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# Readiness of Teacher Education Institutions in Cultivating Effective Teaching Practices

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### Abstract

The present review aims to see the readiness of TEIs for the improvement of teaching effectiveness in terms of curriculum, faculty, resources, and technology. It shows that the quality of teachers is closely associated with the amount of learning in their students and national competitiveness. Views inform these findings on international policies like the Indian National Education Policy 2020 and the issues ranging from teacher burnout, lack of equity, and training deficiencies to professional development, technology integration, and pedagogical innovation. Suggestions are offered to enhance teacher education to promote quality teaching practices to meet new requirements and issues of educational inequity.

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## 1. Introduction

An important factor in a country's ability to compete is the quality of its educational system. When it comes to building and maintaining national competitiveness, many countries start with and implement changes in guidelines that focus on high-quality human assets <sup>[1,2]</sup>. Improving the calibre of Indonesian educators is a priority for the government's Instruction and Culture Service (MOEC). This setup is compatible with the policies of several nations regarding changes in teachers <sup>[3]</sup>. The federal government is banking on the fact that pupils would be able to advance to more advanced courses in different districts as a result of the standardisation of quality brought about by teacher certification. <sup>[4-5]</sup>. It is finally critical to think about planning high-quality teachers and to count people in the teaching staff as they become ready to teach <sup>[6-7]</sup>. Several factors, including recent developments in Indonesia, need to be considered when thinking about the connection between access to high-quality instructors and student accomplishment <sup>[8]</sup>. There is a growing consensus that filling the gap between trained teachers and student accomplishment is of paramount importance. Another thing to think about when thinking about the correlation between teacher pay and national performance

is that nations with higher salaries for experienced teachers also tend to have better national test scores. Having said that, there is zero correlation between public performance and the typical national remuneration for newly graduated teachers <sup>[9]</sup>. While salary is certainly a role in teachers' ability to do their jobs well, it is also essential that the government invest in their professional development so that they can meet student needs <sup>[10-11]</sup>. The policy of enhancing the quality of teachers through different laws is a key factor in this success. <sup>[12,13]</sup>. National student accomplishment is strongly correlated with the availability of legislation addressing teacher quality on a national level <sup>[14,15]</sup>.

A teacher must carry out a variety of tasks in addition to those that are intrinsic to teaching and learning, such as instructing, assessing, conveying, guiding, and counselling the students, planning extracurricular activities, taking part in community programs, diagnosing and resolving student problems, etc. The academic and professional training of teachers and teacher educators needs to be fully implemented. Following are some reasons why teacher education is important:

- **Avoid Failure:** Teachers faces numerous challenges daily and teacher education deserves credit for better preparing new teachers to handle them. While teaching

and teacher preparation programs do not completely prepare new teachers for every challenge they encounter, they can boost their trust in dealing with many of the everyday issues that affect teachers. Teachers might consider themselves failures without all this background and eventually give up.

- **Burnout:** Burnout among teachers was addressed by efficient teacher training programs. Understanding the causes of teacher's burnout is beneficial for new teachers. It stems from the daily demands of teaching. It can also be brought on by inadequate variation in the subject matter and instructional strategies. Students can learn about various ways that a subject can be presented by participating in teacher training programs that concentrate on specific subject areas, such as social studies or mathematics
- **Provide Standards for Achievement:** Many incompetent teachers place a lot of emphasis on helping students memorize and repeat information. New teachers occasionally design lessons that do not produce the outcomes they were expecting because they lack background knowledge on what constitutes and does not constitute accurate student learning. However, teacher preparation programs can assist students in learning how to identify and use efficient performance standards for students.
- **Provide Practice Teaching:** Reading a book is not adequate preparation for teaching, though. Even listening to experienced teachers discussed their strategies is not enough. To help new teachers, recognize what is required of them in their new assignment, effective mentoring must be combined with practice teaching. Through student teaching in the classroom, this takes place. However, student teachers must be enrolled in classes that are suitable for them and suit their interests. To help student teachers, learn, the supervising teacher must also be involved and give feedback every day.
- **Avoid Experimentation:** While all teachers sometimes try out new materials and methods, those without the proper training frequently do so even though their education may have taught them otherwise. The learning of the students is sacrificed in favour of this experimentation. As most teachers are aware, it is very simple to lose students at the start of a term <sup>[16]</sup>.

Modern technological advancements have the potential to revolutionize the educational system by replacing antiquated practices with more modern ones. This highlights the urgent need to integrate it into educational settings to promote teaching and learning. The push for technology integration into the education system has sparked a new era of learning characterized by profound transformations <sup>[17]</sup>. The dynamics of knowledge acquisition, dissemination, and assimilation in educational contexts have been substantially changed by the arrival of digital tools, online platforms, artificial intelligence, virtual reality, and interactive apps. Tech integration, for example, is a game-changer when it comes to improving student learning in the area of teacher education <sup>[18]</sup>. It is crucial to ensure that instructors are well-prepared with the necessary knowledge and abilities to successfully navigate today's classrooms. Consequently, new methods that incorporate technology into teaching strategies are essential, and teacher preparation programs should adapt to meet these demands <sup>[19]</sup>.

This review paper provides a critical analysis of the current state of readiness of Teacher Education Institutions to improve effective teaching practices. It focuses on curriculum, faculty, resources, and technology, including the barriers and suggesting solutions and recommendations for improvement.

### Readiness of Teacher Education Institutions

Notions of 'quality' are at the heart of much discourse in education policy-making nationally and internationally <sup>[20]</sup>. The availability of comparison tables from worldwide testing, such as the Programme for Worldwide Student Assessment - PISA, has increased concern regarding the quality of teacher education. As a result of these global comparisons, numerous politicians have emphasized the need to have qualified educators in positions of authority <sup>[21]</sup>. On the other hand, "teacher quality" and "teaching quality" are often used interchangeably. Therefore, the meaning of the term might vary <sup>[22]</sup>. The degree to which a teacher is prepared to respond and adapt to their school's environment, as well as to assume responsibility for their students' development, is one facet of the idea of "quality" in the classroom <sup>[23]</sup>. Utilising the insights gained from eight ITE providers located in English HEIs, they reevaluate classroom readiness within the framework of post-pandemic teacher education research. First, they lay out the conceptual framework for this research and preparedness, and then they share our study in full.

The quality of teachers is often considered to be the most controllable variable in students' academic outcomes. <sup>[24,25]</sup> Improving schools through teacher education, which includes both initial and continuous professional development (CPD), is, thus, likely the best, quickest, and least expensive option <sup>[26]</sup>. Initial teacher education is defined here as any program that prepares individuals to become teachers, while ongoing professional development is defined as programs that help teachers improve their skills while they are on the job. Our goal in both cases is to make teachers more effective. They know it is possible to improve teacher effectiveness <sup>[27-28]</sup> And that there are also wider benefits of doing so, including greater collective teacher efficacy <sup>[29]</sup>, well-being, retention, and recruitment, in particular for early-career teachers <sup>[26]</sup>. The purpose of this review is to bridge the gap between the literature on effective initial teacher education and continuing professional development (CPD) and that on blended and online teacher education by synthesizing the theory, evidence, and descriptions of practice related to these formats. "Remote," "distance," and "blended" are all terms that spark heated discussion when discussing different approaches to teaching and learning <sup>[30]</sup>. Consequently, this review adds to the existing literature by creating a two-part mode-characteristics framework for describing non-face-to-face teacher education options. Get down to basic, broad definitions before you convey this: What they call "remote teacher education" encompasses a wide range of alternatives to traditional classroom instruction, including but not limited to online learning platforms such as cell phones, tablets, and laptops. Blended teacher education is defined by them as any combination of in-person and online learning, regardless of the ratio. There is a great deal of diversity among and even within these generalized approaches to teacher education, as they explore extensively in the review's substantive parts.

With the help of technology, teachers may take on new roles as content engineers, designers of student experiences, leaders, and guides, all while collaborating with students to create innovative lessons and develops more deeply into

existing ones <sup>[31]</sup>. The most effective approach to prepare modern learners, according to educational reform efforts based on best practices, is for teachers to facilitate learning through the use of information and communication technology (ICT) <sup>[32]</sup>. Many different types of courses, including series, mini-workshops, and technology-embedded techniques courses, are available to educators who are preparing to teach <sup>[33-34]</sup>. Discovered that initial teacher licensure requirements at 60% of participating universities included standalone technology integration courses. To improve teacher preparation for technology integration, those involved in both teacher education and technology integration need to have a firm grasp on what constitutes best practice in these areas. Despite the abundance of research on the topic, university course designers may be oblivious to the literature on technology integration in education or to how teacher education influences the problems that teachers face when trying to incorporate technology into their lessons.

### Global Perspectives on Teacher Education Readiness

As has been seen since the latter half of 2019, the realm of education is constantly evolving, being influenced by factors in politics, economics, culture, technology, and even global health. Global education systems were rocked to their foundations by the COVID-19 epidemic <sup>[35]</sup>. This first entailed teaching a large number of people simultaneously through the Internet. Teachers in traditional classrooms found themselves thrust into the role of distance educators, utilizing technology in ways they had no practice or training for. Many low-income children stopped communicating with their schools completely because they lacked the resources necessary to participate in remote learning, including reliable technology and high-speed Internet (United Nations Children's Fund). Teachers took the lead in enforcing measures of distance, sanitation, masking, and other mitigating measures once schools returned to in-person operations. Teachers were understandably concerned for the safety of their students, spouses, and children as the illness spread unchecked in most areas. The importance of high-quality professional development (PD) for effective teaching has been acknowledged by scholars, policymakers, and educators <sup>[36,37,38]</sup>. Teacher professional development (PD) takes many forms, including but not limited to conferences, workshops, lesson studies, coaching, peer observation, and professional learning communities.

A robust and evolving global meta-narrative has recently exerted substantial influence on the stances taken by particular nations about their policies regarding teacher education. The long-standing understanding of teacher education as a policy issue is characterised by the belief that student achievement scores should serve as the primary indicator of educational success <sup>[39]</sup>. Fundamental to the neoliberal agenda of expanding the role of the state in quality assurance through red tape-"measuring" the public's satisfaction with the service they receive-is this worldwide meta-narrative, which centres on improving the calibre of educators <sup>[40]</sup>. Modern teacher education faces formidable obstacles as a result of this worldwide push for policy reform in the field and other global societal issues. It should be mentioned that looking mainly at teacher education in the North is a good idea. While the global meta-narrative does have an impact on every region, the prevalence of liberal democracies in the North provides a sense of shared future possibilities. Liberal democracy is defined as "a form of government in which the rule of law limits the exercise of

political power and individual rights and freedoms are officially recognised and protected" <sup>[41]</sup>. Democracies rely on elected governments, which means that political parties are always trying to win over voters and prove they've made a difference. Unfortunately, liberal democracies' governing structures and operations discourage such systemic or long-term fixes, which leads to an emphasis on immediate benefits at the expense of more comprehensive reform initiatives. Paradoxically, this makes it such that massive measures are needed to address the pressing problems of the day.

### Innovations and Best Practices in Teacher Education

The definition of a breakthrough, improvement, or growth in the field of education varies greatly from one nation to the next. While some less developed nations may consider the use of basic audiovisual materials and coloured chalk to be an invention in education, more developed nations may view the creation and implementation of complex technological systems, methodologies, practices, etc., as innovations. Technology has also greatly permeated every facet of American culture and society. A great deal of change has occurred in the methods and tools used to provide educational services over time. When it comes to raising the bar for education at all levels, nothing is more vital than research and new ideas in the realm of teacher preparation. Among other things, they want to bring fresh perspectives and methods to classroom interactions and extracurriculars. Strong administration and efficient pedagogical practices can boost the efficiency of the educator. The nation's success is greatly influenced by teachers, and teacher preparation programs are designed to equip future educators with the information and abilities they need to carry out their multifarious roles <sup>[42]</sup>.

The New Education Policy 2020 recognises the critical importance of teacher education in preparing future educators. Being a good teacher is a process that calls for exposure to many fields of study, the establishment of personal beliefs and principles, and the cultivation of practical skills under the guidance of experienced educators. To curb the exponential expansion of organisations serving as corporate agents. The 2020 New Education Policy aims to improve schools and teacher training programs in particular. As per the New Education Policy, teacher preparation programs must ensure that aspiring educators have a solid foundation in Indian culture, language, history, ethos, and traditions (including tribal customs), as well as a thorough understanding of contemporary educational theory and practice. To bring the teaching profession back to its former glory, the Regulatory System needs the authority to punish severely failing teacher education institutions (TEIs) that fail to fulfil even the most fundamental educational standards. In such a situation, all schools that prepare teachers must adhere to standard operating procedures to foster and inoculate students with fundamental requirements like tradition, Indian values, language, ethics, and up-to-date subject knowledge. Teachers should be free to experiment with new methods of instruction and assessment as part of the New Education Policy's emphasis on faculty autonomy. This aside, NEP 2020 also emphasises student evaluation, community service programs, and the exchange of best practices in research <sup>[43]</sup>.

Governments around the world use continuing professional development (CPD) programs for teachers to boost student achievement, teacher effectiveness, and educational results <sup>[44]</sup>. There is a strong correlation between student learning and accomplishments, school quality, and the quality of professional development (PD) programs that aim to improve



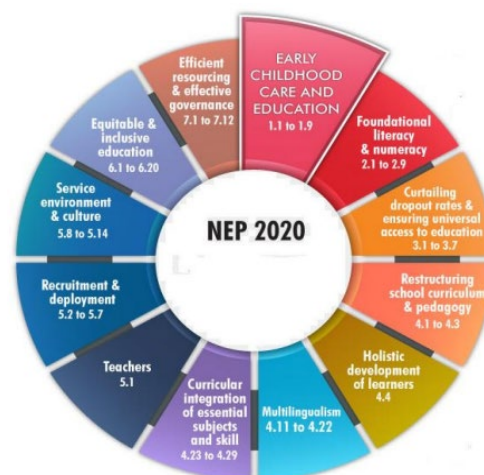
teachers' quality of teaching <sup>[45,46,47]</sup>. Consequently, investing in educators' professional growth is still a top priority if they want to see improvements in classroom instruction and student achievement <sup>[48,49]</sup>. CPD is defined as "the sum of all experiences learning and all deliberate and planned activities to improve the quality of education in the classroom, either directly or indirectly for the individual, the group, or the school" <sup>[50]</sup>. Efforts to raise teachers' level of expertise in the field and the quality of their professional attitudes towards their work are also linked to this term. Teachers' participation in professional development activities inevitably leads to transformation, specifically, shifts in how they teach, what they believe, and how their students learn in the classroom. These alterations will be the product of a learning process (continuous professional development) that focuses on the information, skills, attitudes, and practices of educators <sup>[51]</sup>. Therefore, continuing professional development (CPD) is only useful if the planned activities lead to improvements in student learning, teacher expertise, and classroom management. That change component remains difficult to implement sustainably, notwithstanding the good intentions behind these desirable modifications <sup>[52]</sup>. For one thing, many forms of continuing professional development (CPD) fail to provide instructors with the long-term knowledge they need to effectively alter their pedagogical approaches <sup>[53,54]</sup>. It has been argued that interventions fail to bring about the intended change in teachers because they are too disjointed, unrelated, and not tailored to their specific requirements in the classroom <sup>[55,56]</sup>.

### Implications for Policy and Practice

Educating future teachers is a hotly debated topic around the world. As teacher education is restructured in various contexts, the policy contestations in the field are becoming more intense due to the lack of consensus on what constitutes adequate teacher preparation <sup>[57]</sup>. Disagreements on the standards, substance, and character of teacher education are fuelling debates about teacher training in several different nations. Meanwhile, the needs of the global "knowledge economy" and the shifting social and educational context are making high-quality teachers an absolute necessity. Consequently, policymakers are paying increasing attention to teacher education. All of these things have shown that making decisions about teacher education policies is very much a political process and not merely an implication-driven one <sup>[58]</sup>. This study is equally applicable to the regulatory and policy settings in India that pertain to teacher education.

In 2020, the Indian government is scheduled to unveil its new education agenda. Not only did this policy alter the educational landscape, but it also offered several possibilities and threats to the field of teacher preparation. Improving learning results, increasing accountability, providing high-quality infrastructure, and expanding students' opportunities to be employable were the primary goals of the new policy <sup>[59]</sup>. A more student-centred approach to teacher preparation, higher-quality instruction, and lower attrition rates were other goals. The policy's stated goal was to improve educational opportunities for low-income students <sup>[60]</sup>. Ensuring equitable distribution of resources across the country and providing marginalised areas with access to quality education were also important goals of the strategy. By enhancing teacher preparation, pedagogical methods, school facilities, and student achievement, the policy seeks to raise the bar for education in India <sup>[61]</sup>. No child will be left behind as the government strives to make education available to all by

2022. Improving learning outcomes through better classroom practices and increasing students' employability were two of the many additional challenges that the new education policy aimed to address <sup>[59]</sup>. The second obstacle is making sure schools have everything they need to make these reforms a reality. Thirdly, getting students ready for the new tests and curriculum is no easy feat.



**Fig 1: New Education Policy 2020: Challenges for Teacher Education** <sup>[62]</sup>

There will likely be both new difficulties and exciting opportunities for teacher preparation as a result of these shifts. Ensuring that rural and distant communities have access to quality education was another priority of the policy. Better classroom procedures, more possibilities for students to find work after graduation, and stronger teacher preparation programs are all ways the government plans to reach this goal <sup>[63]</sup>. This makes sure that kids are learning from educators who are well-versed in their fields. Ongoing professional development for instructors is also guaranteed by the policy. Universities and colleges were collaborating with the government to create new teacher preparation courses, credentials, and paths. This guarantees that pupils are taught by educators well-versed in providing high-quality education <sup>[64]</sup>. One of the most impactful policy interventions for India's education system has been the enactment of the Right to Education (RTE) Act in 2009. The legislation not only makes sure that kids between the ages of 6 and 14 go to school, but it also requires states to offer free and mandatory education from kindergarten through eighth grade at a local school within a one-kilometer radius. With 14 million kids not in school as of the 2011 Indian Census, this is a huge step in the right direction <sup>[65]</sup>. There are a lot of problems that need fixing because of the new education plan for 2020. The first obstacle is making sure that schools that train teachers are ready to apply the policy changes <sup>[66]</sup>. The fourth obstacle is making sure that educators have a firm grasp of the new curriculum and can successfully incorporate it into their lessons. There needs to be a focus on training educators in new pedagogies that will allow them to provide high-quality education, as well as on tracking the changes' implementation to make sure they stick. And lastly, the problem of gender imbalance in schools must be a top governmental priority <sup>[67]</sup>. The policy's primary goal was to standardise competency-based training for all university faculty to better prepare future educators. The policy also makes sure that educators get the training they need to effectively use classroom technology. Universities and colleges were collaborating with the government to create

new teacher preparation courses, credentials, and paths. Greater accountability, better learning results, and high-quality infrastructure are the three pillars upon which the new education policy rests<sup>[68]</sup>. For this goal, the government is working to improve teacher training programs, increase student employability, and improve classroom methods to improve learning results<sup>[69,70]</sup>.

## Conclusion

The attainment of higher-quality education and, by extension, national competitiveness hinge on the quality of teacher preparation programs. From Indonesia's teacher certification program to India's New Education Policy, all of these policies emphasise employing qualified educators. By reshaping educational standards through the introduction of new technologies, teacher training has the potential to address long-standing issues like teacher burnout and high expectations for student success. However, uneven access to resources and technology, as well as rigid curricula, present obstacles that must be overcome. Teachers can effectively adapt their classrooms to fit the demands of modern students if they are supported in their professional development, given the resources they need, and encouraged to constantly innovate.

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