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MODELS OF TEACHER EDUCATION: AN INDIAN APPROACH

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Abstract

Reviewing and rethinking the teachers' role in teacher education in India has become a critical issue in recent times, along with the social and cultural shifts, changing paradigms and the emergence of new epistemological, political and technological explorations and contexts. The changing role of teachers in India since the Vedic period to the present era has caused a tremendous shift in compliance with the societal needs, curriculum demands and global ranking of a country, thereby, it is continuously evolving. This demands a particular model or blueprint to be implemented by the teachers in association with the respective curriculum, their role to execute the same as per the changing landscape, demands the teachers' role as a reflective multitasker, context-based and critical problem solver in the execution of teaching. This article explores the various models of teacher education as perspectives change from time to time in relation to individual needs in particular and society at large, how important changes in teacher education policy occur with serious consequences in terms of the concept and context of teacher education and the research dimension integrated into teacher education, as well as new concepts and approaches linking theory and practice.

Keywords: *Teacher education; models of teacher education; teacher education in India; paradigm shift in teacher education*

Introduction

Teacher education is facing continuous transformations worldwide in the present time, and India is also on the same line in its effort to introduce world-class teachers and an innovative teacher education context. The comprehensive scrutiny of the educational policies in India shows that the initiative has been effective in the application of these recommendations from real perspectives (Banerjee et al, 2017). Teacher education must follow some criteria, as the Chinese policymakers have believed in the following structure, which may be used to sum up the assumptions: teacher education (TE) →competent teachers (CT) → quality of education and students' achievement (QE/SA) → quality labour force (QL) → modernisation of the country and economic growth (MD/EG) → national achievement and competitiveness (NAC). (Li, 2013). The emphasis is given on the emergence of new curricula and the evolution of novel models and teaching strategies, as well as modern instructional technology. The development of this mechanism has been increased by growing limitations in the use of traditional pre- and in-service teacher education models and a belief that they are incompetent for preparing competent

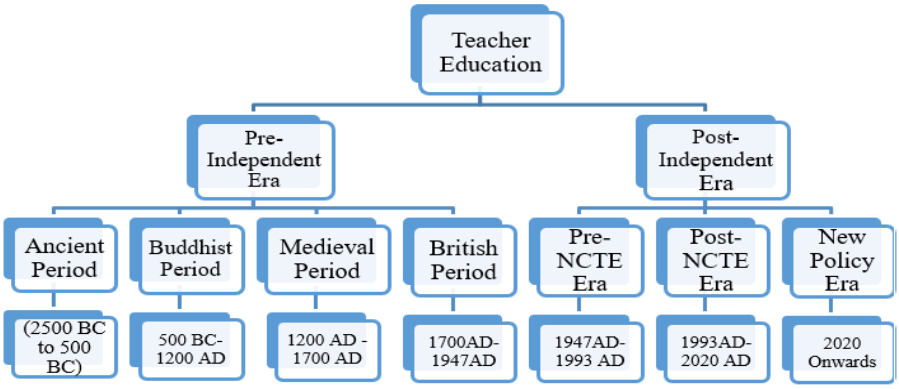
teacher educators (Perlberg et al., 1979). In-service teacher education has a broad terminological use: "in-service development, in-service training, curriculum innovation and implementation, organisational renewal, staff development, personnel education, continuing teacher education, and professional development" (Neil, 1986). Educational reforms of the past 25 years have emphasized the need for a student-centric approach to instruction. This requires a new teacher to have subject-specific content competency as well as a skilful adaptation to curriculum and instruction to meet the learning needs of the students. Teacher education programmes have been organized in India in a stage-specific manner, encompassing pre-primary, primary, secondary, and special education. This framework demanded the transformed teacher education programmes with various curricula promoting knowledge and skills unique to each disciplinary context. More recently, various variables have affected the function of instructors and the nature of their preparation for teaching. These variables include federal education reform intended on changing the performance of all pupils demonstrated as the standards and accountability. India, like other countries, is implementing an innovative methodology for developing world-class teaching standards, which could have far-reaching ramifications for international perspectives in an age of globalisation. (Hardman, 2009).

Historical Background of Teacher Education in India

Rabindranath Tagore defined teachers as: "A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame" (Das, S.K., 1996, p. 64). The Education Commission (1964-66, p.2), in its document entitled 'Education and National Development' stated, "The destiny of India is now being shaped in her classrooms". The National Policy on Education (NEP 1986, p. 25) emphasized: "The status of the teacher reflects the socio-cultural ethos of the society; it is said that no person can rise above the level of its teachers".

The policy framework for teacher education in India tried to ascertain a complete change in the existing structure. This change in the course of time is found in the successive stages of the historical development of teacher education. Teacher education programmes have continuously evolved in form and function since their beginning in the Vedic period, keeping in mind individual aspirations, societal demands and state needs. Teachers being the forerunners of all advancements, teacher education has become the highly demanded and noblest profession in shaping the present world with all its emergence of new philosophical, psychological, sociological and digital methods and innovations- their application in fulfilling the needs of the hour and providing something new for improving the existing structure, etc. In order to get a brief sketch of the historical development of teacher education in India, it has been divided into the teacher education system in pre-independent India, starting from the ancient education system to the independence of India, consisting of the Ancient Period, Buddhist Period, Medieval Period, British Period and in post-independent India, starting from independence till date, consisting of the Pre NCTE Era, Post NCTE Era and New Policy Era. The successive stages of teacher education in India are stated below in Figure 1.

Figure 1. Age-specific structure of Teacher Education in India



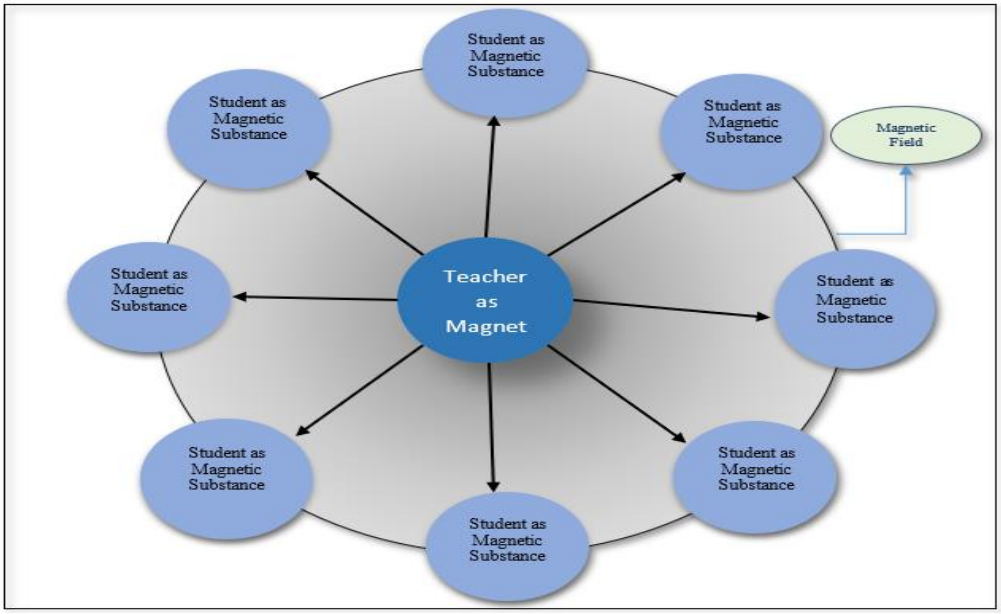
Methodology

Models of Teacher Education: Teachers are the makers of society and their roles have intrigued human societies since the early civilizations. The role of the teachers is dependent on whether they should serve the public interest or work for their own interests. Thus, there is a multiplicity of models in this respect (Cakcak, 2016). In each teacher education model, different focuses on teachers' roles are stated, so the characteristics of teachers are intended as technically enabled teacher education making teachers passive technicians, reflective teacher education programs giving birth to the reflective teachers, and critical teacher education programs motivating teachers as transformative pedagogical leaders (Kumaravadivelu, 2017). Teacher education programmes have modified the teachers' role. After a critical and comprehensive study of the teacher education history, the researcher has formed some teacher education models, viz. Life induction model, Linear model, Angular model, Triangular model, Rectangular model, Multidimensional model and Circular model respectively. The critical appraisal of teachers' role in teacher education has been depicted in these models, which are stated below:

Life Induction Model: Induction refers to a well-planned event that educates new students about the setting of a specific school and connects them with people and society. In the domain of teacher education, the word refers to the responsibility of teachers to provide knowledge, attitude and skills to the students for their development. Since the Upanishadic period, the monitorial system was regarded as the method of inducting the learners and teaching was provided with personal attention to the student (Chand, 2015). The monastic system in the case of Buddhism required that every novice would be placed under the preceptor Upajjhaya and under his guidance and supervision. In the Muslim period, the students are monitored in Muktabs and Madrashas and inducted with life skills (Ahmad, 2023). Even in the implementation of Wood's Despatch, which was stated as the Magna Charta of English Education in India, teacher education was grounded on teachers' knowledge, skills and personalities (Lal, 2021).

In the context of the Ancient, Buddhist and Medieval periods, it is clear that the education system was mainly, teacher-centric. The process of knowledge transmission to the students was a one-way process called indoctrination- a process of infusing attitude, skill, knowledge, values, beliefs, experience and culture into the students. The teacher was like a Guru to the students and the students imitated the personality of the teacher. The source of all knowledge was the Guru. The personality of the Guru motivated the lives of the students. Thus, this process can be explained as a transformation of the iron pieces or magnetic substances into a magnet through the process of inductive magnetic field. The process of transformation of the students is illustrated in Figure 2.

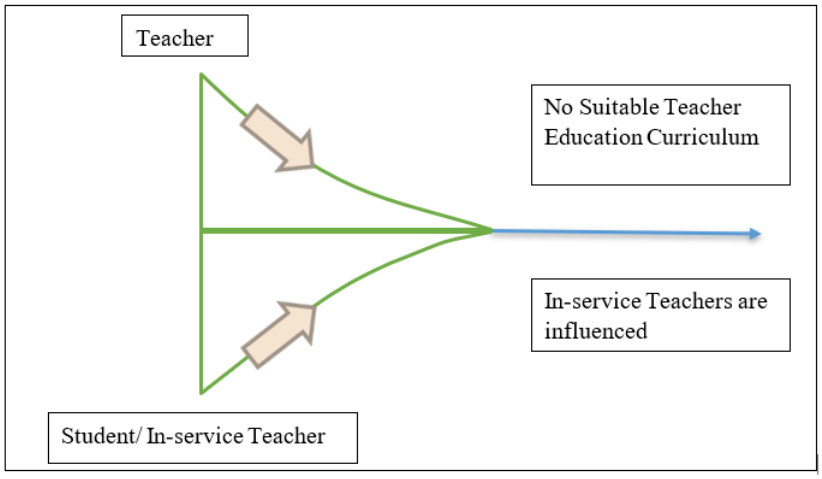
Figure 2. Life induction model of teacher education



Linear Model: After the advent of Lord Stanley's Despatch in 1859 and the Hunter Commission thereafter, the first Indian Education Commission in Pre-Independent India in 1882 focused on critical speculation on the primary, secondary, and higher education systems, grant-in-aid, and improvements in education for women, backward classes, hill tribes, indigenous peoples, and religious education. This policy recommended free education, an invigilation system for monitoring and controlling educational institutions, and educational favours for underprivileged students. To ensure that primary education was inclusive, authority was transferred to a district or municipality. Provisional changes were implemented in high schools to incorporate vocational and literary studies. (Srimathi & Krishnamoorthy, 2020).

The critical study of these policies shows that a new model of teacher education came into account, conventionally called the 'linear model' of teacher education. It is evident that programmes of teacher education were restricted to in-service teachers. They were trained, though there was no predefined structured curriculum and support for the teachers' training. The senior teachers had been deployed as supervisors to enhance the skills of the junior teachers in teaching. The senior teachers or expert teachers guided and motivated the junior teachers to level up their skills until equilibrium existed. In-service teachers' learning and training can be improved through collaborative relationships that use (a) shared responsibility and the development of the ZPD of learners, (b) gradations and freedom of applying experiments, (c) content-specific and structured teaching with immediate feedback, and (d) assessments in ongoing instruction through reflection (Samaras & Gismondi, 1998). The linear model of teacher education prevailing in the domain of Indian education is presented in Figure 3.

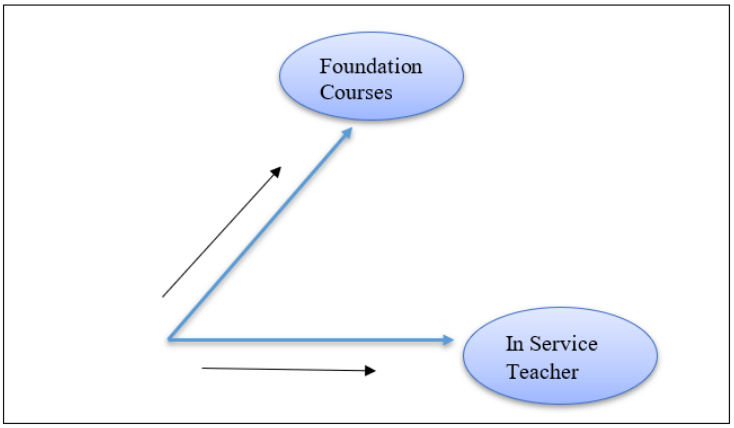
Figure 3. Linear model of teacher education



Angular Model: The Government of India Resolution of February 21, 1913, mandated free and universal primary education across India, with an emphasis on strengthening secondary education by providing universities a larger role in the classroom (Velaskar, 2010). In Calcutta University Commission, 1917-19, led by Dr. M.E. Sadler, promoted the scope of science and technology education, women's education, and teacher preparation (Kumar, 2022). The Hartog Committee, 1929 also recommended the need for more focus on primary education, promotion of the students for high school and intermediate education etc (Kapur, 2019).

These commissions clearly mention that foundation courses were included in the curriculum and the teachers implemented the same in the in-service teacher education courses. During this period, the teacher education model was transformed into an angular shape from its linearity. On one side of this angle, there are foundation courses and the other is occupied by in-service teachers. For the first time, the teacher education programme witnessed a curriculum. In-service teachers got the opportunity to study psychology, sociology and philosophy as foundation courses. It is assumed that this kind of foundational knowledge will be helpful for delivering content material to the learners in a meaningful way on the part of the trained teachers. The angular model of teacher education has been described in Figure 4.

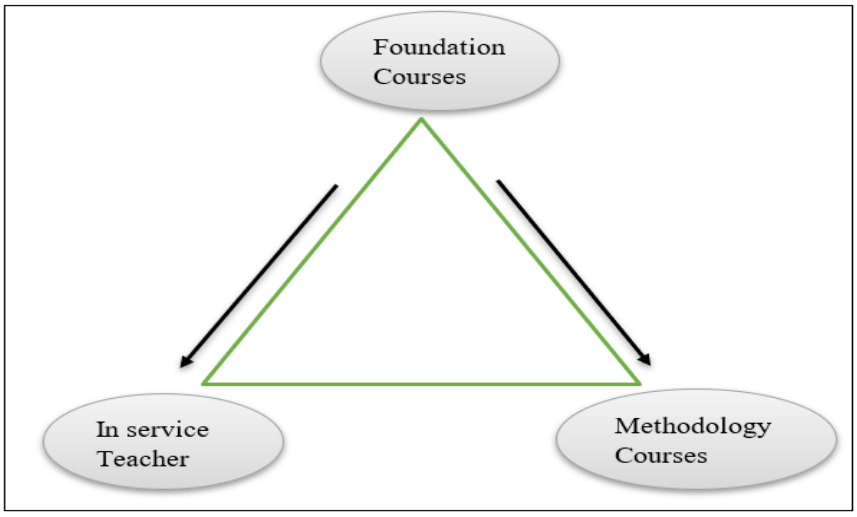
Figure 4. Angular model of teacher education



Triangular Model: In 1948, the University Education Commission, which is India's first independent commission, examined the advancement of current courses in teacher training programmes and proposed courses for flexible and adaptable, circumstances-specific, and school-specific practical training. Teacher education was given a new name in 1950 after being given a new form of action. The Secondary Education Commission (1952-53) explained secondary education reforms such as one year of graduate teacher training, methods of teaching in two subjects, observation, demonstration, and criticism of lesson plans, inclusion of subjects according to the demands of the stream and level, use of activity-based teaching methods, construction and execution of tests in scholastic domain, organisation of supervised study, and conducting library research (Dutta, 2023; Kumar & Azad, 2016). The goal of education has shifted to instilling desirable values, right attitudes, and work habits in students, rather than accumulating knowledge in an effective manner.

During the period mentioned above, the teacher education underwent reshaping and a triangular model emerged. The teacher education framework was designed with a stage-specific curriculum and subject-specific teachers were appointed in schools. For enhancing quality training, methodology courses were introduced with methodology-specific trained teachers. Due emphasis was given to the in-service teachers' pedagogical skills so that the teacher could deliver the content material in a systematic, logical, meaningful, purposeful and psychologically structured way to the students. So, the angular model had been added with one more dimension, resulting in a tri-dimensional model. In this model, three vertices were covered: a) Foundation Courses, b) Pedagogical/ methodological courses, and c) In–service teachers. A clear idea of this model is expressed in Figure 5.

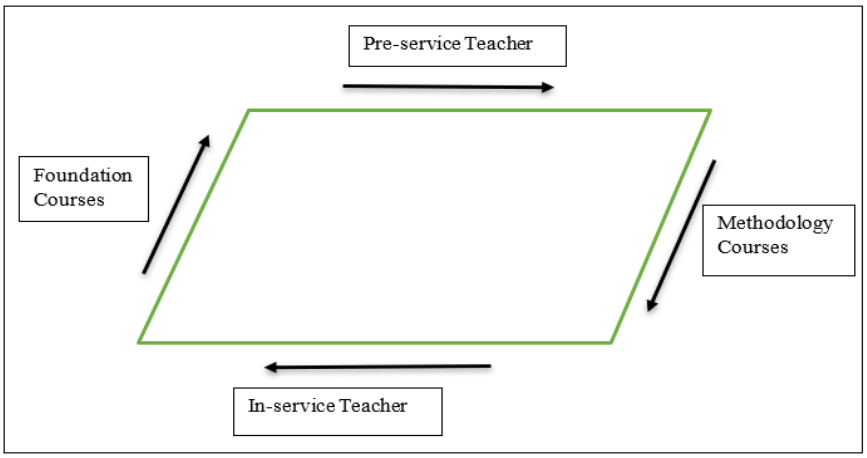
Figure 5. Triangular model of teacher education



Rectangular Model: The Indian Education Commission, 1964-66, widely known as the Kothari Commission, gave importance to teacher education by considering and formulating a suitable programme for the professional education of teachers (Singh, 2017; Singh, 2018). It was critical for achieving qualitative improvements in education irrespective of levels, including the development of personal traits of the teachers, character, educational qualifications, and professional competence. Teachers' freedom in academic exploration and publishing independent studies and work of research have been emphasised. The National Policy Statement on Education (1968) determines education in its qualitative aspect as a step towards national development, with the utmost significance of the role of the teachers. The teaching profession is regarded as one of the noblest professions and teachers are in high status. Thus, the service conditions, pay and reimbursements, and other working conditions of the teachers are kept in focus in accordance with their qualifications and responsibilities (Chhokar, 2010). The National Policy of Education (NPE) of 1986 advocated that teacher education be a continuous process, with no distinction between pre-service and in-service structure. The National Policy of Education and its programme of action made some improvements in teacher education and established a relationship between pre-service and in-service teacher education (Beck & Kosnik, 2017). The Acharya Ramamurti Committee (1990) saw the necessity for an internship programme for teacher training to provide field experience in a realistic context and aid in the improvement of teaching skills over time. The committee also suggested implementing in-service and refresher courses tailored to teachers' unique needs and requirements, as well as evaluation and follow-up (Kumar & Azad, 2016; Bagchi & Bairagya, 2021). The Yashpal Committee (1993), which was initiated in 1993, noted that the average standard of teaching transaction in schools rely on the appropriate programmes of teacher preparation. Therefore, there was a need for a specialized B.Ed. program in secondary, or elementary or nursery education (Balwaria & Gupta, 2014; Tilak & Bandyopadhyay, 2023). The program's duration and content required to be reformed to one year after graduation or four years after senior secondary, and the material needed to meet changing school education demands and standards. The primary goals of these programmes were to help trainees develop independent thinking and job efficiency in order to attain specific objectives and goals.

A changing face of models of teacher education is again observed during this pre-NCTE era. The training of in-service teachers resulted in productivity and that requires the need for pre-service training for the would-be teachers or prospective teachers. Teaching has been considered a noble and professional service that calls for a rectangular model in which the in-service teachers as well as the pre-service teachers were included in the teacher education programme and trained. Pedagogical improvement and advancement in teacher education have become the main focus. The rectangular model is depicted below in Figure 6.

Figure 6. Rectangular model of teacher education

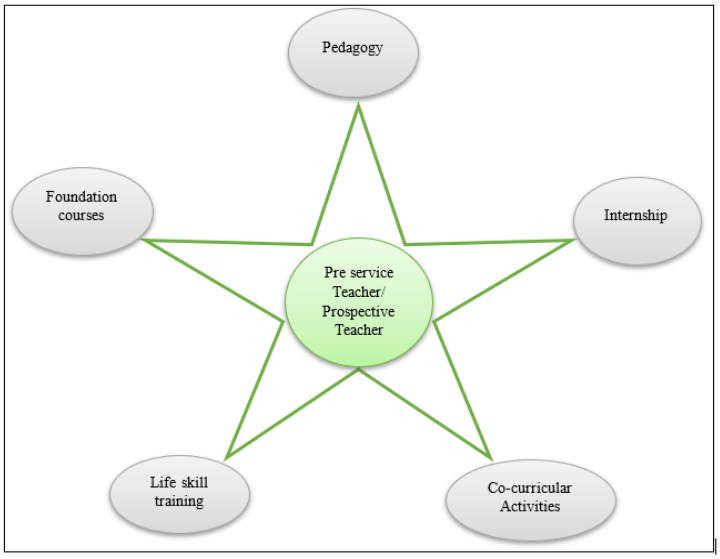


Multidimensional Model: The National Council for Teacher Education (NCTE) developed the National Curriculum Framework for Teacher Education (NCFTE) in 2009, building on the National Curriculum Framework (NCF), 2005, and the principles outlined in the Right of Children to Free and Compulsory Education Act, 2009, which called for a revamped teacher education framework. NCFTE defined teacher

education as the platform for reflective practices, motivating self-learning, integration and expression of novel ideas, opportunities for observing and engaging with children, and the strategies for curricular activities and assessment.

The greater part of teacher education has been occupied by pre-service teachers, alongside minority enrolment of in-service teachers. The various dimensions of teacher education, like Pedagogy and methodology courses, Internship and practice training and co-curricular activities, have been included in teacher education along with the foundation courses. Critical thinking, innovative pedagogy, research skill and auto-learning of prospective teachers are given importance. The multidimensional model of teacher education has been delineated in the following, Figure 7.

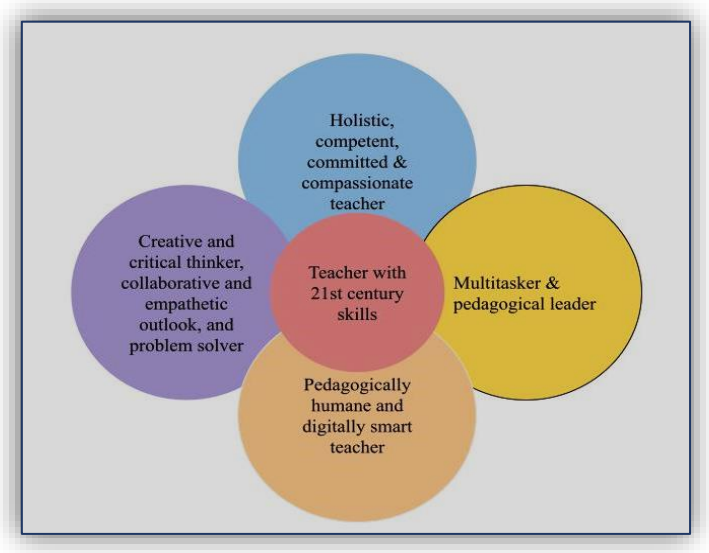
Figure 7. Multidimensional model of teacher education



Circular Model: No education policy was able to fulfil its goal as it aimed to execute. The National Education Policy 2020 (NEP) focuses to build India a sustainable, equitable, and thriving knowledge society, leading to a 'global knowledge superpower' through high standard education and pedagogy that is ‘experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centred, discussion-based, flexible, and enjoyable (Sharma et al, 2023; Warhate, 2021). The teachers’ role undergoes a shift from apprenticeship to an individualistic approach to students' learning. This creates a cooperative relationship between the teacher and student (Pekkarinen, 2021). This policy come up with the ‘revision and revamping’ of the existing education framework to fulfil 21st century aspirational goals, including Sustainable Development Goal-4 (SDG4) and upgrading the values and traditions of India. In this policy, the creative potential of each individual is given due importance for developing “foundational capacities of literacy and numeracy, higher-order cognitive capacities such as critical thinking and problem-solving, socio-emotional and ethical dispositions”. Critical thinking skills can foster new ways of teaching and students are motivated to ask questions, solve problems by working in groups, and discuss the results of their experiments (Chitra, 2019). Teachers being an important part of the education system, the NEP-2020 has highlighted the teachers’ role as the central focus for nation-building and reforming the education system by re-establishing teachers at all levels, their recruitment through transparent methods, providing autonomy and instilling a sense of responsibility and accountability to them (Patil & Karad, 2020). Teacher education requires multidisciplinary inputs and enriched content and pedagogy in composite multidisciplinary institutions (Dwivedi, 2021), the institutions would implement cutting-edge research along with B.Ed. in collaboration with psychology, sociology, philosophy, neuroscience, Indian languages, arts, music, literature, history, physical education, mathematics and science (Raina, 2022). As a comprehensive Bachelor's degree, this policy promotes the 4-year integrated B.Ed. Furthermore, candidates with a bachelor's degree in a specific area will be eligible for the 2-year B.Ed. programme. In addition, students with a 4-year undergraduate degree in a specific topic may be eligible for a 1-year B.Ed.

The role of teachers is to 'move the education system towards real understanding and towards learning how to learn'. The process of education should equip the students with cognitive, affective and psychomotor skills for building personality (Sharma, 2022) and "creating holistic and well-rounded individuals equipped with key 21st Century skills". The curriculum is the medium for nurturing excellence. Thus, 'critical thinking and more holistic, inquiry-based, discovery-based, discussion-based, and analysis-based learning' are the best in this respect. The present curriculum demands in teacher education are linked to the multi-grade setting, viz. planning of the curriculum, curriculum development, classroom organisation, selection and use of appropriate TLMs, inclusion of proper teaching strategies, management of time, classroom discipline, inclusion of effective assessment and evaluation, and healthy relationships among parents and the community (Mulryan-Kyne, 2007). The approach to teaching and learning will be interactive, encouraging questions, creative, collaborative, exploratory and experiential. Figure 8 depicts the journey of the teacher education framework in the new policy era.

Figure 8. Circular model of teacher education



Critical Appraisal of Teacher Education Model

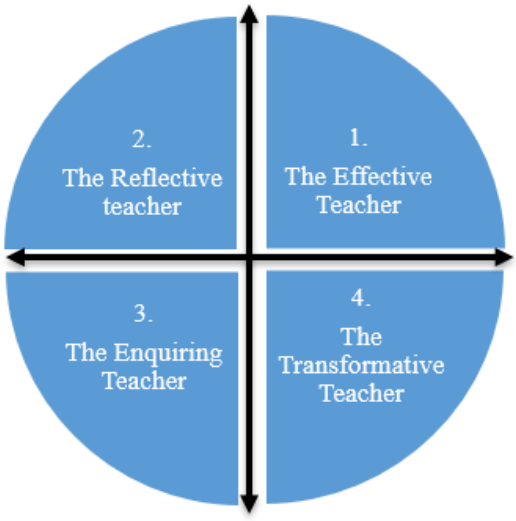
The chronological development of various policies and their implementation in the framework of teacher education shows that there are successive stages of improvement, enhancement, modification of the teachers' role in moulding the students and executing the objectives of these policies practically. This role of teachers has been concretized in the various models, viz., Life induction model, Linear model, Angular model, Triangular model, Rectangular model, Multidimensional model and Circular model respectively. The policies undertaken in the pre-independent era were relevant to the then socio-economic conditions of the country. However, 'cascade' models in the domain of teacher education facilitated many in-service programmes, ultimately resulting in average success in engaging with teachers' local needs in supporting the sustainability of changes in teachers' practices (Saigal, 2012). However, the ever-changing face of education and the diverse needs of society have transformed the policies in the post-independence era. Thus, the ongoing policy, NEP 2020 has aimed to transform India into a global knowledge superpower by 2030.

NEP 2020 is the best policy in the field of teacher education and has aimed to bring about a drastic transformation in education. Teacher education institutions remained as stand-alone institutions, separated or isolated from other higher institutions. This policy recommends a multi-level/multi-dimensional teacher education institution- "multidisciplinarity and a holistic education across the sciences, social sciences, arts, humanities and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge", to connect the primary education and higher education. The goal of teacher education is to influence future generations by preparing teachers with Indian values, language,

knowledge, ethos, traditions, especially tribal traditions, and knowledge of the most recent achievements in education and pedagogy (Korada, 2023). It becomes a complete overhaul in teacher education as it says teacher education institutions will be providing training to the teachers in 'high-quality content and pedagogy' transforming to multidisciplinary colleges and universities having departments that conduct B.Ed., M.Ed., and Ph.D. degrees in education (Sharma, 2022). The teaching programme for in-service teachers in blended mode or open and distance learning (ODL) mode will be helpful for their quality improvement. The teacher education programme aimed to the implementation of tried-and-true training blended with pedagogy in the areas of elementary and secondary education, multi-level teaching and evaluation, literacy and numeracy, special education, education of the gifted, and technology-enhanced collaborative learning approaches. Practicum training in the classroom and in local schools is stressed a lot. Inculcation of values, a sense of fundamental duties of the Indian Constitution, environmental awareness and its conservation in relation to the objectives of sustainability are also major concerns of the new policy, NEP 2020.

The scope of research in relation to its multidisciplinary subjects has been given due emphasis in the new policy. There is a relationship among research, reflection and teacher education as focussed on in this policy. This concept of NEP 2020 is best supported by the earlier model of teacher education as proposed by Singh et al., (2019), entitled "Reflection, research and teacher education". In this model, Singh et al. explained the teacher's journey from an effective teacher to a transformative teacher. An effective teacher has the ability and content understanding to influence students. The reflective teaching model emphasises skills and content, as well as information about individual students as learners. The enquiring teacher conducts research in addition to practising knowledge and skills, and the transformative teacher has a critical inquiry perspective, looking beyond the classroom to the larger social context and examining ethical and moral concerns. The various roles of teachers are stated in Figure 9.

Figure 9. Transformation of the role of the teacher



The application of educational research is incorporated for immediate application in solving problems in schools. For the renovation and rejuvenation of teacher education, the scope of research in education has been enhanced. The scope for interdisciplinary research is enhanced in education, which will create research bent mind of the teachers.

This policy (NEP 2020) encouraged the of 21st Century skills development such as collaboration, cooperation, and digital skills with a focus on digital competency (Nageswari, 2022). The recent initiatives and agendas like Online courses at Indira Gandhi National Open University (IGNOU), Massive open online course (MOOCS, 2008), DIKSHA (Digital Infrastructure for School Education), SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), and PRASHIKSHAK (2016): the District Institutes of Education and Training (DIETs) teacher education portal are aimed to achieve the three

cardinal principles, namely access, equity, and quality. Experiential learning, or the instruction and development of students' 3H (head or cognitive, heart or emotive, and hand or psychomotor), is the primary focus of teaching. Reflective teaching practice has been stressed. The knowledge for practice is related to the technical knowledge or instrumental knowledge needed to reflect on and improve classroom practice. The knowledge in practice or practical wisdom is knowledge invented by the teacher and made available to others for application, deliberation, and discussion. Knowledge of practise is a critical reflection of knowledge production and knowledge application, problematized by means of interrogative inquiry. Critical social theory and critical educational practice are woven throughout the investigation process. The manner in which research actually enacts or develops pedagogical practises, as opposed to merely describing or expressing them, is referred to as "knowledge of practice" or "critical reflexivity" (Singh et al., 2019). The forms of teacher reflection are stated below in Figure 10.

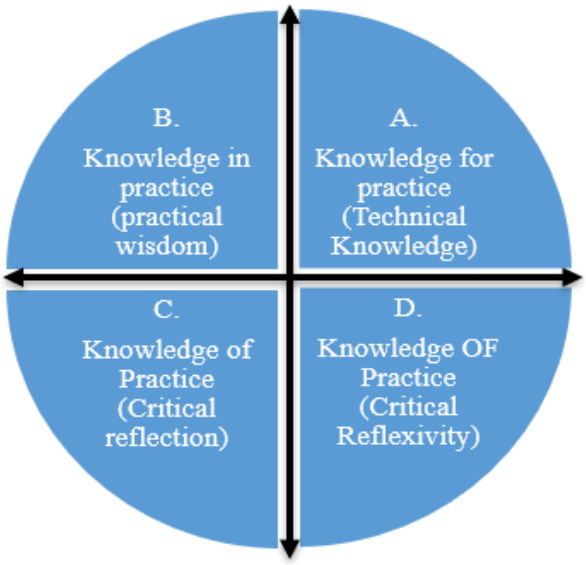


Figure 10. Forms of reflection in teaching

The transition from content-based to competency-based evaluation promotes learning and development while assessing the application of higher order skills, including critical thinking, conceptual clarity, and analysis.

Conclusion

Teaching models are the particular design that guides and directs us to the implementation of a specific strategy in order to achieve specific instructional objectives. The critical analysis of the existing teacher education model in Indian academia can guide a teacher to understand the transformations of the models of teaching from time to time and use his best potential to play his role as per the needs of the hour. Though the models of teacher education explained above are based on a truly Indian approach, they can relate to the need for the structure of education in all developing countries. In keeping with contemporary scientific advancement and technological explorations, several education policies have been implemented in the Indian education system with partial fulfilment of their objectives and recommendations, thereby, the need for a learner-centric, cooperative, integrated, outcome-based teacher education programme is essential. The collaborative model in teacher education has been given due importance for an iterative teacher education programme (Chang, A. et al., 2016). Reflection is also an important component of a teacher education model, which is helpful for the upgradation of skills in teachers (Aubusson, P. et al., 2010). In this respect, the new policy NEP 2020 has aimed to overhaul the education system for making and transforming teacher education in India, i.e., Bharat, ‘sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a greater knowledge superpower’.

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