

Models of Teacher Education: Some Reflections

Awal Saikh¹, Dibyendu Bhattacharyya²

¹Student, Department of Education, University of Kalyani, West Bengal, India

²Professor, Department of Education, University of Kalyani, West Bengal, India

ABSTRACT

The education system has evolved from ancient to modern, adapting to global and local needs in Indian society. India's future is shaping its classrooms as the rapidly growing population demands more qualified and professionally trained teachers. Teacher education needs significant transformation, investigation, digitalization, and universal changes that the world needs. They must possess investigative minds, adapt to transformations, and respond to universal needs to create understanding.

The text emphasizes the importance of innovation and models in teacher education programs that can dynamically respond to new challenges in the education field, thereby aiding in national development and promoting the inclusion of various practices in these programs with digitalization and technology in education. Teacher education is crucial for fostering efficient and capable teachers, as they are the backbone of society. The article highlights the significance of best practices, new trends, and innovations in teacher education programs, as well as the significance of emerging trends in current teacher education, while also highlighting the importance of these elements in enhancing teaching effectiveness.

KEYWORDS: *Technology, Trends, Teacher Education, Digitalization, Model of TE*

INTRODUCTION

The most appropriate terminology to describe these behaviours has long been a source of discussion. The term "teacher education," which denotes preparing staff for a professional role as reflective practitioners, seems to be gaining ground over "teacher training," which might imply that the activity involves instructing staff to carry out relatively routine tasks, at least in India. The two primary components of teacher education are pre-service teacher education and in-service teacher education.

The fact that a teacher must also serve as a learning facilitator, a guide, and occasionally a therapist in addition to their other duties as a content provider is widely accepted among Indian educators. Combs' (1969) idea of the self as an instrument, which is also the new face of a successful teacher, provides a better explanation. According to the self-as-instrument theory, each teacher should identify effective methods to employ their unique abilities in order to maximize their benefits, i.e., by adapting while teaching rather than using a mechanical and structured approach.

This adds a humanistic or practical element to the teaching process.

The most effective teacher is seen to be the self-actualized individual. Teachers are, in fact, the most important and potent force for fairness, access, knowledge, skill, attitude, and quality in education, according to a new statement from the United Nations Educational, Scientific, and Cultural Office (UNESCO). However, instructors are under more pressure than ever to support their students' academic success. Parents, co-workers, head teachers, tertiary institutions, academics, state and national governments, the media (local, national, and worldwide), and of course the students themselves put pressure on them from all sides.

Objectives of the study:

- To study the models of teacher education.
- To explore the model of teacher education incorporating new trends.

How to cite this paper: Awal Saikh | Dibyendu Bhattacharyya "Models of Teacher Education: Some Reflections" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-7 | Issue-5, October 2023, pp.942-949, URL: www.ijtsrd.com/papers/ijtsrd60047.pdf



Copyright © 2023 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



Methodology:

The qualitative research approach was used to comprehend and assess the effects or implications of Data for the study has been collected from various primary and secondary data sources, including policy documents, reports, and research articles. The data were collected and analyzed using a documentary analysis approach to identify the key themes and patterns related to the Emerging Trends and Innovative Practice in Teacher Education.

Contexts:

Teacher education extends to student teachers by equipping them with the information, knowledge, skills, attitude, and abilities they need to thrive in their teaching professions. It aids in giving student teachers the conceptual and theoretical framework required to understand the subtleties of their field of work. It aims to inculcate in student teachers the right mindset toward the profession's stakeholders so they may approach environmental issues in a highly positive manner. It provides student teachers with the instructional, professionalization, and soft skills needed to carry out their responsibilities in the fastest and most affordable manner. As a result, the topic of teacher education is taken into account.

The rules and procedures created to provide teachers with the information, attitudes, behaviours, and skills they need to carry out their duties successfully in the classroom and at school are referred to as teacher education. Early on, professors were frequently used as teachers. Who lacked proper instruction on how to impart their knowledge to students? Actually, many were of the opinion that "teachers were born, not made." Not until pedagogy began to take off, the "art and science of teaching" as a recognized field that guides teacher education was seen as significant.

In the context of teacher education, factors like who (the teacher educator), whom (the student teacher), what (the curriculum), and how (the teaching technique) have a significant impact on our education system. The quality of teacher education is impacted by the qualifications of the teacher educators. The quality of the pedagogical inputs utilized in teacher education programs and how effectively they are employed to train future teachers strongly depend on the professional competence of teacher educators and how that competence is applied to enhance the teacher education program. Therefore, the creation of capable teacher educators is the primary focus of teacher education.

The National Council for Teacher Education defines teacher education as a course of study that equips students to instruct at all educational levels, from school to higher education. A program linked to

teacher education that will equip and empower the teacher to fulfil the demands of the profession and address internal difficulties is the development of a teacher's proficiency and competency. Teacher education is defined as "all the formal and informal activities and experiences that help to qualify a person to assume the duties of a member of the educational profession or to discharge" by the Goods Dictionary of Education.

The term "teacher education" refers to any formal programs created for the purpose of preparing elementary and secondary school teachers. Schools as distinct organizations for this purpose on a wide scale, and teachers as a unique professional category, have only lately arisen. While numerous schemes for young people's education have existed throughout history and in all civilizations, schools have been distinct organizations for this purpose. According to tradition, it is the duty of parents, elders, priests, and wise men to transmit their skills to the next generation.

Trends of Teacher Education in India:

The transition to digital technology is one of the current trends in teacher education. There is a significant opportunity for digital transformation in the Indian educational system, particularly in schools, institutions, and colleges, as well as various institutions. However, digitalization and digital techniques are a means to open up access to education or learning modules at anytime and anywhere by making them available online. The rarest resource in the field of education is not just technological know-how but also leadership with authority. Today's executives and future students must be able to sort through the multitude of digital efforts, manage accelerating innovation cycles, and restructure the company around novel ideas. Modern students now demand the extensive use of digital resources. Potential students constantly search for advanced learning alternatives outside of the conventional classroom setting.

Digitalization in teacher education (TE) has traditionally meant educating future educators to work in technologically advanced or updated workplaces and mastering a variety of digital tools to foster things like collaboration, presenting skills, and the generation of subject-specific knowledge. In varied degrees, the applications have had an impact on the habits they have ingrained. Digital technology has historically been supported by education in general and TE in particular. In educational endeavours, the human agent has served as the action executor, decision-maker, and main performer. The human goal, purpose, and consequence of educational

activity have been believed to be unaffected by the use of digital technology, which is only a means for mediating educational efforts and activities.

In this essay, we contend that people's interactions with digital technology are changing. This has significant effects on how people acquire knowledge and skills and develop sound solutions to difficult problems. Additionally, as robots, artificial intelligence, and objects with intent continue to advance quickly, we come to see non-humans as collaborators and even potential masters. However, teacher educators and student teachers must be aware of and responsive to the epistemological consequences of people's access to and use of mobile hardware and a variety of software if teacher education programs are to foster professional digital. There are many strategies, such as

- The Flipped Classroom
- Virtual learning.
- Concept-based learning anytime, anywhere.
- Assessment of students by using artificial intelligence
- Gamification and self-analysis
- ICT-enabled tool for an effective TL process
- Peer instruction or tutoring
- Blended learning.
- Availability of Resources and Student-Teacher Interaction
- Innovative teaching.
- Peer tutoring or peer instruction
- Team teaching.
- Collaborative teaching.

The primary focus of teacher education is a research-based approach, which has been consistently emphasized by academic institutions, professions, and professionalization. All teacher education programs adhere to this general tenet, and every course has some connection to research. In India, the Ministry of Education founded the Teacher Education Forum, a structure that recently supported it by launching research-based development programs for teacher education and providing financing to support this development.

The research skills of Indian teacher educators enable them to undertake research-based teacher education and to create a relevant connection between their teaching practice and their research for school and higher education. They use the skills and ideas they have developed via research in their instruction, classroom management decision-making, and digitalization. Throughout their teacher education, student teachers are urged to strengthen their critical thinking, inquiry, and research-based

Reading research articles, studying research methodologies, and writing empirical bachelor's and master's theses in educational sciences are all part of the teacher education program's initial introduction to research. There are many different ways that educational ideas and practice are combined. The goal is to educate student teachers to be reflective practitioners with an inquiring attitude toward teaching and to be able to base their pedagogical judgments on reasonable arguments.

Models of Teacher Education:

Model of a teacher education-based organization with a strong basis in terms of the design and content of its teacher preparation programs. In order to ensure strong professional practice and infuse professionalism into teacher development, a model of teacher education was developed: how to develop teacher education, how to develop teacher preparation, and how to develop continuous professional development. Many other high-performing teacher education providers around the world build on existing theoretical frameworks to develop the "thinking teacher" while also forming strong partnerships with key stakeholders and schools. A strong foundation of subject-matter and pedagogical core competence, as well as a tight connection to educational research, contribute to our advantage in teacher education. The adoption of the university-based model demonstrates that teaching is a profession in which the development of teachers is supported by evidence-based learning and in which being a teacher is conditional upon obtaining a degree.

This model of teacher education study strengthens already-strong areas to raise teacher education to a higher degree of quality. This is done in light of evolving educational demands in India and changes in the world of education. The notion that 21st-century learners require many concepts of teacher education in digitalization and technology. A new model of teacher education for the 21st century is the result of our investigation into potential and viable improvement avenues based on thorough digitalization, knowledge of current and emerging trends, local profile, changing landscape in policies and initiatives, and research data.

Behaviouristic model of teacher education:

The Teacher Training Institute's major goal is to provide teachers with the tools they need to serve the needs of schools throughout the globe. Many duties are demanded of teachers nowadays in the classroom, including those of educators, motivators, mentors, counsellors, coaches, and disciplinary authorities. Teachers also need to keep up with the latest

developments in education, technology, and methods for inspiring their pupils to realize their greatest potential. To deal with the various children in the classroom, teachers must receive training. The needs of the learners must be taken into consideration while choosing teaching and learning tactics. Because of this, teachers need to be familiar with a variety of teaching-learning strategies and how to apply them to the subject matter at hand.

Behaviour is wanted to prove that behaviour can be predicted and controlled and that learning is affected by changes in the environment. The role of the behaviourist teacher educator is providing stimulus material and prompting the correct response, while the learners role is to be the receiver of the information response until the behavioural change is permanent.

The operant conditioning model and classical conditioning are the two main models of the behaviour theory of learning. Instrumental conditioning is another name for operant conditioning. Operant conditioning was developed primarily by B.F. Skinner, whose ideas were based on those of E.L. Thorndike (1896). At different levels, instructors have been trained using the operant conditioning concept.

Behaviouristic: The behavioural approach says that learning takes place through conditioning. Conditioning occurs in the sense that an organism matches certain stimuli with certain reactions.

Organism: Behaviouristic used a more general term, organism instead of human or individual. The term organism signifies both people and animals.

Reaction: Behaviouristic psychologists are also called S-R theorists. In this theory, a reaction is a behaviour by an organism against a stimulus.

Stimulus: It is composed of changes in the internal and external states that move the organism. The behaviouristic approach mainly deals with external changes of state rather than internal changes.

Reinforcement and punishment: Reinforcement and punishment constitute increasing the possibility of an organism to display behaviour to a certain stimulus. This stimulus in this process is called a reinforcer.

Competency-based model of teacher education

The competency-based teacher education method is focused on developing professional teacher skills, knowledge, abilities, and attitudes for technical instruction that were generated from the many roles that a teacher must play. It was essential to train as many instructors as possible in the inferred necessary abilities in order to bring about qualitative

improvements in the polytechnic teaching and learning processes. It was believed that the training process needed to move more quickly while also being more effective. The former training software was unable to complete this assignment.

The competency-based perspective refers to an approach to teaching practice and teacher preparation that focuses on teacher competence rather than teacher knowledge. According to Nijveldt, Beijaard, Brekelmans, Verloop & Wubbels (2005), teacher competence is "the ability of a teacher to deal adequately with the demands of the teaching profession using an integrated set of knowledge, skills, and attitudes as manifested in both the performance of the teacher and reflection on his or her performance."

The competency best model is an approach to education that focuses on the student's demonstration of desired learning outcomes at the core of the learning process of teacher education. It is concerned with students moving through the curriculum at their own pace, depth, and so on. There is no course or module where every individual has won a skill or learning outcome, which is known as competency. On the other hand, Houston and Clark (2000) identify and categorize competency-based teacher education (CBTE) into five stages

Cognitive: necessitating the demonstration of knowledge, intellectual skill, abilities, and talents.

Performance: Requires the use of educational techniques, technical abilities, and vocational skills.

Consequence: requiring the performance of students.

Affective: requiring attitudes and values to be demonstrated.

Exploratory: requires to engage in an experience or activity.

It is possible to pinpoint the origin of competency- or performance-based teacher education programs. On many campuses, there are a range of protestors to varying degrees. In one school, student dissatisfaction could have played a role, whereas faculty innovation in another college or department of education might have. A large portion of the pressure for performance targets and demands for program adjustments can be linked to efforts to increase accountability.

Inquiry-oriented model of teacher education

Richard Suchman proposed an inquiry training model. In order to show students how to research and analyse strange events, he adopted this paradigm. Thinkers and academics attempt to arrange information and create numerous principles in this

style. The development of Suchman's model was based on an examination of the many approaches used by inventive researchers, notably physical scientists.

This approach to inquiry poses a confounding concept-related challenge. This issue is described by Suchman as a "discrepant event." The students are then told to ask questions that the instructor can respond to with "yes," "no," or "maybe" in order to elicit hypotheses and suggestions that might explain the phenomena.

He pointed out many components of their research strategy. He created the inquiry training paradigm based on this. The model of the inquiry process and increasing awareness of it are prioritized more in the inquiry training approach. Students can think about an incident or problem and ask questions to discover a solution with the help of the Suchman Inquiry Model. Students participate actively and use higher-order thinking strategies. Three phases of the inquiry-oriented model include

Interaction: The first steps in inquiry-oriented model are interaction between problems with students.

Different ways of Interaction:

Material based interaction: There are formal and informal ways to collect material.

Peer based interaction: Due to the requirement for knowledge and perspective, this contact between students was chosen.

Expert based interaction: There is a demand for accessible expertise in pertinent domains.

Media based interaction: This enables the students to actively participate in their media-based learning.

Clarification: By analysing the data and spotting and removing misunderstandings, one may clarify a subject. Following reading, viewing, and engaging with media, this step helps students clarify their ideas. Thinking is both internal and external. Students may evaluate their knowledge and decide how to go on in the best way by doing this.

Questioning: The period of questioning is the most crucial. To achieve any type of progress, they frequently go back and forth in stages. However, compared to other academy types, the inquiry-oriented approach focuses more on the manner, tone, and instincts of learning.

Different models of Teacher Education:

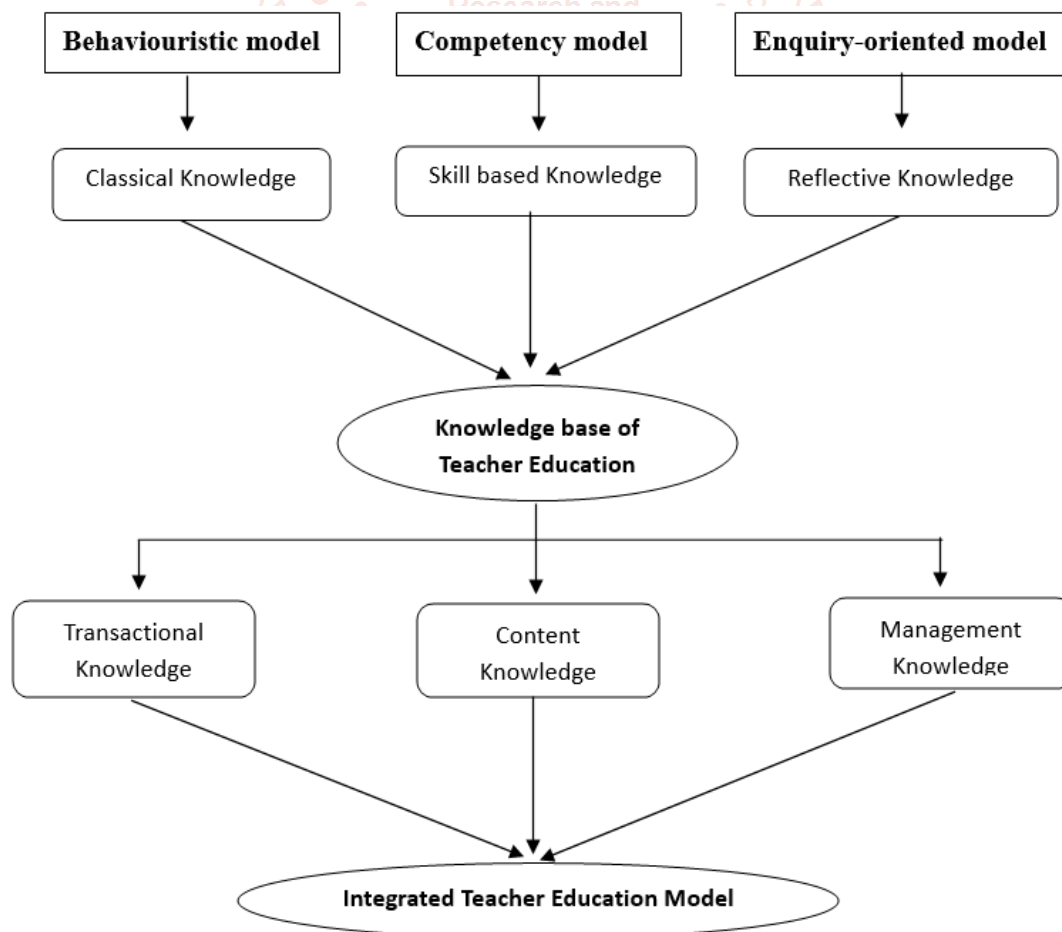
	Behaviouristic model	Competency model	Enquiry-oriented model
1.	Focus on stimulus response, change behaviour, adjust behaviour, and control behaviour.	Focus on student demonstration, mastery, and competency.	Focus on the problem, question, and facilitator.
2.	Also known as stimulus-response learning.	Also known as mastery learning.	Also known as problem-based or inquiry-based learning.
3.	It is against the concept that says mental processes are under the mind and conscious.	It explores academic content through knowledge, and skill.	It explores academic content by posing, investigating, and answering questions.
4.	The role of the teacher always produces new behavior and develops a habit system.	The role of the teacher is necessary to improve skills, knowledge, abilities, and performance competency.	The role of the teacher is to guide, help, and only facilitate.
5.	The model increases the reaction and motivation that an organism has in a given situation.	This model increases their chances of becoming independent, self-directed, and continuing learners.	This model increases the process of gathering and processing more information.

Findings from comparative View Point:

1. The theoretical and practical study programs need to be reorganized for teacher education. To achieve the objectives of teacher education, research should instead use an established model of teacher education. When creating the curriculum for a model of teacher education, the suggestions of these studies should be given the appropriate weight.
2. The paradigm of teacher education has to be revised in light of the evolving needs of the educational system. For the advancement of the teacher education process in many sectors, special creative programs, including seminars, workshops, conferences, projects, and debates, should be routinely held.

3. A school with specific amenities like labs, libraries, and other significant audiovisual technology should be required for every teacher education department. This may be very useful in programs and policies for improving the educational system.
4. The entire system of teacher education is evolving and is based on a model.
5. The teacher education program is further enhanced by extension and exchange programs with many institutions in India and abroad. Government and academic institutions should thus support such programs so that academics from many fields may contribute to the high quality of teacher preparation.
6. Various types of facilities, such as school assemblies, social work, field work, surveys, laboratories, and other co-curricular activities, should be organized in order to develop a professional attitude and dispel the myth or misconception that the training in the teacher education department is superficial and does not apply to real-world situations.
7. Student teachers should be exposed to all facets of the school throughout their internships, which should last at least six months.
8. For teacher educators and student teachers to become familiar with the many issues that arise in classroom settings, institutions should be connected to real-life classroom. For review and orientation initiatives, it is important to promote seminars, conferences, workshops, and symposiums for the professional development of teacher educators. All educators may stay informed about recent advancements, modifications, and innovations in the field of teacher education.
9. Teacher assessments must be unbiased, reliable, and accurate and dependable.
10. Uniformity amongst teacher education institutions must be established and maintained in terms of curriculum, program length, and schedules.
11. Continuing professional development and updating for teacher educators is a must.

Considering all we can conclude by presenting a new model of Teacher Education termed as Integrated Teacher Education Model:



Conclusion:

In actuality, teachers who are reflective practitioners have certain traits with passive technicians, whereas teachers who are transformational intellectuals skillfully share traits. I utilize them to better show the link between these teacher education models and teacher duties in our education system. The function of the teacher as a transformational intellectual shows a smaller figure: the teacher as a reflective practitioner who developed confidence. That indicates that these roles are not mutually exclusive but rather complimentary, and that teachers must possess the traits of all of these roles in order to fulfill their actual missions. This could only be done by using a more thorough and critical approach to teacher education. If the classroom culture is positive, we can bring authentic learning into the classroom, give our students more opportunities, and enable them to positively connect with not only the subject matter but also with their peers and teachers. Teachers are responsible for setting the tone and mood of the classroom. Teacher education is becoming more and more of a global service, and it needs high standards in the country. Curricula must be skillfully, knowledgably, and thoroughly developed so that teachers may use a variety of innovative teaching techniques and digitalization to meet the unique requirements of their pupils. It is really time to keep up with the trends and adapt the technology for the teacher education model.

References:

- [1] Albert, R. S., Runco, M. A. (1999). A history of research on creativity. In *Handbook of creativity* (Vol. 2, pp. 16-31).
- [2] Ayeni, M. A., & Adeleye, J. O. (2014). Teacher Education and Social Ethics. *International Journal of Education and Literacy Studies*, 2(2): 1–3. <https://doi.org/10.7575/aiac.ijels.v.2n.2p.1>.
- [3] Barker, R.L., 1975, Implementing performance/competency based Teacher Education, p.23, *Journal of Industrial Teacher Education*, Vol. 12, No. 4.
- [4] Bolitho, R and Padwad, A. (Eds.) 2011. *Continuing professional development lessons from India*. New Delhi: British Council.
- [5] Cochran-Smith, M. (2005). Teacher education and the outcomes trap. *Journal of Teacher Education*, 56(5), 411–417. Darling-Hammond, L., & Bransford, J. (Eds.). (2005).
- [6] Darling-Hammond, Linda, and Milbrey W. McLaughlin. "Policies that Support Professional Development in an Era of Reform." *Phi Delta Kappan*, vol. 76, no. 8, 1995, pp. 597-604.
- [7] Donna J. Cole (1984) *Multicultural education and global education: A possible merger, Theory Into Practice*, 23:2, 151-154, DOI:10.1080/00405848409543106.
- [8] Elliott, J. & Adelman, C. circa 1975, *Classroom Action Research*, pp.22-23. Ford Teaching Project. Also M.D. Gall, 1970, *The Use of Questions in Teaching*, pp.707- 721, *Reviews of Educational Research*, Vol. 40 (s).
- [9] Ganeles, D., 1974, *Competence-Based Preparation Programme for Teachers of Adults*, ps. 187-189, *Adult Leadership*, Vol. 20, No. 6.
- [10] Hertzberg, H.W., 1976, *Competency Based Teacher Education: Does it have a Past' or Future?* P.13, *Teachers College Record*, Vol. 78, No. 1.
- [11] Houston, W.R. & Brown, K.W., 1975, op.cit. p.7.
- [12] <http://downloads.ncss.org/NCSSTeacherStandardsVol1-rev2004.pdf> www.ijert.org © 2022 IJCRT | Volume 10, Issue 5 May 2022 | ISSN: 2320-2882 IJCRT2205049 International Journal of Creative Research Thoughts (IJCRT) www.ijert.org a443.
- [13] https://www.academia.edu/22885838/Innovative_Practices_in_Teacher_Education retrieved on 2 march 22.
- [14] Iredale, R. (1996). *The significance of teacher education for international education development: Global perspectives on teacher education*, C. Brock (Ed.). Oxfordshire: Triangle Books, pp. 9-18.
- [15] Jadhav, V. (2011). "ICT and Teacher Education". *International Educational E-Journal (Quarterly)*, 1(1):39–58. http://faculty.ksu.edu.sa/Alhassan/2503/ICT_and_teacher_education_in_Australia_2003.pdf.
- [16] Lahiri, S. (2017). "Education for sustainable Development in Teacher Education in India". *ZEP: Zeitschrift Für Internationale Bildungsforschung Und Entwicklungspädagogik*, 40(3): 30–36.
- [17] May, J., Rama, D., Sabasales, M., Antonio, A., & Ricohermoso, C. (2020). "Virtual Teaching as the ' New Norm ': Analyzing Science Teachers ' Attitude toward Online Teaching , Technological Competence and Access,

Technological Com. July.
<https://doi.org/10.2139/ssrn.3654236>.

Francisco: Jossey-Bass. Darling-Hammond, L., & Hammerness, K. (2005).

- [18] Mardiana, H. (2020). "Lecturers ' Attitudes towards Online Teaching in the Learning Process". Register Journal 13(1): 77-98.
- [19] National Board for Professional Teaching Standards. (1989). What teachers should know and be able to do. Retrieved Feb 26,2022.
- [20] Naaz, I. (2020). Comparison of Student Teachers' Perception of Institutional Climate in Government and Private Teacher Education Institutions. Our Heritage; UGC CARE listed Journal, Vol. 68(48): 223-233.
- [21] Preparing teachers for a changing world: What teachers should learn and be able to do. San
- [22] The design of teacher education programs. In L. Darling-Hammond & J. Bransford (Eds.), Preparing teachers for a changing world: What teachers should learn and be able to do (pp. 390-441).
- [23] Schmieder, A.A., 1975, Ten Critical Issues in Educational Reform, p.18. Journal of Teacher Education, Vol. 26, No. 1.
- [24] Shaw, K.E., 1976, Paradigms or Contested Concepts, p.22, British Journal of Educational Technology, Vol. 7, No. 2.

