VOICES OF STUDENTS-TEACHERS ABOUT DISTANCE AND BLENDED LEARNING: AN INSTRUCTIONAL FITS PERCEPTION

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Abstract

Distance learning and blended learning have come out as two of the most prevalent and forefront approaches to learning implemented today, especially Post Covid-19. However, not much study has been undertaken to determine how Indonesian teachers perceive the implementation of distance learning and blended learning. This research aims to investigate the advantage of teachers' involvement as students in the graduate school of Universitas Terbuka (UT) that employ distance learning mode. This research is also intended to find out challenges faced by student-teachers in applying blended learning as an emergent method to learning Post Covid-19. Mixed Method with convergent parallel design has been used by involving 30 student-teachers to involve in the questionnaire and 6 of them to be interviewed using semi-structured interviews. The participants were from three different study programs (Master of English Education, Master of Elementary Education, and Master of Mathematics Education) in the School of Postgraduate Studies of UT. The study findings noted: (1) instructional fit as a crucial component in education settings; (2) innovative pedagogies as key aspect in learning in the virtual classroom, and (3) blended learning functions to harmonized traditional classroom experiences with digital tools. This study provides evidence, results' implications, and suggestions regarding additional instruction-related study.

Keywords: distance learning, blended learning, technological pedagogical content knowledge, mixed method research

1 INTRODUCTION

The field of education has witnessed a significant transformation in recent times due to technological advancements and global circumstances. Many people declare that technology's rapid advancement has catalyzed a transformative shift in education. From traditional chalkboards to virtual classrooms, the educational landscape has evolved, embracing digital tools to enhance learning (Koper, 2000; Subkhan, 2012). Digital tools have revolutionized the way knowledge is acquired and shared.

In addition, the COVID-19 pandemic before has accelerated the adoption of distance learning and blended learning approaches, forcing educational institutions and stakeholders to swiftly adapt to new modes of instruction. Distance learning, often referred to as online learning, involves delivering educational content to students who are geographically separated from the

instructor. Distance learning, characterized by its virtual corridors of knowledge, erases geographical boundaries, and brings education to the fingertips across the globe (Moazami et al., 2014; Moore et al., 2011). Blended learning, on the other hand, combines traditional face-to-face instruction with online elements, aiming to harness the advantages of both approaches. Blended learning refers to an instructional approach that reduces limitations related to time, location, and environmental constraints, all while enhancing the quality of interactions between teachers and students (Vallee et al., 2020). Blended learning, an artful fusion of traditional classroom dynamics and digital interactions, redefines the learning experience itself. Since the onset of the Covid-19 pandemic, the fundamentals of blended learning have seen widespread adoption across a wide spectrum of educational institutions, spanning from primary to tertiary levels (Feitosa de Moura et al., 2021; Garad et al., 2021). For instance, at Universitas Terbuka, students now have access to an online learning platform that offers them the ability to access course materials, engage in online discussions, complete quizzes, and submit assignments. Furthermore, online lecture recordings have been provided as a supplementary resource to traditional synchronous lectures, serving as valuable review materials for students. The introduction of virtual learning has empowered students to tailor their education to their individual circumstances and capabilities (Utomo et al., 2020). Notably, instructors and tutors have found improved opportunities to support and monitor their students' progress in online courses by incorporating interactive introductory materials. This approach has resulted in heightened student engagement, greater likelihood of relating course content to personal experiences, and increased opportunities for students to express their thoughts through various techniques.

Both methodologies offer a departure from conventional pedagogical norms, ushering in a new era of flexibility and adaptability. Distance learning capitalizes on digital platforms to facilitate self-paced education, while blended learning strategically combines face-to-face interactions with online resources, harnessing the strengths of each (Jeffrey et al., 2014). These approaches cater to diverse learning styles and schedules, but also introduce fresh challenges – from sustaining engagement in virtual spaces to navigating the integration of physical and digital realms. These two methods offer flexibility, allowing students to access course materials and interact with instructors at their own pace and convenience (Anthony et al., 2022). Online resources in distance learning and blended learning facilitate self-paced study, while interactive platforms foster global collaboration (Sunubi & Bachtiar, 2022). Artificial intelligence has also

been indicated to personalize learning experiences, adapting content to individual needs. Online learning platforms break down geographical barriers, enabling remote education and lifelong learning. As the educational landscape continues to evolve, the emergence of these novel paradigms brings with it opportunities for creativity, collaboration, and improved accessibility (Dziuban et al., 2018; Eka Yulia Syahrawati et al., 2022).

However, this change isn't without challenges in which bridging the digital divide and ensuring pedagogical quality demand attention. Yet, technology's influence is undeniable, reshaping education into a dynamic, accessible, and tailored journey that equips learners with skills crucial for the modern world. With the rapid advancements in technology, integrating digital tools and resources into the classroom has become imperative. This would require ensuring that all teachers have access to the necessary training and support to effectively utilize these tools (Hrastinski, 2019; Kumar et al., 2021). Additionally, efforts should be made to close the digital divide by providing equal access to technology for all students, regardless of their socio-economic background. By addressing these challenges and embracing technology, Indonesia can create a more inclusive and effective education system.

This research explores the experiences of Indonesian teachers who are also students at the Graduate School of Universitas Terbuka (UT), where distance learning is the primary mode of instruction. It also investigates the challenges faced by student-teachers in implementing blended learning, which has gained prominence post-COVID-19. This is importance by recognizing that, despite many studies that have been done in relation to blended learning (e.g. Anthony et al., 2022; Kumar et al., 2021; Suartama et al., 2019) and distance learning (Epps et al., 2021; Garad et al., 2021), very few if any that have tried to see their effectiveness in adjusting Indonesian teacher’s classroom instruction. By delving into the experiences and perspectives of student-teachers as one of the key stakeholders in education, we can gain valuable insights into the effectiveness and challenges of these instructional approaches. This study was guided by three research questions: (1) What is the student-teachers’ conception of the instructional fits in the current educational setting? (2) How do student-teachers perceive the alignment between instructional strategies and their learning needs in distance learning settings? (3) To what extent do the student-teachers believe that the pedagogical approaches employed in blended learning meet their educational objectives and expectations?

2 METHODOLOGY

The research methodology employed in this study was a Mixed Method approach with a convergent parallel design. This approach combines quantitative and qualitative data collection methods to provide a comprehensive understanding of the research questions, allowing for a triangulation of data from multiple sources and perspectives, thereby enhancing the validity and depth of our findings (Åkerblad et al., 2021; Bachtiar, 2022). In addition, the Mixed Method approach with a convergent parallel design is a powerful research methodology that leverages the strengths of both quantitative and qualitative research to provide a more thorough understanding of complex research questions (Creswell & Creswell, 2018), making it especially valuable in educational research like the study you mentioned.

The current study was carried out among 30 student-teachers enrolled in the Graduate School at UT, specifically focusing on three study programs: Master of English language education, Master of elementary education, and Master of Mathematics education. The choice of this research site was deliberate, as it offered a wealth of relevant information aligned with our research objectives. Moreover, the research environment was thoughtfully selected and considered suitable due to its relevance to the investigation of student-teachers' experiences with technological competencies during their graduate studies at UT. It's important to note that a prerequisite for admission to any of these three graduate programs at UT is active teaching engagement either in elementary schools or high schools.

Quantitative data was gathered through questionnaires administered to all 30 participants, while qualitative insights were derived from semi-structured interviews conducted with six of the participants. This combination of methods allowed for a more nuanced exploration of teachers' experiences and perceptions regarding distance learning and blended learning. A survey instrument is a self-reporting tool utilized for efficient and cost-effective data collection from a wide pool of potential participants. In the present study, the survey was divided into two distinct sections. Section A, focusing on demographic data, captured information about participants' gender, age, teaching experience, and their enrolled study program. Section B was constructed using a Five-Likert Scale, with response options ranging from 1 (not at all) to 5 (to a significant extent). This section comprised ten items, addressing two specific aspects: the implementation of distance learning and blended learning. A detailed breakdown of all

questionnaire items is available in Table 1. Prior to its distribution to research participants, the questionnaire underwent a pilot test with four individuals who were not part of the study.

Table 1. Item Statements in the Questionnaire

Aspects	Questionnaire Items
Distance Learning	1. Learning mode by using distance learning in Graduate School UT has increased student-teachers' understanding of technological integration in learning
	2. Distance learning mode UT provides sufficient learning resources for student-teachers
	3. The tutors of Graduate School UT use technological tools, such as Mentimeter, paddle, google slides in online learning process
	4. Distance learning mode UT has improved my teaching strategy
	5. Learning tutorial at Graduate School UT encourages students to share knowledge and collaborate each other
Blended learning	6. There is a need for teachers to implement a blended learning as an emerging teaching approach post Covid -19
	7. I perform better with blended learning
	8. Blended learning is more tedious
	9. I am in favor of blended learning next semester
	10 I hope to have more training on how to implement blended learning effectively

The researcher employed the Statistical Package for Social Sciences (SPSS) to process and assess the quantitative data derived from the questionnaire. Descriptive statistics, such as means and standard deviations, were utilized to summarize participant's data. The qualitative data obtained from interviews underwent thematic analysis, a method for identifying emerging themes crucial to interpreting a phenomenon. Boyatzis (1998) provides a framework for structuring the data, which serves to both elucidate and dissect various aspects of the phenomenon under investigation. In our data analysis, we adopted Widodo's (2014) framework. The initial stage involved understanding well of the interview data by meticulously analyzing and repeatedly reading the transcripts. Subsequently, the researcher systematically assigned codes, incorporating specific transcription symbols, and categorized the material into coherent themes, making it readily comprehensible. The following step involved interpreting and sharing insights drawn from the interviews. To ensure the reliability of the obtained data, the participants were given the opportunity to confirm or contest our findings.

3 FINDINGS AND DISCUSSION

The findings derived from the questionnaires were set against and integrated with the findings from the interviews. Consequently, this segment introduces significant insights generated by the findings. The initial part discusses the findings concerning how participants perceive instructional fit as a crucial component in learning. The subsequent section delves into participants' viewpoints regarding innovative pedagogies that need to be implemented in teaching and learning in the virtual classroom. The last section illustrates participants' views on blended learning as the learning strategy to harmonize traditional classroom experiences with digital tools. All these three sections hold relevance for the ensuing discussion as they are closely aligned with the objectives of this research.

3.1 Instructional Fit: A Crucial Component

In the ever-changing world of education, the concept of instructional fit remains paramount. It involves tailoring teaching methods and approaches to suit the evolving needs of students and the dynamic landscape of learning. Five of the participants in this study emphasized that instructional fit is an indispensable element in effective teaching, especially in the current trend of education. This is because adjusting instructional fit revolves around the alignment of instructional approach and strategy with the unique needs, preferences, and abilities of students. Some of the participants also stated that to create an optimal learning environment, educators need to consider factors such as students' prior knowledge, learning styles, and developmental stages. By tailoring teaching methods to match these aspects, educators can ensure that the instructional materials and media are accessible and engaging, thereby enhancing students' understanding and retention. The findings from this study support the previous studies' findings by Chan and Ahern (2016) and Suartama et al (2019) that a personalized approach to teaching can have a significant impact on students' learning outcomes. Personal approach to teaching emphasizes the importance of recognizing and accommodating individual differences in the classroom, as this can lead to improved student engagement and overall academic success. Furthermore, the findings from Kinne and Eastep's (2017) study suggest that educators should continuously assess and adapt their teaching methods to meet the evolving needs of their students, as this can foster a more inclusive and effective learning environment for all.

Another interesting finding from this study is that the participants recognize that a one-size-fits-all approach is not applicable in many teachings context and therefore rarely succeeds in education. Students are diverse, and what works well for one may not work for another. Therefore, educators must employ a variety of instructional strategies to accommodate this diversity. From this view, the implementation of differentiated instruction allows teachers to adapt their teaching methods, content, and assessment techniques to suit individual students' needs. This personalized approach can foster a deeper understanding of the subject matter and promote academic success for all learners (Lightweis, 2013).

Instructional fit has also been linked to the creation of learning environments. Most of the participants believe that a well-designed classroom can significantly impact students' ability to focus and engage with the learning process during class. Creating a comfortable and conducive environment can help maximize the effectiveness of instruction. The current study findings confirm the results from previous studies that emphasize the importance of a supportive and appropriate learning environment (Kaushik, 2020; Lutfah et al., 2019; Puteh M. et al., 2015). By considering factors such as classroom layout, seating arrangements, and lighting, educators can create a space that promotes collaboration, creativity, and active participation. This not only benefits students' academic performance but also enhances their overall well-being and sense of belonging in the classroom (Puteh M. et al., 2015). Ultimately, investing in creating an inclusive and effective learning environment can lead to improved student outcomes and a more positive educational experience for all.

Instructional fit is enhanced and optimized using technology. Some of the participants informed that the integration of digital tools in the learning process enhances the opportunity to customize students' learning experiences. Adaptive learning platforms, for instance, can provide students with tailored content and media based on their performance and progress, ensuring that each learner receives the right level of challenge and support (Aslam et al., 2021; McDiarmid & Zhao, 2022).

In conclusion, instructional fit is a critical component of effective teaching that revolves around aligning instructional strategies, content, and the learning environment with the diverse needs and characteristics of students. By recognizing that there is no one-size-fits-all approach, educators can create a more inclusive and personalized learning experience, leading to

improved student outcomes. Embracing technology and adaptability in teaching methods are essential steps towards achieving instructional fit in modern educational settings.

3.2 Innovative Pedagogies: Teaching and Learning in the Virtual Classroom

All participants in the interview noted that their involvement in the Graduate School of UT, which primarily employs distance learning mode, significantly contributed to the enhancement of their teaching competencies. Notably, Technological Pedagogical Content Knowledge (TPCK) showed significant improvement, highlighting its benefits for their classroom practical activities. The results from the questionnaire also confirmed this (see Table 2).

Table 2. Questionnaire items for Distance Learning

No	Items	Not at All		Somewhat		50%		To a large Degree		To a Great Extent	
		N	%	N	%	N	%	N	%	N	%
1.	Learning mode by using distance learning in Graduate School UT has increased student-teachers' understanding of technological integration in learning	0	0	0	0	3	10	13	43.3	14	46.7
2.	Distance learning mode in Graduate School UT provides sufficient learning resources for student-teachers	0	0	0	0	2	6.7	11	36.7	17	56.7
3.	The tutors of Graduate School UT use technological tools, such as Mentimeter, paddle, google slides in online learning process	0	0	0	0	0	0	9	30	21	70
4.	Distance learning mode in Graduate School UT has improved my teaching strategy	0	0	0	0	2	6.7	12	40	16	53.3
5.	Learning tutorial at Graduate School UT encourages student-teachers to share knowledge and collaborate each other	0	0	0	0	2	6.7	16	53.3	12	40

Table 2 points out that the majority of the participants felt "to a great degree" for item 3 (the tutor of Graduate School UT uses technological tools in online learning process = 70%), item 2 (distance learning mode in the Graduate School UT provide sufficient learning resources = 56.7), and item 4 (Distance learning mode in the Graduate School UT has improve my teaching strategy = 53.3). In addition, more than half of the participants felt "to a large degree" for item 5 (Learning tutorial at the Graduate School UT encourages student-teachers to share knowledge and collaborate with each other = 53.3%).

A noteworthy finding from the study is the participants' strong emphasis of the importance of interactive learning in the virtual classroom. They highlighted the need for innovative pedagogical strategies that foster active student engagement. This included discussions and

collaborative projects to replicate the interactive nature of traditional in-person classes. The findings from the previous studies by Fernando et al. (2020) and Garad et al. (2021) also put a strong emphasis on interactive learning aligns with current educational research. Their study findings noted that engaging students actively in the learning process fosters deeper understanding and knowledge retention. Therefore, instructors/tutors should explore digital tools and platforms that facilitate collaborative activities, discussions, and peer-to-peer interaction in the virtual classroom.

In addition, the participant in current study expressed a desire for personalized learning experiences in the virtual classroom. They believed that adaptive technologies and tailored content could enhance their learning outcomes. This finding underscores the importance of addressing individual learning needs and preferences in online education. One aspect that has been emphasized strongly was that interactive learning aligns with current educational research, including in the distance learning mode. This is because engaging students actively in the learning process fosters deeper understanding and knowledge retention. From this side, instructors/tutors need to explore digital tools and platforms that facilitate collaborative activities, discussions, and peer-to-peer interaction in the virtual classroom (Epps et al., 2021).

In conclusion, the findings regarding innovative pedagogies in distance learning underscore the evolving nature of education in the digital age. To meet the expectations of students and optimize the learning experience, educators and institutions must continually adapt their pedagogical strategies and embrace technology as an enabler of effective and engaging online education.

3.3 Blended Learning: Harmonizes Traditional Classroom Experiences with Digital Tools

Blended learning is a pedagogical approach that seamlessly integrates traditional face-to-face instruction with online learning components, offering a holistic and versatile educational experience. Most of the interviewees in the current study concurred that learning benefited from both in-person and online instruction. The time and space constraints of a classroom are not suitable to be applied to the online settings as a repository. The participants also seen blended learning as a great method for quickly getting in touch with every student. One of the participants stated that: "the beautiful thing about online mode is that you can put material in there those students can access at anytime, anyplace. Teachers can swiftly broadcast notices

and or lesson materials to their pupils" (Int. T. 2). As a result, the participants denoted to teachers who oppose using the online mode as old fashioned to be implemented to introduce a comment on the participants' fondness as the instruction in classroom activities. The questionnaire results confirmed the participants' conception and preferences for blended learning as can be seen in Table 4.

Table 3. The participants' conceptions of blended learning

No	Items	Not at All		Somewhat		50%		To a large Degree		To a Great Extent	
		N	%	N	%	N	%	N	%	N	%
1.	There is a need for teachers to implement a blended learning as an emerging teaching approach post Covid -19	0	0	2	6.7	4	13.3	11	36.7	13	43.3
2.	I perform better with blended learning	0	0	3	10	5	16.7	13	43.3	9	30
3.	Blended learning is more tedious	16	53.3	10	33.3	4	13.3	0	0	0	0
4.	I am in favor of blended learning next semester	0	0	1	3.3	2	6.7	11	36.7	16	53.3
5.	I hope to have more training on how to implement blended learning effectively	0	0	0	0	2	6.7	12	40	17	56.7

It has been indicated in Table 4 that most of the participants felt "to a great extent" for item 5 (56.7%) and item 4 (53.3 %). Interestingly, most of the participants felt "not at all" for item 3 (53.3%). This indicates that blended learning is a learning approach that potentially creates fun, enjoyable, and student-cantered learning, as well as enhances learning effectiveness. The participants in the interviews further elaborate on blended learning implementation by stating that online components can supplement the classroom, despite some of its drawbacks.

Interestingly, many participants advocated of using for a blended learning approach, where elements of traditional classroom instruction are combined with online resources and activities. They saw this as a way to maintain the benefits of face-to-face interaction while leveraging the flexibility and accessibility of online tools. The results of this study validate outcomes reported in earlier research by Feitosa de Moura et al. (2021) and Wang (2021) that explored student contentment with blended learning. These two previous studies have consistently indicated that blended learning has the potential to yield higher satisfaction among learners compared to conventional lecture-based instruction and entirely online instructional methods. In aadition, Feitosa de Moura et al.'s (2021) research, for instance, supports the idea that a blended environment can offer unique learning experiences that are not available in non-blended

settings, and it is believed that the diverse array of experiences provided within a blended context can promote effective learning. In particular, within the context of technology-driven education, blended learning environments encompassing both physical and virtual components are regarded as fundamental strategies for educational institutions.

Despite the benefits, the participants in this study also acknowledged challenges associated with blended learning. These challenges included the need for effective time management and self-discipline to navigate between in-person and online components. Additionally, some of the participants mentioned concerns about maintaining a sense of community and social interaction in a partially virtual learning environment. The previous studies have also noted of the importance of implementing both, face to face and online learning modes in the current demand of educational settings (Kumar et al., 2021; Malasari et al., 2021). The endorsement of blended learning models suggests that while online education offers flexibility, there is still significant value in face-to-face interactions. Institutions should consider a hybrid approach that combines the best of both worlds, allowing for meaningful in-person engagement while leveraging the advantages of online resources.

4 CONCLUSION

The experiences and perceptions of the student-teachers regarding distance learning and blended learning underscore the significance of instructional fit in the success of these approaches. Achieving an instructional fit that aligns with the needs and preferences of the student-teachers is crucial for fostering engagement, participation, and effective learning outcomes. As technology continues to shape the landscape of education, ongoing research, dialogue, and adaptation will be essential to ensure that distance and blended learning experiences are enriching and fulfilling for all stakeholders involved. Further research is required to identify the specific variables that affect the relationship between instructional methods, instructors' proficiency with technology, and student achievements. An investigation into the impact of educators' technological competence and the use of blended learning on students' academic performance could be a prospective avenue for future research. These proposed inquiries would advance our understanding of how instructional approaches and strategies, as well as technological proficiency, are employed in distance and blended learning environments extend beyond merely identifying substantial differences.

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