For data gathering purpose the following terms have been used---

- ❖ "Transdisciplinary approach of teacher education."
- ❖ "Challenges of teacher education in India"
- ❖ "Teacher education and NEP 2020."
- ❖ "Interdisciplinary and transdisciplinary education."

Data analysis technique

To identify the common concept, terms, challenges, opportunities and strategies for various sources of data and documents were coded and categorized in various forms for the purpose of the content analysis. The composed facts have been analyzed using the content analyze method. The content analyzes methods is being used to identify key themes and patterns focusing on the major three areas:

Challenges: challenges faced by participants in teacher education programmes.

Opportunity: opportunities in Transdisciplinary approach of teacher education.

Strategy: strategies for overcoming the challenges and barriers in the transdisciplinary approach of teacher education.

Findings of the study

The researcher stated the Major findings of the research in three parts. Which are

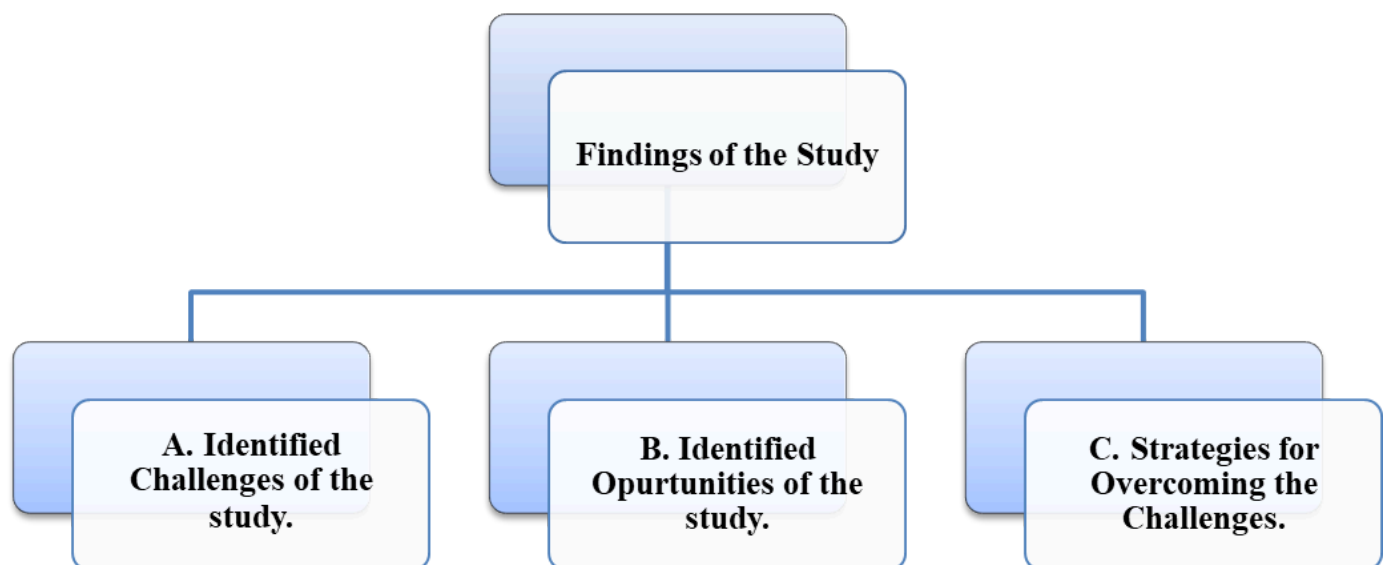


Fig.3 Analytical Framework of the study.

A. Identified Challenges of the study are

Issues of Curriculum Integration

Curriculum development and integration is one of the primary challenges in transdisciplinary education. Sometimes educators face difficulties in designing curriculum frameworks from different disciplines.

Resistance to Adaptation

Resistance to adaptation with new approaches is another problem to full implementation of transdisciplinary education. Most educators like traditional disciplinary-based teaching methods. Traditional approach can be a barrier for stakeholders to adapt with new pedagogical strategy in a transdisciplinary approach.

Policy Misalignment

There is a lack of sufficient policing on teacher education and most of the policies in India are rooted in traditional paradigms which are not aligned with the goal of transdisciplinary education. This policy misalignment can be a bureaucratic barrier in integration of transdisciplinary approaches in teacher education programmes.

Lack of Resources

Transdisciplinary methods in teacher education required a huge number of resources. This resource is not only a material resource but also a human resource. Many of the teacher training institutions may lack access to learning materials, teaching aids and technology to support collaborative work. Further staffing and recruitment in teacher education is not sufficient which is the lack of human resource in teacher

education. So, the lack of resources can be challenged implementing a transdisciplinary approach of teacher education.

Inadequate Teacher Training

Many of the teacher training institutions in India are still emphasizing subject specific disciplinary knowledge instead of interdisciplinary and collaborative competencies and experience. And now teacher education is not adequately equipping our future generation teachers with the skill-based knowledge. So, inadequate teacher training programmes are one of the key issues in the transdisciplinary teacher education approach.

Time Constraint

The educator needs more time in the transdisciplinary method of teacher education to complete the syllabus and programme. But in teacher education, educators try to maintain a professional schedule to cover curriculum within time bound. So, there is a lack of time to nurture creativity and foster interdisciplinary collaborative work.

Student Engagement Problem

It is very challenging to engage students in a transdisciplinary teaching environment. It is difficult for students to find connections among the disciplines and work beyond the discipline which may lead to disengagement of students in teacher education.

Resistance of Culture

In India most of the teacher education institutions believe in traditional disciplinary boundaries. This traditional culture impedes stakeholders of teacher education to adjust to a new teaching-learning environment.

Lack of Sufficient Professional Development

To foster transdisciplinary methodologies and practice in teacher education, educators need continuous professional development. But there is a lack of professional development courses on teacher education and lack of opportunities to leave from teacher training institutions for the professional development courses, because of the shortage of teachers.

Lack of Collaborative Environment

Effective transdisciplinary methods need collaboration among stakeholders from different disciplines. For that many of the teacher education institutions struggle to foster a collaborative environment in institutions. But ego fight among/between departments, communication gap among stakeholders, different philosophy of teaching methods foster a subject specific disciplinary environment. So, without the collaborative environment implementation of a transdisciplinary approach in teacher education is challenging.

Challenges of Community Involvement

In teacher education programme involvement of communities is an essential part of the practicum but it is also challenging to engage the community in a transdisciplinary approach of teacher education.

Lack of Administrative Support

The transdisciplinary approach of teacher education needs more administrative support to work beyond the disciplinary boundaries but sometimes lack of administrative help leads to a challenge in the transdisciplinary approach of teacher education.

Challenges in Evaluation

Another problem in the transdisciplinary approach of teacher education is assessment because there is no specific guideline to evaluate transdisciplinary approach of teacher education. So, it is difficult to evaluate the students' performance beyond the disciplinary boundaries.

The highlighted challenges are identified to shifting teacher education towards transdisciplinary education. The addressing challenge can be overcome by policy reformation, resource allocation, fostering collaborative culture and planning innovative strategy etc.

B. Identified Opportunities of the study are

The identified various opportunities in the transdisciplinary method of teacher education are.....

Promotion of Holistic Learning

The transdisciplinary approach encourages students to collaborate among various subjects, fostering a deeper understanding of concept and practice of interdisciplinary approach. The students can develop a

comprehensive view of the world by integrating various disciplines. The students enhance their cognitive, humanistic and skill base knowledge and critical thinking ability in a transdisciplinary method of teacher education.

Natural Leadership Skills

Transdisciplinary method emphasis on teamwork and collaboration with each other disciplines which nature the development of leadership skill among the learners. Primary stakeholders of teacher education make decisions, take initiatives, communicate with each other stakeholders, and navigate group work. These skills foster leadership skills among stakeholders of teacher education.

Development of Empathy and Social Skills

As the transdisciplinary method did not work from disciplinary boundaries. By working beyond the disciplinary boundaries, collaboration with community and other discipline transdisciplinary methods develop empathy and social skill among the learners.

Enhancement of Decision-Making Skills

Engagement of the students with complex, real-world problems in transdisciplinary education enables students to improve decision making skills. By these methods students learn to evaluate circumstances, events or perspectives and make their own decision.

Foster Critical Thinking

By breaking down the disciplinary boundaries, stakeholders of teacher education collaborate with each other's discipline and work together in a transdisciplinary approach of teacher education. This method encourages students to think from different fields, analyze and synthesize data from different perspectives. This method also helps students to explore different fields and investigate alternative solutions to the problem. So this method helps to foster critical thinking ability among the learners.

Emphasis on Cultural Understanding

Transdisciplinary approach of teacher education emphasizes cultural understanding by incorporating different disciplines in the teaching learning process of teacher education. Students are engaging from different disciplines and culture in teacher education is the opportunity to celebrate diversity, cultural understanding in the transdisciplinary approach of teacher education.

Promotion of Innovative Research

In the transdisciplinary approach of teacher education, traditional disciplinary boundaries education breakdown and students are engaged to explore teamwork and collaborative methodologies. This integration of discipline may promote innovative research practice opportunities in teacher education. This transdisciplinary approach of teacher education also enhances academic inquiry and advanced educational research and practice in the field of teacher education.

Nurture Creativity

The transdisciplinary method allows students to grow up and develop their capability in a flexible environment. This method encourages students to think independently. In this method stakeholders of teacher education collaborate with each other from different disciplines and discuss the innovative practice of teaching and learning process, lesson plans and delivery method of the content. This originality and flexible environment of teacher education foster creativity among the stakeholders of teacher education.

Adaptability to Change

The transdisciplinary method of teacher education prepared stakeholders of teacher education to adapt with the new changing environment by working together from different disciplines. In this method students are enabled to deal with new problems. This adaptable ability makes students adjust with the new pedagogical strategy and technological change in future.

Respect for Diversity

In this method, our future generation teachers are being competent to address the diversified needs of the learners. This method fosters an inclusive learning setup where the students participate from different backgrounds and disciplines. The learners from different backgrounds learn to respect and value diversity. This respect for diversity promotes classroom discussion and helps the future teacher to arrange a diversified classroom.

Promotion of Inclusive Education

Promotion of inclusive education is one the key opportunities in transdisciplinary methods of teacher education. Now every educational institution and society is struggling to build up an inclusive set up where everybody can learn and participate from different backgrounds regardless of any criteria. This inclusive setup works on equity and equality which promote work beyond the disciplinary boundaries.

Promotion of Lifelong Learning

The primary goal of the modern teaching-learning process is to make the pupils as lifelong learners. This goal can be achieved easily in the transdisciplinary approach of teacher education because in this method stakeholders are engaging curiosity and exploration beyond the discipline base traditional boundaries. This curiosity encouraged the learners in continuous professional development in which learners continue to learn throughout their life.

The identified opportunities are very essential and important in teacher education. These opportunities in the transdisciplinary approach of teacher education can be practiced in teacher education institutions which may transfer our learners to knowledgeable, skillful future educators. At last, these opportunities may improve the quality of teacher education for learners as well as society.

C. Strategies for Overcoming the Challenges

Organization of professional development programme

The ways for overcoming challenges in the transdisciplinary approach of teacher education is organization and participation in continuous professional development. In this professional development programme equip the stakeholders of teacher education to adjust with the new challenging environment. This skill based collaborative interaction session helps the learners to explore new pedagogical strategy and innovative methods in teacher education

Resource allocation

Lack of appropriate human and material resources is the main barrier in teacher training programmes to implement the transdisciplinary approach. This barrier can be overcome by allocating the human and material resources. Human resources including educators, administrators and expertise can deal with the changing environment of disciplinary approach of teacher education easily. And material resources like learning materials, teaching aids and new innovative technologies help to develop the quality of teacher education.

Interdisciplinary team building

Many teacher training organizations struggle to improve quality improvement of teacher education. But communication gap between the departments, ego fights among the discipline is one of the barriers in this way. This barrier can be overcome by interdisciplinary team building. In this interdisciplinary team educators can collaborate from major disciplines, work together and design interdisciplinary research projects and team-teaching methods to address the challenges.

Align curriculum design

Curriculum design, development and integration from multiple disciplines in transdisciplinary methods are challenging. Educators also lack experience to design transdisciplinary curricula. This challenge may be overcome by organizing workshops, seminars and consultation among educators and expertise collaboration can bridge to ensure a balanced curriculum in transdisciplinary methods of teacher education.

Integration of technology

Integration of technology may help to systematic implementation of transdisciplinary methods in teacher education programmes. Technology may provide a bridge between subjects, offering a platform to collaborative discussion among various disciplines from anywhere of the world. This integration may help collaborative research management, instructional planning and integration of multiple disciplines into the course of a teacher education programme by the help of technology.

Engagement of community

Community engagement is one of the parts of the teacher training programme, in which the students are being stimulated to work beyond the classroom boundaries, building partnership with the NGOs, and engaging with local communities to explore the real-world problem. This real-world experience helps the learners deal with transdisciplinary methods of teacher education.

Building administrative leadership

Administrative support is essential for overcoming any challenges of educational institutions. Funding, policy implementation, resource allocation depends on administrative support. For this reason, to overcome the challenges in the transdisciplinary approach of teacher education every institution needs to develop effective administrative leadership.

Project based activity

To foster a transdisciplinary method in teacher education the students have to engage in project-based activity. Because learner center project-based activity helps the learner to think independently from different disciplines and perspectives about the problems practically. In this practical problem center activity enables students to overcome any challenges of teacher education.

Collaborative research practice

Research practice together from different disciplines enables the stakeholders of teacher education to work with collaboration and short out any challenges. The students from divergent disciplines think together about the problem and investigate the solution of the problem. This cooperation and collaboration with each other help to address any type of challenges of teacher education programmes.

Plan For strategic assessment

Another unique problem in transdisciplinary methods of teacher education is evaluating the student's performance accurately. Because a teacher education programme is not only a degree course but also a professional training programme. Which include content mastery, as well as skill acquisition and development of the humanistic viewpoint of the student-teachers. It is also a practicum base course where learners have to deal with community activity and experimental school. So, it is very challenging to evaluate the learners of teacher education programmes from different perspectives. But this challenge may be addressed by a plan for a strategic innovative evaluation method including diversified evaluation method, project-based activity and comprehensive and continuous evaluation.

By following those strategies teacher education institutions can implement transdisciplinary methods of teacher education which may foster innovative pedagogical strategies for holistic progress of existing teacher training programmes.

Discussion

Finding of this study highlights the necessity of systematic change in existing teacher training programmes to nurture diversified needs of learners and foster effective teaching practices. Transdisciplinary education not only emphasizes skill-based training but also comprehensive knowledge and holistic development of teachers. The discussions point out both challenges and opportunities of adopting a transdisciplinary approach in a teacher education. The shift towards transdisciplinary education brings various types of challenges like curriculum integration problems, policy misalignment, resistance to change etc. But the opportunities help to develop a supportive framework, resource allocation, holistic development and foster administrative leadership. Findings of this research shows that shift of teacher education towards transdisciplinary approach requires supportive policy, modified curriculum with administrative support and community involvement which is challenging. But the transdisciplinary approach of teacher education has valuable benefits and opportunities which are more important than challenges. And the challenges can be overcome by following the standard strategy. So, this study concludes that implementation of a transdisciplinary approach in teacher education is challenging but not impossible. So, implementations of transdisciplinary approaches need innovative supportive systems, effective strategy, involvement of community, collaboration with experimental schools and support from learner, educators and policymakers.

Conclusion

The findings of the study shows that the shift of teacher education towards transdisciplinary approach requires supportive policy, modified curriculum with administrative support and community involvement which is challenging. But the transdisciplinary approach of teacher education has valuable benefits and opportunities which are more important than challenges. And the challenges can be overcome by following the standard strategy. So this study concludes that implementation of a transdisciplinary approach in teacher education is challenging but not impossible. So implementations of transdisciplinary approaches need innovative supportive systems, effective strategy, involvement of community, collaboration with experimental schools and support from learner, educators and policymakers.

Limitations of the study

The limitations of this research are---

- ✖ This is not fully highlighted the real time lived experience of the educators.
- ✖ This research is mainly based on secondary data analysis which may restrict the in-depth understanding of actual viewpoints of stakeholders about transdisciplinary approach.
- ✖ This study mainly focuses on Indian context only, so the findings may not be applicable or generalize to another subcontinent.
- ✖ As this is qualitative so the lack of quantitative data may not support the findings.
- ✖ This study is a short-term analysis, so the study may not be applicable as long term effective strategy in teacher education

Suggestions for further research:

Depending on this research a researcher can do further study through gathering data by interviewing learners and educators, survey in educational institutions or developing questionnaires for conducting grounded theory research in this field.

- ✖ The further research can be done as empirical study by gathering primary data from teachers, learners, educators, administrators of teacher education programmes that can express the real time experience of stakeholders of the transdisciplinary approach of teacher education.
- ✖ Further research can be done on quantitative data to support and validate the findings effectively.
- ✖ A researcher can explore the long-term effect of a transdisciplinary approach of teacher education over a time period on effect and outcome of quality education.
- ✖ A comparative study can be conducted between the institutions following the traditional mode of teacher training programme and transdisciplinary approach of teacher education.
- ✖ The same study can be conducted in other countries as cross-cultural analysis of a transdisciplinary approach of teacher education that can offer insightful practice of teacher education.

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