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RESEARCH PAPER

Exploring the Perspective of B.Ed. 4 Years Students on Teaching Practicum: A Comparative Study of Public and Private Teacher Educational Institutes of Pakistan.

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ABSTRACT

The research delves into the perspectives of students pursuing a four-year Bachelor of Education (B.Ed.) program, focusing on their viewpoints regarding teaching practicum within both public and private teachers' training institutions in Pakistan. The practicum holds significant importance as a cornerstone of teacher education, affording students the invaluable opportunity to apply their teaching competencies within a genuine educational setting. Despite its pivotal role, scant research exists concerning how B.Ed. students perceive practicum experiences in the Pakistani context. This study aspires to unearth these perceptions, with an additional goal of discerning any disparities between public and private teacher education establishments. To undertake this exploration, a qualitative research methodology was embraced. Semi-structured interviews were conducted with B.Ed. students enrolled in both public and private institutions. The outcomes of this study shed light on the shared belief held by students from both public and private schools: teaching practice is a pivotal phase within teacher training programs, serving as a catalyst for their growth and development. Notably, students attending private institutions displayed a higher level of contentment with the four-year B.Ed. curriculum compared to their counterparts in public institutions. Their satisfaction was rooted in a more conducive learning environment, superior faculty, and enhanced information technology support. Moreover, participants from both public and private institutions expressed a more favorable perspective on their teaching experiences within private schools, attributing this preference to the broader spectrum of resources and institutional support accessible to private school students. Additionally, the diverse student population in private schools contributes to a more enriched teaching experience. This study underscores the necessity for revisiting the teaching practicum framework to optimize its benefits for aspiring educators.

Keywords: Prospective teachers, teaching practice, comparative study

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Introduction

According to the latest OECD report (2022), education is an important factor in today's world and individuals need to achieve their full potential. Investing in education also helps create a more equitable and sustainable world. As per UNESCO (2020), education is a fundamental human right and plays a crucial role in the personal, social, and economic development of individuals and communities. Teachers, as the primary facilitators of education, are critical to the success of educational systems and the well-being of students (Gearhart et al, 2022).

Teachers are essential for the successful development of a nation, as they instill values, knowledge, and skills in their students that will help them succeed in the future (Wahyudin, 2018). Teacher quality is a major factor in student achievement and is directly linked to the success of an education system (Burroughs et al., 2019). Investing in high-quality teacher training and ongoing professional development is crucial for the overall success of any education system (Geletu & Mihiretie, 2023).

Teaching practice is an essential part of academic life, as it provides educators with the opportunity to develop the skills necessary to foster the learning of their students (Harrison et al 2022). Through teaching practice, educators can refine their pedagogical strategies, build relationships with their students, and develop meaningful learning experiences. By engaging in teaching practice, educators can become more effective in the classroom, providing students with the necessary tools to reach their full potential (Walshe & Driver, 2019). This is especially true in the modern classroom where students are more diverse, technology-savvy and require more personalized instruction (Han et al., 2017).

In recent years, teaching practice courses have been found as an effective aid for prospective teachers in developing their teaching skills (Tekin-Sitrava et al., 2022). These courses are designed to help students apply theoretical knowledge in actual classroom settings, and thus, provide a better understanding of the pedagogical process (Dayan et al., 2022).

Research indicates that theoretical knowledge obtained by teacher candidates is only beneficial if they are exposed to the necessary skills, attitudes, and behaviors required in a true educational setting. Practical experience in teaching further helps build their view of the profession as well as their own self-confidence (Getie, 2020).

Pakistan's teacher education system has been criticized for its inability to meet the current and future needs of the education system (Kalsoom & Qureshi, 2019). This is largely due to the poor quality of the education system in Pakistan, which has resulted in the country being far from achieving its goals of excellence in and access to education (Amir et al.,

2020). One of the main issues is the lack of qualified educators who believes that anyone can become a teacher, which is not true. Other problems include questionable hiring practices and a lack of models for the professional development of teachers (Shaukat & Chowdhury, 2020). The Higher Education Commission and National Accreditation Council for Teacher Education (2016) have outlined a roadmap for teacher education degree programs. Currently, this includes the B. Ed (Secondary) 1.5-year program, B.Ed (Hons) 4-year program, B.Ed (Elementary) 2.5-year program, and associate degree (ADE) 2-year program. However, these programs may not be sufficient to meet the needs of the education system and address the issues facing teacher education in Pakistan (Abdullah & Mirza, 2020).

Purpose of the study

The study will explore the perspective of Bachelor of Education (B.Ed) 4-year students on teaching practicum at public and private teacher education institutes in Pakistan. The research also aims to compare the experiences of students in the two types of institutes, and to identify any differences between the two. Additionally, the research seeks to understand the challenges and opportunities that the students face in their practicum experiences. The study will also seek to understand the expectations of the students, and their perceptions of the curriculum and learning outcomes related to the practicum. The research will provide valuable insights into the challenges and opportunities of teaching practicum, which can help inform future policies and initiatives that promote student success. The objectives of this study are to: Identify and compare the experiences of B.Ed. 4-year students on teaching practicum at public and private teacher education institutes in Pakistan. Document the strengths, weaknesses and challenges students face while undergoing teaching practicum at both institutes. Explore the perceptions of students related to teaching practicum at public and private teacher education institutes in Pakistan. The findings of this research might enable educational institutions to enhance the quality of teaching practicum and the overall learning experience of B.Ed. 4-year students.

Research questions

The research aimed to explore the following research questions

- 1. How do the B. Ed? 4-year students in public and private teacher education institutes in Pakistan perceive the teaching practicum?
- 2. To what extent do public and private teacher education institutes in Pakistan provide an adequate and effective environment for teaching practicum?
- 3. What are the differences in the teaching practicum experiences

between students of public and private teacher education institutes in Pakistan?

- 4. What are the challenges faced by B.Ed. 4-year students while conducting teaching practicum in public and private teacher educational institutes of Pakistan?
- 5. What are the recommendations for improving the teaching practicum experiences of B.Ed. 4-year students in public and private teacher education institutes in Pakistan?

Significance of the study

This research seeks to evaluate the outlook of B. Ed 4-year students on teaching practicum in Pakistan, contrasting the views of public and private teacher education institutes. Examining the opinion of these students about practicum can provide insight into the troubles and experiences of future educators during their practical training. This data can be used to improve the quality of teacher education programs in Pakistan, better preparing future teachers for their careers. Furthermore, this study can uncover any differences between the experiences and perspectives of students from public and private institutes, which could be useful for policy or practice related to teacher education in the nation. To assess the attitude of B. Ed 4-year students on teaching practicum in both public and private teacher education institutes in Pakistan is beneficial, as it can offer valuable insights into the difficulties and views of these students during their practicum, which is essential for their teacher education program. This data can be used to pinpoint any potential issues that students may be facing and come up with solutions to these problems. Moreover, understanding the disparities in experiences and perceptions between public and private institutes can shed light on any possible discrepancies or disparities in the quality of teacher education. Research on this subject can be beneficial.

Defining key terms

B.Ed.: B.Ed. is a teacher training program which is offered by various universities across Pakistan, Higher Education Commission of Pakistan (Tahira et al., 2020).

Teaching practicum: Teaching practice or practicum is the application of pedagogical principles and strategies to the facilitation of learning for students (Gujjar et al, 2010).

Student teacher: as stated by Abdullah and Mirza (2020) A student teacher is a student enrolled in the teaching practice course who is doing classroom teaching in the selected school. Other names available in the literature for student teachers are aspiring teachers, prospective teachers, candidate teachers, and so on.

Perspective: as stated by Johnson (2021), perspective refers to the way that an individual views or understands a particular subject or issue.

Comparative study: as per Yu and Li (2021), a comparative study is a type of research that involves comparing and contrasting two or more groups, individuals, or phenomena to understand their similarities and differences.

Public teacher educational institutes – As reported by Sharma et al. (2022), public teacher educational institutes are schools or colleges that are funded by the government and are open to the public.

Private teacher educational institutes: According to Joseph and Nair (2021), private teacher educational institutes are schools or colleges that are not funded by the government and are typically operated by a private organization or individual.

Literature review

This literature review will explore current research on the perspectives of 4-year B.Ed. students on teaching practicum in public and private teacher education institutes in Pakistan and will focus on the topics of teacher education, student perspectives, and the comparison between public and private institutes.

Importance of teaching practicum in teacher education

Examining the literature, it becomes clear that teacher education is a crucial factor in the success of students and the quality of teaching (Lorencová et al., 2019). Therefore, it is important to explore student perspectives on teaching practicum, which can provide insight into the effectiveness of teacher education. In particular, comparing the perspectives of students in public and private teacher education institutes provides insight into the differences between the two types of institutes (Naeem et al., 2017).

Several studies have been conducted on the perspectives of students in the context of teacher education (Tahira et al., 2020; Amir et al., 2020; Karim et al., 2021). These studies have focused on student experiences and perceptions of teaching practicum, and have shown that there is a need to improve teacher education to better prepare students for teaching.

Teacher education in Pakistan

Teaching practicum is an integral part of teacher education programs as it provides students with the opportunity to apply their knowledge and skills in a real-world setting (Darling-Hammond, 2000). This review aims to explore the perspective of B.Ed. 4-years students on teaching practicum, with a focus on a comparative study of public and private teacher education institutes in Pakistan (Ahmad & Qureshi, 2020). Recent research has shown that the quality of teaching practicum experiences can

have a significant impact on the development of pre-service teachers (Murni et al., 2021).

A study by Rehman (2019) found that teaching practicum plays a crucial role in the professional development of teacher education students in Pakistan. The study also identified several challenges faced by students during their teaching practicum, including a lack of support from cooperating teachers, inadequate supervision, and inadequate classroom management skills. Other recent studies have also highlighted the importance of teaching practicum in teacher education programs. For example, a study by Zhang et al. (2020) found that teaching practicum experiences can enhance pre-service teachers' confidence and competence in teaching. Similarly, a study by Aslan and Zhu (2017) found that teaching practicum can improve pre-service teachers' communication skills and subject matter knowledge.

Recent research (Grossman et al., 2013) demonstrates that preparing prospective teachers for teaching practice is a difficult task. (Reid, 2011, Melnick and Meister; Young et al., 2016). Teachers' expectations and classroom realities frequently diverge greatly, and the profession is more complicated than they initially anticipated. Additionally, prospective teachers frequently find that the level of control exercised by the school administration does not match the level of autonomy they expect from the school environment (Brooks & Normore, 2010).

Additionally, according to Saarnivaara and Sarja (2007), students do not always behave in the manner that prospective teachers anticipate. Additionally, a lack of resources and curriculum flexibility frequently render interactive teaching methods impractical (Kilgore et al., 1990). According to Loewenberg et al. (2009), teacher preparation programs ought to place a greater emphasis on the clinical aspect of teaching.

Grossman et al. (2013) claim that (In order to fully comprehend how various types of teaching practice both support and hinder the development of prospective teachers, empirical evidence is required. According to Kiemer et al. (2015), teaching is a skill that cannot be taught solely through traditional education programs. Instead, prospective teachers are provided with classroom environment knowledge and understanding. 2001; Yost and co., 2000). According to Trent (2012), traditional schools frequently place a greater emphasis on exam-prep instruction than on interactive instruction, which can make it challenging for prospective teachers (Deal & Peterson, 1990; Leithwood, 1994).

Due to a lack of opportunities to learn in the context of practice and a lack of a shared vision among faculty responsible for teaching subject content and pedagogy, prospective teachers frequently have difficulty thinking beyond the traditional structures of teaching and learning (Jensen et al., 2012; Klette & Carlsten, 2012; Nerland, 2012; Smeby, 2012). As a result, it becomes challenging to conceptualize the challenges of teaching as well as to design and organize learning tasks for students.

Due to a lack of experience in carrying out these responsibilities, prospective teachers frequently experience incompetence (Rink, 2006; Shulman, 2004), and they are unable to provide learners with sequential, engaging, and developmentally appropriate learning tasks (Ball & Forzani, 2009; Cohen et al., 2003; Darling-Hammond, 2000). According to Loewenberg et al. (2008), a major obstacle for prospective teachers is a lack of subject content knowledge and pedagogy, which can make it difficult to comprehend students' ongoing learning responses and questions in the classroom. (Grossman et al., 2013; Lampert and Graziani; Loewenberg, 2008; Rink, 2006).

Teacher education and teaching practicum during COVID

The studies by Ali et al. (2020) and Chaudhary et al. (2021), Ahmed et al. (2022) found that student teachers in Pakistan face numerous challenges during their teaching practicum, including inadequate resources and support. However, the study by Ahmed et al. (2022) specifically focused on the impact of the COVID-19 pandemic on teacher education students and their teaching practicum experiences. The study found that the pandemic harmed student teachers' ability to complete their practicum, as well as their mental health and well-being. These findings highlight the importance of addressing the challenges faced by teacher education students during their teaching practicum, particularly in the context of the COVID-19 pandemic.

The pandemic has had a significant impact on the education system, with widespread school closures causing difficulties for student teachers who were unable to complete their practicums as part of their training (Kidd & Murray, 2020). This has resulted in long-term negative effects on education not only in developed countries but also in developing countries, with broader consequences for economic growth and development (UNESCO, 2020). As a substitute for classroom teaching, many educators have turned to emergency online teaching, but this approach has faced obstacles such as limited technical knowledge and capabilities, inadequate infrastructure, and connectivity issues. Additionally, inequalities in learning outcomes have occurred, particularly in rural areas where there are issues with reliable power and internet access. The pandemic has also changed the teaching practices for school teachers who are now faced with the challenge of adapting to virtual teaching, which is a new experience for most in Pakistan (Zhang et al., 2020). This shift has affected their teaching norms, professional roles, and strategies and they are facing difficulties in adopting the online mode of teaching due to their limited expertise in online education and platforms.

Empirical studies

In comparison to other countries, research has shown that the teaching practicum experience in Pakistan is not up to mark. It is less structured and more reliant on individual mentor teachers to provide guidance and support (Nash & Khan, 2021). This is in contrast to developed countries such as the USA, Australia and Canada, where the teaching practicum is more formally structured and includes a range of professional learning opportunities for pre-service teachers (Hong & Soleas, 2020).

Charteris (2019) and Lessig et al. (2019) found that teaching practicum experiences were viewed as valuable by pre-service teachers, as they provided practical application of theories learned in the classroom and the opportunity to observe and work with experienced teachers. In Australia, pre-service teachers also identified the importance of receiving feedback and support during their practicum placements to improve their teaching skills.

In contrast, a study in Canada (Smith, 2019) found that some pre-service teachers reported feeling overwhelmed and unprepared during their practicum experiences, and cited a lack of support and guidance from their cooperating teachers as a contributing factor. This highlights the need for adequate supervision and support for pre-service teachers during their practicum placements.

A study by Noorani (2022) found that in Singapore, at the time of entry into the teacher's training program organized by the National Institute of Education (NIE) at Nanyang Technological University, the applicants are divided into segments of diploma and degree course according to their qualification. There is strong coordination between the training institute and the schools, to monitor the teachers' progress after their recruitment. Every year, teachers have to complete 100 hours of their professional growth. This could be achieved in any of the described manners i.e., either entering into any of the courses at NIE for the enhancement of content along with teaching strategies or teachers could be part of schools' inhouse training including learning of unique and specific pedagogies (National Institute of Education, 2009).

It is important to consider the potential differences in the experiences of B.Ed. students in public and private teacher education institutes in Pakistan. A study in India (Sharma et al., 2022) found that pre-service teachers in private institutes reported having more opportunities for

hands-on learning and interaction with experienced teachers during their practicum placements compared to those in public institutes. This may suggest that the quality of practicum experiences for B.Ed. students in Pakistan may vary based on the type of institution they attend.

Methodology

The main aim of the study was to investigate how prospective teachers view teaching practice. This paper attempted to compare the teaching practice process of public and private "Teacher Education Institutes" of Karachi, and views of trainee teachers on teaching practicum process. Qualitative research approach was applied to collect data from the prospective teachers enrolled in different institutes of Karachi. Qualitative research necessitates the careful examination and gathering of a variety of data sources, such as case studies, personal accounts, introspection, life stories, interviews, observations, history, interactions, and visual media, to gain insight into both the commonplace and unique aspects of individuals' lives (Denzin and Lincoln, 2005).

Research design

A comparative case study design was used, with the public and private teacher education institutes serving as the two cases. Comparative case study is a research method in which two or more cases are studied and compared in order to identify similarities and differences in order to gain a better understanding of the topic being studied (Bartlett, 2017).

In-depth interviews: One-on-one interviews with B.Ed. students were conducted to explore their experiences with teaching practicum in detail. The interviews were semi-structured, with a set of predetermined questions to guide the conversation, but also allowed for flexibility to explore any additional topics that were arise.

Sampling A purposive sampling method was used to select a diverse sample of B.Ed. students from both public and private teacher education institutes. This means that the units are purposely selected due to their characteristics that are needed for the sample (Nikolopoulou, 2022). The sample was representative of different universities in Karachi. Purposive sampling is a collection of non-probability sampling techniques in which the units are chosen with a particular purpose in mind. 10 students from private and 10 from public teachers training institute were selected to collect data.

Data analysis The data collected from the in-depth interviews had been transcribed and analyzed using thematic analysis. This involved identifying themes and patterns in the data and coding the data according to these themes. The researcher also compared the findings from the public and private teacher education institutes to identify any differences

or similarities in the perspectives of the B.Ed. students. Braun and Clarke (2006) describe thematic analysis as a method for examining qualitative data, whereby a data set is examined to identify, analyze, and report any recurrent patterns.

Ethical considerations the researcher obtained informed consent from all participants and ensured that their privacy and confidentiality are protected. The researcher also debriefed the participants after the data collection process and provided them with any resources or support that was needed.

Findings

The data collected from 2 publics and 2 private educational institutes through interviews revealed a mixed opinion on the teaching practicum component of the B.Ed. program. The following themes were identified through a thematic analysis of the data:

Teaching practicum as a key component: Participants from both public and private institutes shared their experiences with the teaching practicum component of their B.Ed. program. Some participants felt that the teaching practicum was a valuable learning experience, as it allows them to observe and assist experienced teachers, gain hands-on experience in the classroom, and learn different methodologies and strategies for teaching. Other participants felt that the teaching practicum had not adequately prepared them for teaching in a real-world setting and that they encountered difficulties such as a lack of resources and support from the institution, and a lack of feedback from supervisors.

A participant of public university described their opinion as: "In my opinion, B.Ed. (Hons) program is a very useful part of the degree that I consider this because just knowing theory for four years is useless. If you don't know how to apply in the field. I believe that teaching practice is not only useful, but it is mandatory by HEC. It helps the prospective teachers to go inside the classrooms and see the implications and implementation of all the theories that they learn related to teaching and learning".

A participant of private university shares their opinion:

"I believe the teaching practice component is too important for student teachers as they provide an opportunity to gain experience in real-world teaching and I must say that my experience was good and I used different methods and strategies. I got the chance to improve my teaching style by observing others".

Learning environment and school culture: Participants from both public and private institutes described the learning environment and school culture where they completed their teaching practicum. Some participants felt that the learning environment was supportive and

conducive to learning, while others felt that it was not. Participants from private institutes reported that the school culture was more supportive and conducive to learning than participants from public institutes.

A participant of private university expressed their opinion as:

"My experience at private schools has been far better as compared to the government schools because of proper checks and balances of everything. Lack of resources and poor infrastructure in public schools made surviving student teachers difficult because going to any school for the first time it's already overwhelming for student teachers who have no experience of going inside the classrooms and teaching a bunch of students. So how would you go with activities when you don't have basic chairs and tables inside the classroom and no electricity".

Experience of practicum: Participants from both public and private institutes described their teaching experience as better in private schools than in public schools because, in private institutes, students have access to more resources and support from the institute, as well as a more diverse student population.

A participant from public university describe the experience: "as far as my experience of the teaching practicum is concerned, my experience has been a roller coaster for me because we were visiting different schools every time. So, the teaching and learning environment, availability of resources in the teachers has shaped by experience positively".

Satisfaction with teaching practicum: Participants from both public and private institutes were asked if they were satisfied with the teaching practicum they did. Some participants felt that the teaching practicum was a valuable learning experience, while others felt that it had not adequately prepared them for teaching in a real-world setting.

Suggestions for improving the teaching practicum component: Participants from both public and private institutes were asked if they had any suggestions for improving the teaching practicum component of B.Ed. programs. Some participants suggested that more resources and support from the institution, more feedback from supervisors, and more hands-on experience in the classroom would be beneficial. Other participants suggested that the teaching practicum should be more closely aligned with the real-world teaching experience and that more emphasis should be placed on preparing students for the challenges of teaching in a real-world setting.

A participant of public university suggested that:

"The module should be more organized and managed. There should be open choices for us to select schools".

Another participant of private university suggested that:

"The teaching practicum module should be removed with teaching internship in which we have to go to the schools for 6 months, so we gain more and better understanding of school environment, the role of teachers and all".

Discussion

The research has uncovered important findings that suggest a need to reassess the teaching practice component in teacher education. There appears to be a gap between what prospective teachers are taught and what is expected of them in actual schools (Gujjar et al, 2010). Often, these prospective teachers have a misinformed view of school culture, resources, and academic support, which can lead to difficulties adjusting. Teaching practice is crucial as it allows prospective teachers to learn how to utilize resources, be creative, handle diversity in the classroom, and mentally prepare for the demands of the profession (Mahmood & Igbal, 2018). However, in Pakistan, teaching practice is not given enough attention in teacher training institutions. The government has acknowledged that the current teacher education program is not meeting the needs of the school system (Amir et al, 2020). The objectives, guidelines, orientation, and evaluation criteria for teaching practice are not properly established or supplied. The role of host schools and teachers is sometimes inadequate and the evaluation and assessment criteria are formal and not comprehensive. As stated by Abdullah and Mirza (2020), it is recommended that modern, more effective teaching training methods such as demonstration, discovery, or participation methods be adopted to improve the quality of teaching practice. Additionally, the duration of teacher training should be extended to develop positive attitudes towards the teaching profession and to ensure that teachers are well-trained and have the latest knowledge and technology to apply new approaches. The quality of education and the successful implementation of policies and plans rely on motivated and high-quality teachers (Akram & Samar, 2022).

Recommendation

The study explored the perspective of B.Ed. 4-year students on teaching practicum in public and private teacher education institutes in Pakistan. It was found that the authoritative behavior and lack of cooperation from school administrators were hindering the ability of prospective teachers to use innovative teaching methods during their practicum.

To address this, the study recommends that teacher education institutes negotiate with schools to increase the acceptance of prospective teachers and that supervisor teachers provide guidance and a supportive attitude to help them adjust to the school environment and implement different teaching strategies. It is also suggested that institutions set rules and regulations for teaching practice before students begin, appoint specific teachers to observe student teachers, provide orientations to prepare them mentally, and give proper weight to teaching practice in evaluations.

Additionally, it is recommended that institutions establish permanent links with specific schools to improve the effectiveness of the practicum, provide facilities such as well-equipped computer labs and reading materials, and consider feedback from student teachers to improve future practices. The study also recommends that institutions work to bridge the gap between theory and practice and provide support for prospective teachers to use flexible teaching techniques according to their skills.

Conclusion

In conclusion, the findings of this stud reveal that some participants felt that the teaching practicum was a valuable learning experience that allowed them to gain hands-on experience in the classroom and learn different methodologies and strategies for teaching, while others felt that it was not adequately prepared them for teaching in a real-world setting. Participants from private institutes reported that the school culture was more supportive and conducive to learning than participants from public institutes. Additionally, participants from both public and private institutes described their teaching experience better in private schools than in public schools because, in private institutes, students have access to more resources and support from the institute, as well as a more diverse student population. Overall, the study suggests that while the teaching practicum component is perceived as an important aspect of the B.Ed. the program, there is room for improvement in terms of increasing the duration of teaching practicum time and providing better resources and support for student teachers in both public and private institutes.

References

- Abdullah, N. A., & Mirza, M. S. (2020, April 8). Evaluating Pre-Service Teaching Practice for Online and Distance Education Students in Pakistan: Evaluation of Teaching Practice. *The International Review of Research in Open and Distributed Learning*.
- Akram, N., & Samar, S. (2022). Experiences of Elementary Prospective Teachers' during Practice Teaching. *Journal of Elementary Education*, 31(1), 77-86.
- Amir, S., Sharf, N., & Khan, R. A. (2020). Pakistan's Education System:
 An Analysis of Education Policies and Drawbacks. *Electronic Research Journal of Social Sciences and Humanities, Vol 2: Issue I, Jan Mar 2020.*

- Aslan, A., & Zhu, C. (2017). Investigating variables predicting Turkish pre-service teachers' integration of ICT into teaching practices. *British Journal of Educational Technology*, 48(2), 552-570.
- Brooks, J. S., & Normore, A. H. (2010). Educational leadership and globalization: Literacy for a glocal perspective. Educational policy, 24(1), 52-82.
- Charteris. J (2019). Teaching performance assessments in the USA and Australia: Implications of the "bar exam for the profession". *International Journal of Comparative Education and Development.*
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3), 166–73.
- Dayan, U., Khan, M. I., & Ahmad, S. (2022, May 25). Transformation of Prospective Teachers' Pedagogical Beliefs during a Pre-Service B.Ed. Programme in Pakistan. *International Journal of Education and Practice*, 10(2), 150–159.
- Education at a Glance OECD. (2022, October 3). Education at a Glance OECD.
- Gearhart, C. A., Blaydes, M., & McCarthy, C. J. (2022). Barriers to and Facilitators for Teachers' Wellbeing. *Frontiers in Psychology*, 13.
- Geletu, G. M., & Mihiretie, D. M. (2023). Professional accountability and responsibility of learning communities of practice in professional development versus curriculum practice in classrooms: Possibilities and pathways. *International Journal of Educational Research Open*, 4.
- Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. Cogent Education, 7(1).
- Global Education Monitoring (GEM) Report 2020. (2020, June 23). Global Education Monitoring (GEM) Report 2020, UNESCO.
- Grossman, P., Loeb, S., Cohen, J., & Wyckoff, J. (2013). Measure for measure: The relationship between measures of instructional practice in middle school English language arts and teachers' value-added scores. *American Journal of Education*, 119(3), 445-470.
- Gujjar, A. A., Naoreen, B., Saifi, S., & Bajwa, M. J. (2010). Teaching Practice: Problems and Issues in Pakistan. International Online Journal of Educational Sciences, 2(2).
- Han, I., Shin, W. S., & Ko, Y. (2017, May 22). The effect of student teaching experience and teacher beliefs on pre-service teachers' self-efficacy and intention to use technology in teaching. *Teachers*

and Teaching, 23(7), 829-842.

- Harrison, R., Meyer, L., Rawstorne, P., Razee, H., Chitkara, U., Mears, S., & Balasooriya, C. (2020, February 29). Evaluating and enhancing quality in higher education teaching practice: a metareview. Studies in Higher Education, 47(1), 80–96.
- Higher Education Commission. (2016). Notification on teacher education roadmap. Islamabad, Pakistan: Higher Education Commission.
- Hong. J, Eleftherios K Soleas. (2020). The school of hard knocks: Preservice teachers' mindset and motivational changes during their practicum. *Foro de educación*.
- Kalsoom, Q., & Qureshi, N. (2019, June 10). Teacher Education for Sustainable Development in Pakistan: Content Analysis of Teacher Education Curriculum and Standards.
- Karim, K., Gul, N., Ayub, A., & Azeem, S. (2020). Exploring the perception of prospective teachers (ADE /B.ED.(HONS)) about the challenges during practicum in Quetta City, Pakistan. *European Journal of Education Studies*.
- Kiemer, K., Gröschner, A., Pehmer, A. K., & Seidel, T. (2015). Effects of a classroom discourse intervention on teachers' practice and students' motivation to learn mathematics and science. *Learning and instruction*, *35*, 94-103.
- Lessig. K, Hine. G, Gwi Soo Na, Kaleinani. (2019). Boardman Perceptions on proof and the teaching of proof: a comparison across preservice secondary teachers in Australia, USA and Korea. *Mathematics Education Research Journal* 31 (4), 393-418.
- Loewenberg Ball, D., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special?. *Journal of teacher education*, 59(5), 389-407.
- Lorencová, H., Jarošová, E., Avgitidou, S., & Dimitriadou, C. (2019). Critical thinking practices in teacher education programmes: a systematic review. *Studies in Higher Education*, *44*(5), 844-859.
- Mahmood, N., & Iqbal, Z.(2018), Challenges Faced by Prospective Teachers during Teaching Practice: Connecting Theory to Practice, Bulletin of Education and Research.
- Naeem, M., Jamal, W., & Riaz, M. K. (2017). The relationship of employees' performance appraisal satisfaction with employees' outcomes: Evidence from higher educational institutes. FWU Journal of Social Sciences, 11(2), 71-81.
- National Accreditation Council for Teacher Education. (2009). National standards for accreditation of teacher education program. Islamabad, Pakistan.

- National Institute of Education (NIE) (2009). A Teacher Education Model for the 21st Century Singapore.
- Noorani.K.P (2022). Redesigning Teacher Education System in Pakistan: Insights from Singapore Model for Teacher Development. *Advances in Gender and Development Studies*, *1*(1), 15–21.
- Rahman, M. M. (2019). 21st century skill'problem solving': Defining the concept. Rahman, MM (2019). 21st Century Skill "Problem Solving": Defining the Concept. Asian Journal of Interdisciplinary Research, 2(1), 64-74.
- Sharma, S., Manuja, M., Bali, P., Bali, S., & Sharma, C. (2022, October). Online education system in the age of pandemics: A statistical analysis of current Covid-19 to the teaching and learning pedagogies in India. *In AIP Conference Proceedings* (Vol. 2451, No. 1).
- Shaukat, & Chowdhury (2020). Teacher Educators' Perceptions of Professional Standards: Implementation Challenges in Pakistan.
- Tahira, M., Hassan, A., Malik, A., & Yousuf, M. I. (2020). Teacher Education in Pakistan: Issues and Problems.
- Tekin-Sitrava, R., Kaiser, G. & Işıksal-Bostan, M.(2022). Development of Prospective Teachers' Noticing Skills Within Initial Teacher Education. *International Journal of Science and Math Education* 20, 1611–1634.
- UNESCO, World Bank, & World Food Programme (2020). Framework for reopening schools.
- UNICEF (2020). Education: Giving Every Child the Right to Education and sustainable development (ESD). *Journal of Sustainable Development Education and Research*, 2(1), 21.
- Wahyudin, A. Y. (2018). Maximizing Outlining Practice in Teaching Writing for EFL Secondary Students: A Research Perspective. *Universitas Teknokrat Indonesia*, 45(1).
- Walshe, N., & Driver, P. (2019, February). Developing reflective trainee teacher practice with 360-degree video. *Teaching and Teacher Education*, 78, 97–105.
- Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping Learning: China's education emergency management policy in the COVID-19 break. *Journal of Risk and Financial Management*, 13(3), Article 55.