Re-engineering Teacher Education Approaches and Challenges

Professional Ethics

Reengineering Teacher Education

Way Forward

Challenges

Reducing gap between

Theary and Practice

Editors

Rev. Dr. D. Thomas Alexander SJ Dr. A. Punfitha Mary



Re-engineering Teacher Education

Approaches and Challenges

Editors

Rev. Dr. D. Thomas Alexander SJ
Dr. A. Punitha Mary





St. Xavier's College of Education (Autonomous) (Re-accredited (4th Cycle) at 'A⁺' Grade by NAAC) Palayamkottai, Tiruneveli – 627002, Tamil Nadu, India

ii

All rights reserved. No part of this publication may be reproduced in any form by any

means without the prior written permission from the publishers.

All data, information, views, opinions, charts, tables, figures, graphs, etc that are

published in this volume are the sole responsibility of the authors. Neither the publisher

nor the editors in any way are responsible for the same.

Price: Rs.500/-

ISBN:978-93-84192-22-8

©March 2024

Published by

AASAAN Publications St. Xavier's College of Education (Autonomous)

Palayamkottai-627002

PREFACE

Dear Teaching and Research Fraternity, Greetings from SXCE, Palayamkottai!

Oh, Teacher Education! Quo Vadis? (Latin phrase for 'Where are you going?'). Where are the teacher educators? Where should we be heading towards? Are we on the precise road? What should be triggered? What kind of teachers do we mold to face the challenges of today's world? These are a few questions being raised among the teachers, teacher educators, educationists, policymakers, elderly citizens, and stakeholders such as parents and well-wishers. In search of reflective answers, our college ventured into the organization of a national conference of teacher educators, focusing on 'Re-engineering Teacher Education: Approaches and Challenges' on February 2nd and 3rd, 2024. It was consciously made offline to avoid the undesirable academic sluggishness and disasters in online transactions. We aimed to provide a platform on which the above questions may be deliberated, and concrete action plans may be initiated.

Teacher education is a foundation laid for the sustainable growth and development of any nation. If education must prosper and function positively in a society, then improving teacher education is vital and indeed inevitable. Teacher education is expected to contribute towards developing a basic understanding of the principles and practice of teaching and learning. It is to produce well-qualified professionals who can adjust to the changing needs of the students and developmental prospects of modern society. In it, knowledge and skills are developed, thereby building teachers/people to become useful to themselves and to the society they live in.

Which means, the need for overhauling and revamping of the system at a regular interval is a must for innovative and relevant training of prospective teachers, and meaningful classroom teaching-learning activities. Therefore, the keyword 'Re-Engineering,' which means a 'systematic process of analysis, design, and implementation' (Akpan et al, 2016), assumes significant importance if teacher education is to be modernized. Needless to say, the reassessment of teachers, existing pedagogic tools and materials will have to undergo stringent scrutiny of its appropriateness in the classroom transaction. Or we must agree, at least to the understanding that the re-engineering will require the use of both traditional and technological tools and modes, building on and extending traditional social forms of teaching and learning.

The current challenges that teacher education faces today after the advent of LPG mainly are related to the lethargic and easy-going attitude of teacher-educators, less enthusiasm among prospective teachers, a disconnect between pre-service training and post-training classroom activity, slow process of evaluation and revamping of learning content, diminishing professional commitment, rare model ethical behavior, and slow adoption to the rapid change of technological and scientific discoveries and inventions in the educational system. Hence there is a need for stimulating the professional spirit among the teacher educators/teachers, retaining the spirit of inquiry and creativity in teachers, enhancing teachers' commitment, training and motivating teachers for effective handling of classroom situations at different levels, and equipping them with modern Learning Management Systems (LMS). There is no one-size-fits-all solution; rather, each locality requires its own creativity, redesigning of content suiting local geographical conditions and needs, and adapting to the growing demands of society.

Thus, the two-day national conference on the above central point of re-engineering of teacher education enabled us to collectively, in person, ponder over various sub-themes and had the privilege of 43 papers being presented on the portal of St. Xavier's College of Education (Autonomous), Palayamkottai, Tirunelveli, Tamil Nadu. Indeed, it was a unique experience to listen to so many speakers, including a thought-provoking panel discussion among administrators, faculty, parents, and students on the existing scenario in teacher education.

We are grateful to all the speakers, paper presenters, and the participants for their wonderful sharing and contributions along with their enthusiastic participation. Thus, we are very proud to publish the collections of the best papers presented at the conference as e-proceedings with an ISBN number. We are sure, this will go a long way to trigger the minds of younger teacher educators and prospective teachers in its way; we hope the responsibility of bearing this torch to further the cause of quality teacher education will continue in the future. I would like to fondly remember the painstaking effort undertaken by Prof. Dr. A. Punitha Mary and other faculty of our college for magnificently organizing the event to the point of relevance, quality, and fruitfulness.

May God bless you.

Prof. Dr. D. Thomas Alexander SJ, Principal, SXCE, Palayamkottai, Tirunelveli, TN. 29.02.2024.

Contents

Pro	eface	iii			
	Chapter I				
	Emerging Technologies and Innovations in Education				
1.	The Melodic Symphony of Education: Considering the Innovative Potential of Suggestopedia in Pedagogy Saritha C Babu & Dr. K.Gireesh Kumar	1			
2.	Pecha Kucha: An Innovative Pedagogical Approach for Developing English Speaking Skills in Primary Teachers Dr A. Philomine Bala & Dr. M. Antony Raj	6			
3.	Intelligent Education: A Journey into Artificial Intelligence Enhanced Teaching and Learning Soumya M S & Dr. S. Devika	14			
4.	Adolescents Online Behaviour A.Sathya & Dr. G. Rexlin Jose	20			
5.	Developing 21 st Century Skills among Prospective Teachers through STEM Approach <i>M.Viji & Dr. H. Deepa</i>	26			
6.	Enhancing Higher Order Thinking Skills for Academic Excellence Nisha M S & Dr. Bindu Gouri V P	30			
7.	Empowering Pre-Service Teachers through Emerging Technologies in Education J. Soosai Mary Nancy & Dr. P. Muthupandi	36			
8.	Generative AI – The Master of Creation A.Priscilla Valan Assumptio	42			
9.	Interactive Trigonometry: Unleashing the Power of E-Content in Education L. Mahesh & Dr. A. Michael J Leo	47			
10.	Empowering Minds and Nurturing Earth: Fostering Ecological Intelligence through Innovative Education Practices <i>Sreelakshmi C & Dr. S. Devika</i>	53			
11.	Emerging Technologies and Education N. Fathima Chandhini	60			

12.	Pedagogical Innovations in Education Dr. K.K. Rajendran	65
13.	Shaping the Future of Education : Analysing the Potential Impact of Online Learning and E-learning Systems <i>Dr. G. Annlet</i>	73
14.	Pedagogical Methods and Innovation R. Shanmugapriya & Dr. H. Deepa	81
15.	Enriching the utility of select e- learning materials through demo classes among Primary School Teachers Dr. M. Gnana Soundari	87
	Chapter II	
	Role and Responsibilities of Teachers in the Digital Era	
16.	Cultivating Digital Pedagogues: Navigating Digital Landscapes for Enhanced Learning Feba Ann Thomas	92
17.	Divulging the role of Educators in Imparting Life Skills Jyothish John Kizhakkethalackal & Dr. H. Deepa	99
18.	Multifarious Qualities and Multifaceted Responsibilities of Teacher Educators V. DelwinMary & Dr.A. Punitha Mary	104
19.	Value orientation in Teacher Education Baskar. Y. & Dr. A. Michael J. Leo	109
20.	Inculcation of Values through the Process of Learning <i>Michael Lathis G & Dr. A. Punitha Mary</i>	114
21.	Role of Social Agencies In Value Inculcation to Learners S. Rajamanickavasagan & Dr. A. Punitha Mary	119
22.	The Role of Teacher in Nation Building <i>M.Sajitha</i>	125
23.	Fostering learning skills through multiple intelligence Sangeetha G S & Dr. Deepa R P	128
24.	Challenges for running CBSE schools in India: navigating the dynamic educational landscape <i>M. J. Sharmil</i>	134
25.	Developing 21st century skills among prospective teachers <i>AjitPoulKujur</i>	140

26. Pedagogical Methods and Innovations for science student in High school level <i>A.Vennila & G.Ramesh</i>	146		
Chapter III			
Mental Health of the Teachers			
27. The Impact of Mental Well-Being of the School Teachers A. Ignaciammal & Dr. P. Muthupandi	150		
28. Nurturing Mental Health among Prospective Teachers for Holistic Education Dr. R. Sathesh Franklin & Dr. A. Nicholas Jegan	155		
29. Teachers' Mental Health: Challenges and Solutions <i>Dr. R. Grace Sophia</i>	159		
30. Strategies for Building Emotional Intelligence for Intangible Lifelong Cognitive Gains <i>Dr. P. Subramanian & M. Rathish</i>	165		
31. To enrich the mental health of teachers <i>V.Rajkumar & K.Mathumitha</i>	172		
32. Mental Health of the Teachers <i>S.Vaishnavi</i>	177		
33. Nurturing the Roots: The Essential Role of Teacher Mental Health and Mindfulness in Education <i>S.Ulagammal & Dr.C.Ramesh</i>	182		
Chapter IV			
NEP and Teacher Education			
34. Transformation of Teacher Education for Building Resilience of Pre-Service Teachers Evangaline Arulmary K. & Dr. M. Antony Raj	186		
35. Metamorphosis of Digital Education in India with Special Reference to the Policies and Regulations of NEP 2020 <i>Krishnendu E.S.</i>	192		
36. Fostering Multifaceted Dimensions of Professionalism among Teacher Educators <i>S.S.Helen Sathia Sheela</i>	200		

	viii
37. Empowering Educators: Integrating Sustainable Development Goals in Teacher Education Curricula <i>Dr. R. Indra Mary Ezhilselvi</i>	206
38. Navigating New Horizons: The Future of Teacher Educational Institutions in India Dr. U. Subramanian & Dr. A. Nicholas Jegan	212
39. Challenges of Teacher Education in NEP 2020 Dr. Y. Daniel	217
40. Utilizing AI in The NEP 2020 Framework: A Pathway to Enhanced Scientific Reasoning Abilities in Indian Education <i>A.Y. Paul Usha Rani</i>	223
41. Role of Evaluation in Teaching and Learning Process Sankareswari N, Dr. H. Deepa	230
42. Evaluation Process in Teacher Education Dr. A. Nicholas Jegan	236

240

43. The Teaching Approaches for the Reduction of Cognitive Dissonance *P. Rajeshwari, Dr. A. Michael J Leo*

NAVIGATING NEW HORIZONS: THE FUTURE OF TEACHER EDUCATIONAL INSTITUTIONS IN INDIA

Dr. U. Subramanian

Assistant Professor in Tamil Education, St. Xavier's College of Education (Autonomous), Palayamkottai

Dr. A. Nicholas Jegan

Assistant Professor in Computer Science Education, St. Xavier's College of Education (Autonomous), Palayamkottai

Abstract

India's education sector is witnessing a transformative phase, marked by the integration of technology, innovative pedagogies, and an increasing emphasis on skill development. Teacher Education Institutions (TEIs) are at the heart of this transformation, operating as the crucibles where the future educators of India are trained. As the country moves forward into the digital era, these institutions must adapt to evolving educational paradigms to effectively prepare teachers who can navigate the complexities of 21st-century classrooms. This article explores the anticipated changes and challenges that TEIs in India may face, including curriculum updates, the adoption of blended learning practices, collaborative models of teacher training, and emphasis on continuous professional development. The role of policy reforms, quality assurance, and international collaborations will also be discussed. Ultimately, providing a broad perspective on the future of TEIs, the article posits the necessity for a dynamic shift towards more flexible, learner-centred approaches that equip teachers with the skills necessary for fostering an educated, empowered, and ethically grounded citizenry.

Key Words: Teacher Education Institutions, learner-centred approaches

Introduction

India's ambitious journey towards educational excellence is heavily contingent on its ability to catalyze teacher education. The quality of teachers directly influences the academic and socio-emotional development of students, underscoring the critical role of Teacher Educational Institutions (TEIs). Considering technological advancements and a rapidly evolving job market,

TEIs in India are encountering the pressing need to revamp their pedagogical methods and curricula. This article delves into the potential trajectories these institutions might take and the transformative strategies required to ensure they remain relevant and effective in nurturing the educators of tomorrow.

Curricular Revitalization

The changing landscape of India's educational system necessitates a corresponding shift in the TEI curriculum. Future TEIs are expected to incorporate a multidisciplinary approach, bridging the gaps between theoretical knowledge and practical application. The National Education Policy (NEP) 2020 serves as a catalyst for such changes, emphasizing the importance of holistic and flexible teacher education programs.

Curriculum updates may include a greater focus on emerging fields such as educational technology, psychology, and environmental sustainability. The integration of these subjects will aim to develop teachers who are well-versed in dealing with issues relevant to the current socio-economic and environmental climate.

Blended Learning Adoption

Blending technology with traditional instructional strategies will likely be a cornerstone of future TEIs. This adoption of blended learning will aim to provide prospective teachers with a first-hand understanding of managing digital platforms, fostering digital literacy, and leveraging online resources effectively.

The use of virtual simulations, educational software, and digital forums could be instrumental in transitioning from rote learning to an environment that encourages critical thinking and problem-solving skills. Blended learning environments can also facilitate personalized learning experiences, catering to diverse learning styles, and fostering inclusivity.

Collaborative Models of Training

The paradigm shift in education circles reverberates the call for a more interactive and cooperative approach to teacher training. Prospective teachers could benefit greatly from exposure to collaborative practices, be it through peer-learning or mentorship programs involving seasoned educators.

Networking with global education communities can expose Indian TEIs to international best practices and pedagogic innovations, enabling the professional growth of teachers and the institutional development of TEIs.

Continuous Professional Development

Continual learning is essential in an ever-changing educational ecosystem. Future TEIs could adopt a model that provides ongoing professional development opportunities for teachers to keep up-to-date with the latest research and teaching methodologies.

Seminars, workshops, and short courses can be incorporated within the TEI structure to enable teachers to refine their skills continuously. Such initiatives will help teachers remain adept at dealing with the evolving demands of students and the education sector at large.

Policy Reforms and Quality Assurance

The regulatory environment for TEIs in India is set to become more stringent regarding quality assurance and accreditation processes. This is crucial to maintain high standards of teacher education and propagate a culture of excellence.

Policy reforms may introduce measures such as performance-based funding and reward systems based on teaching outcomes, pushing TEIs towards better performance and accountability. Enhanced transparency and participatory governance can further democratize the functioning of these institutions.

International Collaborations and Exchange Programs

One of the gateways to globalizing teacher education in India lies in forging strong international collaborations. In the near future, TEIs could benefit from partnerships that facilitate exchange programs for educators and students alike. Engaging with diverse educational philosophies and practices through such collaborations will not only broaden the perspectives of Indian teacher trainees but also reciprocally enrich the international teaching community. These programs can serve as platforms for shared learning, comparative analyses of pedagogical strategies, and joint research initiatives.

Technological Empowerment and EdTech Startups

A surge in educational technology startups in India reflects a growing interest in enhancing the teaching and learning experience through innovation. TEIs could play a pivotal role by working closely with EdTech companies to co-create content, tools, and systems that Re-engineering Teacher Education: Approaches and Challenges ISBN: 978-93-84192-22-8

cater to the needs of modern classrooms. This partnership may lead to the development of advanced teacher training modules, digital resources, and assessment tools, all designed to facilitate and enrich the teaching process.

Empathy and Inclusive Education

As society grows more cognizant of the varied needs of learners, there is a call for teacher education programs to inculcate empathy, respect for diversity, and the skills required to manage inclusive classrooms. TEIs will need to tailor their curriculum to include strategies for special education needs, cultural competency training, and conflict resolution. Preparing teachers to cater to different learning needs ensures no child is left behind, which is particularly vital in the diverse socio-cultural matrix of India.

Environmental Education and Sustainable Development

The future of education is inextricably linked to the global imperative for sustainability. Recognizing this connection, TEIs will need to embed environmental education within their core curriculum, equipping educators with the knowledge to foster environmental stewardship among their students. This initiative will align with the United Nations Sustainable Development Goals (SDGs), highlighting the role of education in combating climate change and promoting sustainable development.

Strengthening Research in Teacher Education

TEIs of the future will need to become centres of research excellence that contribute to both theoretical and practical knowledge in education. By fostering a strong research culture, these institutions can play a leading role in shaping educational policies and practices. This involves providing training in research methodology, promoting action research projects, and encouraging publications and presentations in national and international forums.

Promoting Entrepreneurial Mindsets

Emerging TEIs will also focus on instilling entrepreneurial mindsets in teachers, enabling them to think innovatively in problem-solving and curriculum design. Educators with an entrepreneurial spirit can inspire their students to be enterprising and self-motivated, qualities that are invaluable in the world beyond the classroom.

Conclusion

The future of Teacher Educational Institutions in India hinges upon their ability to embrace change and embark on a path of innovation and reform. By undertaking initiatives across curriculum development, blended learning, collaborative models, continuous professional development, and policy revamping, these institutions can cultivate a new generation of teachers ready to lead India's educational renaissance. Indubitably, the metamorphosis of TEIs will play a pivotal role in sculpting the nation's educational future, ensuring sustainability, inclusiveness, and global competitiveness.

As India continues to progress and redefine its educational landscape, Teacher Educational Institutions stand on the brink of a new educational epoch. They are tasked with the monumental responsibility of transforming aspiring teachers into agents of change who can impart education that is dynamic, inclusive, and responsive to the challenges of the 21st century. It is a future that demands a reimagined vision for TEIs, one that fosters excellence in teaching, learning, and leadership.

Through concerted efforts in policy, pedagogy, and practice, TEIs will need to become adaptable, forward-thinking institutions that not only respond to the demands of the present but anticipate the educational needs of the future. It is this forward momentum that will ensure teacher education in India remains at the cutting edge, inspiring generations of teachers to create an enlightened and progressive society.

Reference

Parikh, R. (2023, February 17). The future of education in India: Predictions and trends for 2023.

Times of India Blog. https://timesofindia.indiatimes.com/blogs/voices/the-future-of-education-in-india-predictions-and-trends-for-2023/

The future of education in India. (2023, May 13). LinkedIn. https://www.linkedin.com/ pulse/future-education-india-upgrademyclass/

Anurag Tripathi, Secretary, CBSE writes about the importance of skill education and the future of education. (2022, September 2). ScooNews. https://scoonews.com/news/news-future-of-education-skilling-in-india-11642/

