



## Teachers' Conceptions of the Role of Master of Elementary Education in Enhancing Their Competences

Bachtiar<sup>a1</sup>, Widya Rizky Pratiwi<sup>b2</sup>

<sup>a,b</sup> Universitas Terbuka (UT), Indonesia

<sup>1\*</sup>[bachtiar\\_nur@ecampus.ut.ac.id](mailto:bachtiar_nur@ecampus.ut.ac.id), <sup>2</sup>[widya\\_pratiwi@ecampus.ut.ac.id](mailto:widya_pratiwi@ecampus.ut.ac.id)

INFORMASI ARTIKEL	ABSTRAK
<p>Riwayat: Diterima 6 Februari 2023 Revisi 2 Maret 2023 Dipublikasikan 17 April 2023</p> <p><b>Kata kunci:</b> <i>Post-Covid 19, Universitas Terbuka, Blended Learning, Kompetensi Guru</i></p>	<p><i>Blended learning</i> telah muncul sebagai salah satu strategi pembelajaran paling populer dan mutakhir yang diterapkan Pasca Pandemi Covid -19. Namun, sejauh ini hanya sedikit penelitian yang telah dilakukan untuk menyelidiki konsepsi guru tentang implementasi <i>blended learning</i> dalam konteks Indonesia, dan dampak Program Studi Magister Pendidikan Dasar (MPDR) Universitas Terbuka (UT) Indonesia terhadap kompetensi guru. Penelitian ini bertujuan untuk mengkaji mamfaat keterlibatan guru sebagai mahasiswa di program studi MPDR UT. Penelitian ini juga dimaksudkan untuk mengetahui tantangan yang dihadapi guru dalam menerapkan <i>blended learning</i> sebagai metode pembelajaran kekinian <i>Post Covid-19</i>. Penelitian ini menggunakan rancangan <i>convergent parallel design</i> sebagai bagian dari <i>Mixed Method Research</i> (MMR) dengan melibatkan 20 (dua puluh) guru untuk berpartisipasi dalam kuesioner dan 4 dari partisipan tersebut dilibatkan dalam wawancara semi terstruktur. Para peserta berasal dari Program Studi Magister Pendidikan Dasar (MPDR) UT. Temuan studi menemukan bahwa terlepas dari beberapa tantangan yang dihadapi guru pada awal-awal Covid -19, para guru juga memandang Covid -19 sebagai berkah terselubung. Para guru banyak belajar cara melakukan pembelajaran dengan <i>fully online mode</i>. Temuan penelitian juga menunjukkan bahwa keterlibatan para responden di MPDR UT telah membantu guru-guru tersebut untuk meningkatkan kompetensinya, termasuk <i>Technological Pedagogical Content Knowledge</i> (TPCK). Hal lain yang menjadi temuan studi adalah bahwa <i>blended learning</i> telah dipandang sebagai strategi pengajaran yang sesuai dengan <i>instructional fits</i> pasca Covid -19. Studi ini memaparkan</p>



bukti, implikasi hasil, dan arah yang disarankan untuk penelitian selanjutnya terkait instruksi pembelajaran.

#### ABSTRACT

#### Keywords:

Post-Covid 19, Universitas Terbuka,  
Blended Learning, Teachers'  
Competences



Copyright © 2023, Bachtiar &  
Widya Rizky Pratiwi

This is an open access article  
under the CC-BY-SA license



*Blended learning has emerged as one of the most popular and cutting-edge learning strategies implemented in the Post Covid -19. However, little research has been conducted to investigate teachers' conceptions of implementing blended learning in the Indonesian context and the impact of Master of Elementary Education (MEE) Universitas Terbuka (UT) Indonesia on teachers' competencies. This research investigates the advantage of teachers' involvement as students in MEE UT. This research also intends to discover student-teacher challenges in utilizing blended learning as an emerging learning method of Post Covid-19. This research employed a convergent parallel design of Mixed Method Research (MMR) by inviting 20 student-teachers to participate in the questionnaire and 4 student-teachers in the semi-structured interviews. The participants were from MEE UT. The study findings found that despite some challenges that the teachers faced in the early stages of Covid -19, the teachers also viewed Covid -19 as a blessing in disguise, where the participants learned a lot about how to conduct learning in a fully online mode. The research findings also noted that the participants' involvement in MEE UT has the teachers enhance their competencies, including Technological Pedagogical Content Knowledge (TPCK). Another worth finding is that blended learning has been viewed as a teaching strategy that meets the demand of instructional fits post Covid -19. This study includes evidence, implications of the results, and suggested directions for future instruction-related research.*

**How to cite:** Bachtiar & Widya Rizky Pratiwi. (2023). Teachers' Conceptions of the Role of Master of Elementary Education in Enhancing Their Competences. *Jurnal Pemikiran dan Pengembangan Sekolah Dasar (JP2SD)*, 11 (1). 1-17 doi: <https://doi.org/10.22219/jp2sd.v11i1.24942>

## INTRODUCTION

The primary knowledge that students will encounter, acquire, and apply throughout a course is served by the instructional fits. They have the ability to encourage or demotivate learners. With common objectives, a shared knowledge of how to achieve those goals, and a shared institutional objective for reviewing achievement, an instructional model may bring together teachers and students. A badly designed implementation process, however, may produce rifts that take years to mend (Buheji et al., 2020; Kara, 2021). The lessons gained by educational institutions and the experiences of students will impact the future learning and teaching expectations of students. In a tight world, this highlights the necessity for educational institutions to promote their distinctive selling characteristics.

Numerous educational institutions have previously embraced learning methodologies to create their education provision more flexible and accessible to suit the

demands of their students. Integration of Information and Communication Technology (ICT) to academic purpose, such as virtual learning, has grown into a new culture in industrialized and developing nations alike (Purnama Sari & Dahnia, 2022), including Indonesia. Blended learning, which combines online learning mode with face-to-face sessions, is one of the most popular and cutting-edge learning strategies (Anthony et al., 2022; Bashir et al., 2021). Each meeting and learning practice in blended learning is presented in-person, synchronously, and asynchronously online, allowing students to choose how to engage (Beatty, 2019; Rahmawati et al., 2023).

Three principles support the significance of using ICT into the practice of education today. First, the extension of coverage and access to university education on an equal basis. Numerous educational institutions, such as Universitas Terbuka Indonesia (UT, meaning Indonesia Open University), employ online learning to assist the aim of the Indonesian government to increase access to education. Distance Education (PTJJ) was founded by a country such as the Indonesian Government in an effort to improve access to higher education or boost coverage. Second, it is anticipated that digital learning services with virtual learning modes would enable learners and lecturers to engage more freely and openly. Azhari and Fajri (2021) indicate that online learning enables distance instructors and students to simply and organically express their views, connect with others, investigate the topic at hand, and control the process of learning in a flexible manner.

The availability of online education has enabled some students to study according to their own talents and circumstances (Marlin et al., 2022; Utomo et al., 2020; Kuncayono, 2021). In the framework of the PTJJ, the situations and abilities of students are quite different, ranging from recent high school graduates to retirees and housewives. By uploading interactive introductory materials, online instructors are able to lead and monitor the learning process in a number of ways. The diversity of approaches motivates students, encourages them to share experiences directly relevant to the issue under discussion, and provides them with additional opportunity to voice their opinions. It becomes an important aspect in learning process that may ensure learning process becomes more productively.

Practitioners and researchers of learning at the university level now use the terminology of distant teaching university (DTU), distance higher education (DHE), and open university (OU) interchangeably the most often. The establishment of the British Open University (BOU) or the Open University of the United Kingdom (UKOU) in 1969 is seen as a turning point for university-level distant education. The use of computer-mediated communication (CMC) has facilitated the expansion and growth of remote education (Gaba & Li, 2015). Rusnak and Vasylyk (2021) and Trentin (2014) affirmed that the development of ICT creates new opportunities for learners' learning management in regards to time, speed, and location through online learning. In distance learning, paper-based and correspondence studies have been replaced with web-based teaching that enables learning transactions to be weaved into virtual educational environments (Müller & Mildenerger, 2021).

In many educational institutions in the level of elementary schools, secondary schools, and universities, some elements of blended learning are being implemented widely post Covid -19 (Feitosa de Moura et al., 2021; Garad et al., 2021). In Universitas Terbuka (UT), for example, the use of the Virtual Learning Environment in the e-learning website is provided to allow students to access learning materials, give their opinion in the discussion forum, complete virtual quizzes, and/or submit assignment. In addition,

lesson recordings have also been made accessible online to enhance synchronous course delivery and provide students with a review resource.

Many scholars argue that the incorporation of technology into the learning process is essential for creating enjoyable, experience-based, effective, and interactive learning (Aghaei et al., 2020; Anthony et al., 2022; Müller & Mildenerger, 2021). Hence, the advent of technology in education is not meant to eradicate the essence of education, but rather to supplement traditional learning techniques (Ardiasih et al., 2021; Suardi & Pratiwi, 2022). Blended learning includes learning in a particular setting, contact with teachers and instructional material, and student cooperation. This learning is realized by integrating offline and online learning, simultaneously developing computer skills and social skills, and combining experimental and conceptual concepts (Abdul Kohar et al., 2022; Malasari et al., 2021). Nonetheless, many educators and educational institutions still face obstacles in adopting blended learning effectively. They include a demand for technology that exceeds supply, the necessity for a consistent supply of instructors and pupils, and the absence of technical assistance (Anthony et al., 2022; Mahalli et al., 2020). In implementing blended learning, self-awareness, technical literacy and competency, and ineffectiveness of technology continue to be challenges for many educators. The emergence of blended learning demonstrates that technology has become an absolute need in the sphere of education. While this type of instruction still confronts a number of obstacles, all educators may profit from it. It remains to be fulfilled via advancing education and learning through partnership (Anthony et al., 2022; Rusnak & Vasylyk, 2021).

While research about blended learning in educational institutions is emerging, research on the challenges and strategies that Indonesian teachers faced and implemented in relation to blended learning is especially scarce. How and why educators balance online and traditional classroom elements is mostly absent (Sunubi & Bachtiar, 2022; Torris-Steele & Drew, 2013). The inability of blended learning to realize its promised potential may be partially explained by a greater understanding of what educators do when compelled to include online components into their classrooms. Only by comprehending the existing practice will help us to plan for its modification. Furthermore, the impact of learning process that students experience during studying in the graduate program of UT has not been observed systematically. The current research adds to the scarce literature of the impact of learning process in the Master of Elementary Education Universitas Terbuka on teachers' competence, especially digital literacy. In addition, the effectiveness of student-teachers' involvement and active participation in the Master of Elementary Education Universitas Terbuka were assessed toward their capability in implementing blended learning in their teaching practice. Our study aims to find out teachers' worth experiences in online learning during Covid -19, the benefits of teachers' involvement in the Master of Elementary Education Universitas Terbuka learning activities, and teacher's conceptions of the worth of implementing blended learning in their current teaching practice.

## METHOD

Mixed Methods Research (MMR) was employed in this current study. The students-teachers from Master of Elementary Education (MEE) of Universitas Terbuka (UT) Indonesia were involved in the current research. The study program was purposefully chosen because it was expected to be information-rich (Bachtiar, 2022b).

There were two phases in collecting data (data gathering tools), namely questionnaire distribution and semi-structured interviews by involving 20 participants who took part in the questionnaire, and four of the participants were involved in the semi-structured interviewed. The two data sources contributed to triangulation, which enhanced the reliability and validity of the research (Lemon & Hayes, 2020; Moon, 2019).

The questionnaire for this research was divided into two parts. Part A (demographic data) was utilized to collect demographic information from participants. Part B consisted of 10 (ten) questions that covered two aspects: the UT learning process and the implementation of blended learning. Table 1 presents every item of the questionnaire in further depth. Prior to distribution to study participants, the questionnaire was administered to four nonparticipants for pilot testing.

**Table 1. Statements of questionnaire items**

Aspects	Questionnaire items
Learning process in UT	<ol style="list-style-type: none"><li>1. Learning approach/strategy in graduate program of UT has increased student-teachers' understanding of technological integration in learning</li><li>2. The Graduate Program of UT provides sufficient learning resources for student-teachers</li><li>3. The tutors of graduate program of UT use technological tools, such as Mentimeter, paddle, google slides in online learning process</li><li>4. I have improved my teaching strategy since taking graduate study in UT</li><li>5. Learning tutorial at Graduate Program of UT encourages student-teachers to share knowledge and collaborate each other</li></ol>
Blended learning	<ol style="list-style-type: none"><li>6. There is a need for teachers to implement a blended learning as an emerging teaching approach post Covid -19</li><li>7. I perform better with blended learning</li><li>8. Blended learning is more tedious</li><li>9. I am in favor of blended learning next semester</li><li>10. I hope to have more training on how to implement blended learning effectively</li></ol>

The questionnaire was self-administered to the participants using the Google Form, and the participants were asked to return it within two weeks. Taking into consideration how often they check their email and/or WhatsApp, the link to the questionnaire was sent with all of the participants by email and/or WhatsApp. The questionnaires were given out to a total of 25 MEE UT student-teachers who are now enrolled in the education graduate program. Twenty out of twenty-five questionnaires that were sent out were filled in completely and returned, which was an 80% response rate.

Semi-structured interviews were the second research tool used for this current study. In the context of the present research, semi-structured interviews have been done to gain more specific information and to consolidate the data obtained through questionnaires. Four student-teachers from the study programs were asked to participate in the interview. The purpose of selecting these four participants was to get a diversity of viewpoints (Bachtiar, 2022c) about their experiences in attending graduate program

classes. The researcher did the semi-structured interviews using WhatsApp Calls and Microsoft Teams in accordance with the interview standards. The interview questions addressed two facets of the UT learning process and blended learning. Example of interview questions included: “*Did the learning process in the graduate program of UT help you enhance your technological literacy?*”; and “*What do think of the benefit of implementing blended learning in your current learning process?*” All the participants were interviewed in Bahasa (Indonesian language) which lasted in approximately 30 minutes.

The sequence code reference used for quotations in the report of the interview findings identifies the data source. The reference quotations of "IT" at the beginning of coding reference for the interview data refers to the interview transcript. Participants' pseudonym names were then placed after this by being replaced with numbers. IT. T. 2 would, for instance, indicate to the interview with teacher 2. Statistical Package for the Social Sciences (SPSS) was used to analyzed the questionnaire's quantitative data. The participant data was reported using descriptive statistics, including means and standard deviations. The interview was subjected to theme analysis to extract qualitative information. For the data analysis techniques, the researcher used Widodo's (2014) framework. The initial step was getting acquainted with the interview data by carefully listening to the recorded data, transcribed verbal data, and read and re-read each transcription. The data was then methodically coded, with a place for transcription symbols, all pertinent information was categorized, and the data was presented in a readable format for easy interpretation. The following phase involved analyzing and conveying interview data. To guarantee the correctness of the data, the researcher then gave the participants the chance to either affirm or refute.

## RESULTS AND DISCUSSION

This section presents and discusses significant propositions emerging from the findings. There were three key themes emerged: (1) the participants' conceptions of the worth lesson they learned from online teaching and learning during pandemic Covid -19; (2) the benefits of the teachers' involvement in the Master of Elementary Education Universitas Terbuka; and (3) the participants' viewpoints of the worth of implementing blended learning as one of the emerging learning approaches. Below is the discussion for each of the themes.

### The Worth Experiences in Implementing Online Learning during Covid -19

Three of the student-teachers interviewed said that many educators, as well as their students, were unprepared to transition from a traditional learning mode to a completely online learning environment at the outset of the implementation of virtual learning. A lack of technical experience regarding digital learning platforms, technology devices (smartphones, laptops, etc.) for online classes, quotas, and internet access were among the factors affecting their preparation. In addition, the majority of their pupils were unprepared for the dramatic transformation in the manner that learning and teaching were conducted. The current study's findings corroborate those of prior research (Bachtiar, 2022b; Lalima & Lata Dangwal, 2017), which found that a quick transition in the manner in which learning is given does not afford educational institutions and students the opportunity to adapt. The sudden change from conventional face-to-face education to online learning left many instructors and students unprepared for web-based training.

Face-to-face learning gives direct social engagement in the classroom in addition to human psychological connections throughout classroom activities, but online learning does not (Bachtiar, 2022a, 2022c; Shand & Farrelly, 2018).

Despite the fact that many teachers initially lacked preparation for virtual learning, all participants in the interviews reported that they had to conduct online learning regularly and actively in order to convince their students to learn and acquire new information in such a challenging environment. Three of the participants said that a large number of their students enrolled in the online course owing to the new information and experience they gained in terms of learning strategy and technique, and also the classroom atmosphere. The following extracts are representative of the participants' remarks.

In the early stage of Covid -19, many educators were irritated by their duty to undertake virtual learning processes. Some of them had never engaged in online learning before, which was the primary source of their frustration and lack of motivation. Internet connectivity and online learning gadgets (such as laptops and mobile phones) were obstacles for many of us. The learning process was conducted electronically via the use of online resources such as Learning Management Systems (LMS), which was a fascinating experience. Thanks to the new learning approach, we have gained new information and skills and keep up with advances in the sphere of education. Therefore, despite several limits, we get invaluable knowledge and experience (Int.T.3).

Another noteworthy outcome of this research is that the rapid shift in the learning paradigm had an influence on instructors' preparation as well as their students' desire for learning. Four respondents gave evidence to support the hypothesis that too many students initially lacked motivation and were somewhat irritated while attending web-based classes. A number of factors contributed to the unfavorable attitude of the students, including a lack of understanding of the digital learning system, a lack of communication between pupils and teachers, the unpredictability of online access, and the high cost of internet quotas. Teachers and students gained proficiency with virtual learning models and media over time, which increased their motivation. Due to the technical skills that both instructors and students have gained, online learning is seen as entertaining and beneficial by the participants. Students' enthusiasm to study has improved as a result of their teachers' innovative usage of online platforms in online education. The participants claimed that their knowledge and skill with these new digital platforms are crucial for supporting their everyday activities, especially while teaching in the present technology age.

A further noteworthy outcome of this research is that the rapid shift in the learning paradigm had an effect on both instructors' preparation and their students' willingness to learn. Four respondents offered evidence to support the argument that initially, many students were uninterested and hostile toward attending web-based learning courses. Lack of awareness of the digital learning system, lack of communication between students and instructors, unpredictability of online access, and the high cost of internet quotas all contributed to the unfavorable attitude of the students. The results of the present study corroborate the findings of earlier research indicating that many students had difficulty gaining internet connection during the Covid -19 epidemic (Arifin et al., 2022; Cahyani et al., 2020; Putria et al., 2020). According to Cahyani et al (2020), the use of a poor internet connection to engage in online learning irritates students and reduces their willingness to study. Therefore, a dependable internet connection is essential for efficient online education (Putria et al., 2020). The results are bolstered by Linjawi and Alfadda

(2018), who state that stable internet connectivity is vital for the successful adoption of e-learning.

Intriguingly, four of the participants said that both themselves and their pupils had acquired new knowledge via online learning. Three of the participants saw the covid -19 epidemic as a gift in disguise due to the fact that the majority of instructors, as well as their pupils, had a greater awareness of technological literacy, particularly the integration of technology into teaching and learning methods. According to them, the majority of instructors are already acquainted with and able to use online tools such as Zoom, Microsoft Teams, and Google Classroom. Some of them are also acquainted with Mentimeter, Paddle, Google Slides, and Quizzes as additional online learning tools to boost academic accomplishment. Everyone agreed that virtual learning had boosted their technical expertise. Their enthusiasm and positive attitude toward online learning were affected by their improved technical abilities. The results of Bhuvanewari and Dharanipriya's (2020) research indicate that when instructors and/or students have confidence in their own ability to utilize technological devices, they get positive effect from it and have a positive attitude related to computer-assisted education and a moderate to positive attitude about e-learning. The capability of students to use technology is also a major element influencing their views of the educational process (Indriani & Widiastuti, 2021). The more students' enthusiasm for online learning, the greater their technological proficiency. Their attitudes throughout the online learning sessions affected their involvement in learning (Bachtiar, 2022b; Nurani & Widiati, 2021).

### **Benefits of the Teachers' Involvement in the Learning Activities in the Master of Elementary Education Universitas Terbuka**

Integrating technology in teaching and learning process requires teachers' expertise. To utilize technology's role to bring about classrooms inclusive, attractive, and engaging, educators should have the appropriate competence and skills. Three of the participants in the interviews stressed of the importance of using technology devices that may alter learning environments, making it more interactive, student-centered, and tailored to each student's learning preferences. According to the participants, using technology during whole-class instruction can increase student engagement for auditory and visual learners. Table 2 provides the participants' perceptions of learning process in UT based on the questionnaire items.

Table 2 shows that most of the participants felt "to a great extent" for the item 2 (the Postgraduate Program UT provides sufficient learning resources for student-teachers = 56.7%) and item 4 (I have improved my teaching strategy since taking graduate study in UT = 53.3 %). Generally, technological knowledge and learning experiences the participants have been experiencing during studying in the postgraduate program UT benefitted them a lot. Analysis of the interview results showed that participants' perceptions of the role of technology in teaching shifted substantially towards a positive perspective or were strengthened when teachers and students already perceived technology as an important for teaching and learning. Another insight is that the respondents stated that breakthroughs in integrating digital in teaching provided them a brand-new appreciation for educational technology and/or widen their minds to understand how valuable (integration) technology can be in learning.



**Table 2.** The participants' conceptions of learning experiences in MEE

No	Items	Not at All		Somewhat		50%		To a large Degree		To a Great Extent	
		N	%	N	%	N	%	N	%	N	%
1.	Learning approach/strategy in graduate program of UT has increased student-teachers' understanding of technological integration in learning	0	0	0	0	3	10	13	43.3	14	46.7
2.	The Graduate Program of 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 program of 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.	I have improved my teaching strategy since taking graduate study in UT	0	0	0	0	2	6.7	12	40	16	53.3
5.	Learning tutorial at Graduate Program of UT encourages student-teachers to share knowledge and collaborate each other	0	0	0	0	2	6.7	16	53.3	12	40

Based on Table 2 they informed feeling of much more engaged in teaching and this encourages them (teachers) to fit in technology and articulated an intention to practice technology in further ways than estimated because of this experience. Most of the respondents declared of their future planning to put technology integration in their learning design (lesson plan). The current study findings extended prior studies that modern educational technology can enhance teachers' interaction, encourage student interest, and liven up classrooms through sharing online schedules and incorporating digital information into classes (Hall & Trespalacios, 2019; Kanwar et al., 2020; Kara, 2021). Our findings also support of the role and function of technology that enables expansion of coverage and equitable access to higher education. Some previous findings (Dziuban et al., 2018; Mailizar et al., 2021; Vallee et al., 2020) that virtual learning can provide more students with learning experiences to fulfill the demands of massive education demand. Using distance classes as its primary form of instruction, PTJJ can serve a greater and more equally dispersed number of learners than UT Indonesia, which now serves over 340,000 students.

Regarding the digitized educational facilities in virtual learning modes to allow for more open and unrestricted interaction between students and instructors/lecturers, all the participants in the interviews informed that they have been experiencing good interactions with all tutors and other student-teachers in the distance learning mode implemented by the postgraduate program UT, despite the limited number of synchronous (face to face) meetings. Therefore, despite the less time to communicate directly both with the tutors and classmates, the participants felt that the distance learning mode gave them worth experiences and invaluable skills on technological knowledge (TK), especially how to handle the virtual learning and what aspects that need to put in the online learning system. The research findings are consistent with earlier research (Aditama & Pratiwi, 2021; Gess-Newsome et al., 2019). In addition, Kind and Chan (2019) emphasize how important teachers/instructors to be knowledgeable in the subjects they teach. However, as Kind and Chan point out, simply being knowledgeable about a subject may not be

enough to effectively teach without being familiar with the instructional techniques. The results of this study concur with those of Aditama and Pratiwi (2021), an Indonesian researcher, who discovered that teachers desired to be experts in their fields and to be able to impart their expertise to students.

### The Worth of Implementing Blended Learning in Teachers' Current Teaching Practice

In Indonesian context, many teachers perceived the emerge of Covid -19 as a blessing in disguise in which most of teachers were obliged to implement online learning and forced to adjust their instructional learning approaches and strategies. The perceived advantages and disadvantages of both modalities impact instructors' decisions about the usage of virtual or classroom components. All respondents agreed that both in-person and online training are beneficial to learning. The limitations of time and classroom space will not apply to the online repository environment. It is also regarded as an effective tool for swiftly contacting each pupil. One participant said, "The beauty of online mode is that you can upload content that students may view at any time." Teachers may rapidly provide announcements and/or instructional materials to students (Int. T. 2). As a consequence, participants referred to instructors who oppose the online method as "old fashioned" which was often used to begin a statement about the participants' preference for classroom training. The survey findings validated the participants' perceptions and preferences about blended learning (see Table 3).

**Table 3.** The respondents' conceptions of blended learning implementation

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	1	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	1	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	1	56.7

The majority of respondents responded "to a great degree" for items 5 (I hope to have more training on how to implement blended learning effectively = 56.7%) and 4 (I am in favor of blended learning next semester = 53.3%). Intriguingly, the majority of respondents felt "not at all" for item 3 (Blended learning is more tedious = 53.3) This suggests that blended learning is a method of education that has the ability to make learning pleasurable, student-centered, and enjoyable, as well as increase learning effectiveness. The interviewees commented on the adoption of blended learning by indicating that an online component may enrich the classroom, but that there are disadvantages. The following quote represents the thoughts of the participants.

I find internet learning resources and/or information to be beneficial. However, I believe it should be tailored to the circumstances in which it may be performed. Online education cannot yet replace classroom interaction and student debate, in my opinion. I agree that extra information and learning resources that are offered online, including connections to further reading, would be extremely valuable. I believe it is wonderful, but it cannot replace the traditional classroom learning experience. I am not prepared to accept that computer-based learning and interaction replaces classroom materials when it improves learning (Int. T.1).

The participants, however, stressed the importance of having the freedom to employ online components to build a range of learning styles and tactics. They argued that students who are afraid to ask questions may find the speed of regular lectures to be excessively fast. Moreover, not every subject may be thoroughly explored in class. Notably, participants said that the learning strategy and approach at UT often use blended learning as the instructional technique. They provided an illustration of the UT graduate program's learning process, which included the adoption of asynchronous discussion forums and synchronous face-to-face tutorial webinars. This study's results corroborate the findings of a number of other investigations into student satisfaction with blended learning. The results of a previous research support the assumption that blended learning is more enjoyable for students than conventional lecture-based learning and wholly online training (Feitosa de Moura et al., 2021; Sunubi & Bachtiar, 2022; Wang, 2021). Notably, participants said that the learning strategy and approach at UT often use blended learning as the instructional technique. They provided an example of the UT graduate program's learning process, which included the establishment of a discussion forum asynchronously and a synchronous face-to-face teaching webinar.

Intriguingly, four respondents stressed the efficacy of blended learning, which provides students with a greater diversity of learning-improving elements than are feasible with online or traditional modalities alone. They reported that the hybrid approach improved pupils' technological literacy knowledge. They emphasized that blended instruction allows them to employ an approach to learning that is more engaging to students of this age. Despite the advantages of blended learning, the participants also suggested certain considerations to be made. These components include the preparation of instructors and students in terms of skills and technological gadgets, as well as the assistance of educational institutions. They said that adopting virtual learning for teaching activities would be useless if two things were not taken into account: the extra time necessary for networked learning and the period of adjustment for people inexperienced with e-learning. Teachers are less likely to create a successful blended learning setting if they are unaware of the benefits of online education.

In order to achieve their pedagogical goals, educators must also demonstrate their own abilities in blended learning classroom designs (Bouilheres et al., 2020; Malasari et al., 2021). The results complement the conclusions of Feitosa de Moura et al.'s (2021) research, which demonstrated that a mixed environment might give experiences not accessible in non-blended contexts and that the nature of these unique experiences promotes learning. Similarly, Bouilheres et al. (2020) and Cleveland-Innes et al. (2009) discovered that the usage of Web sources and other Internet devices in education has increased in recent years. Blended learning, a combination of the virtual learning mode and traditional classroom setting, is gaining importance in this trend. This is also consistent with the prevalence of blended learning post-Covid-19, sometimes known as

the "new normal" in higher education instruction (Anthony et al., 2022; Cronje, 2020). Particularly in this technologically driven learning style, educational institutions see blended learning environments that include physical and computer-generated components as essential approaches (Kumar et al., 2021; Rachman et al., 2021).

## CONCLUSION

The learning process in Master of Elementary Education (MEE) of Universitas Terbuka (UT) has a substantial impact on student-teachers' competencies, especially their pedagogical knowledge, content knowledge, and technological competence. The results of the study suggest that student-teachers' involvement in MEE UT learning process and PLC activities most likely has a favorable effect on their ability to fit in technology in students' learning processes. PLCs are also thought to be essential for raising educational standards. In addition, a significant trend in the modern education industry is the growth of blended learning. The increasing number of research demonstrating the superiority of a blended approach to an online or classroom-only approach is fueling this trend. However, if educators do not alter their attitudes and behaviors to create blended learning experiences, they may have lack of understanding in optimizing blended learning modes and would limit the potential of maximizing its benefits. Most of the time, educators did not fully take use of the potential provided by online settings or combine the two methods to make their teaching materials cohesive for their learners.

Future study might benefit from a more in-depth analysis of the particular factors that contribute to the connection between learning strategy, educators' technological competences, and student's learning success. Incorporating qualitative data, such as interviews, may help the questionnaire findings achieve more depth and clarity. Future studies may also examine the impact of educators' technological skills and blended learning on students' academic improvement. These recommendations would advance understanding of the impacts of educational techniques and strategies, and technology literacy beyond the ability to identify substantial change.

## REFERENCES

- Abdul Kohar, D., Saehu, A., & Sri Ardiasih, L. (2022). Strengthening reading comprehension and interest through SQ3R strategy using Whatsapp during pandemic. *Indonesian EFL Journal*, 8(2), 165–176. <https://doi.org/10.25134/ieflj.v8i2.6440>
- Aditama, V., & Pratiwi, D. R. (2021). Integrasi Technological Pedagogical Content Knowledge (TPACK) dalam Perangkat Pembelajaran Daring Guru Bahasa Indonesia (The Integration of Technological Pedagogical Content Knowledge into Online Learning Plan of Indonesian Language Subject). *Basastra*, 10(2). <https://doi.org/10.24114/bss.v10i2.26621>
- Aghaei, K., Rajabi, M., Lie, K. Y., & Ajam, F. (2020). Flipped learning as situated practice: A contrastive narrative inquiry in an EFL classroom. *Education and Information Technologies*, 25(3). <https://doi.org/10.1007/s10639-019-10039-9>
- Anthony, B., Kamaludin, A., Romli, A., Raffei, A. F. M., Phon, D. N. A. L. E., Abdullah, A., & Ming, G. L. (2022). Blended Learning Adoption and Implementation in Higher Education: A Theoretical and Systematic Review. *Technology, Knowledge and Learning*, 27(2). <https://doi.org/10.1007/s10758-020-09477-z>

- Ardiasih, L. S., Yundayani, A., & Juhana, J. (2021). Teachers' Readiness to Online Learning: A Pedagogical Perspective. *ASEAN Journal of Open and Distance Learning*, 4(2), 105–117. <https://doi.org/https://doi.org/10.1007/s10639-022-10336-7>
- Arifin, B., Nuro, F. R. M., Muzakki, A., & Riska, L. I. (2022). Implementasi Pembelajaran PJOK Pada Masa Pandemi Covid-19 di Sekolah Dasar. *JP2SD (Jurnal Pemikiran Dan Pengembangan Sekolah Dasar)*, 10(1), 104–111.
- Azhari, B., & Fajri, I. (2021). Distance learning during the COVID-19 pandemic: School closure in Indonesia. *International Journal of Mathematical Education in Science and Technology*. <https://doi.org/10.1080/0020739X.2021.1875072>
- Bachtiar, B. (2022a). Tantangan dan Strategi Penerapan Berpikir Kritis pada Pembelajaran Online: Kajian Pustaka (Challenges and Strategies in the Implementation of Critical Thinking in Online Learning: A Literature Review). *Jurnal Pemikiran Dan Pengembangan Sekolah Dasar (JP2SD)*, 10(2), 145–159. <https://doi.org/https://doi.org/10.22219/jp2sd.v10i2.22308>
- Bachtiar, B. (2022b). Indonesian High School Students' Readiness and Attitude toward Online Learning: A Mixed Method Study. *EDUKATIF: Jurnal Ilmu Pendidikan*, 4(3), 3289–3300. <https://doi.org/10.31004/edukatif.v4i3.2678>
- Bachtiar, B. (2022c). The Interplay between Online Learning and Students' Learning Motivation: A Mixed Method Study. *Jurnal Basicedu*, 6(3), 4701–4711. <https://doi.org/10.31004/basicedu.v6i3.2902>
- Bashir, A., Bashir, S., Rana, K., Lambert, P., & Vernallis, A. (2021). Post-COVID-19 Adaptations; the Shifts Towards Online Learning, Hybrid Course Delivery and the Implications for Biosciences Courses in the Higher Education Setting. *Frontiers in Education*, 6. <https://doi.org/10.3389/educ.2021.711619>
- Beatty, B. J. (2019). Hybrid-Flexible Course Design Teaching a Hybrid-Flexible Course The Faculty Experience in HyFlex Managing a Multi-Modal Learning Environment. *Hybrid-Flexible Course Design*.
- Bouilheres, F., Le, L. T. V. H., McDonald, S., Nkhoma, C., & Jandug-Montera, L. (2020). Defining student learning experience through blended learning. *Education and Information Technologies*, 25(4). <https://doi.org/10.1007/s10639-020-10100-y>
- Buheji, M., da Costa Cunha, K., Beka, G., Mavrić, B., Leandro do Carmo de Souza, Y., Souza da Costa Silva, S., Hanafi, M., & Chetia Yein, T. (2020). The Extent of COVID-19 Pandemic Socio-Economic Impact on Global Poverty. A Global Integrative Multidisciplinary Review. *American Journal of Economics*, 10(4). <https://doi.org/10.5923/j.economics.20201004.02>
- Cahyani, A., Diah Listiana, I., Puteri, S., & Larasati, D. (2020). Motivasi Belajar Siswa SMA pada Pembelajaran Daring di Masa Pandemi Covid-19. *IQ (Ilmu Al-Qur'an): Jurnal Pendidikan Islam*, 3(01), 123–140. <https://doi.org/10.37542/IQ.V3I01.57>
- Cleveland-Innes, M., Garrison, R., & Kinsel, E. (2009). The role of learner in an online community of inquiry: Responding to the challenges of first-time online learners. In *Solutions and Innovations in Web-Based Technologies for Augmented Learning*:

- Improved Platforms, Tools, and Applications* (pp. 1–14). IGI Global.  
<https://doi.org/10.4018/978-1-60566-238-1.ch001>
- Cronje, J. C. (2020). Towards a new definition of blended learning. *Electronic Journal of E-Learning*, 18(2), 43–56. <https://doi.org/10.34190/EJEL.20.18.2.001>
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(1). <https://doi.org/10.1186/s41239-017-0087-5>
- Feitosa de Moura, V., Alexandre de Souza, C., & Noronha Viana, A. B. (2021). The use of Massive Open Online Courses (MOOCs) in blended learning courses and the functional value perceived by students. *Computers and Education*, 3(2), 124–138. <https://doi.org/10.1016/j.compedu.2020.104077>
- Gaba, A. K., & Li, W. (2015). Growth and development of distance education in India and China: a study on policy perspectives. *Open Praxis*, 7(4). <https://doi.org/10.5944/openpraxis.7.4.248>
- Garad, A., Al-Ansi, A. M., & Qamari, I. N. (2021). The role of e-learning infrastructure and cognitive competence in distance learning effectiveness during the covid-19 pandemic. *Cakrawala Pendidikan*, 40(1). <https://doi.org/10.21831/cp.v40i1.33474>
- Gess-Newsome, J., Taylor, J. A., Carlson, J., Gardner, A. L., Wilson, C. D., & Stuhlsatz, M. A. M. (2019). Teacher pedagogical content knowledge, practice, and student achievement †. *International Journal of Science Education*, 41(7). <https://doi.org/10.1080/09500693.2016.1265158>
- Hall, A. B., & Trespalacios, J. (2019). Personalized Professional Learning and Teacher Self-Efficacy for Integrating Technology in K–12 Classrooms. *Journal of Digital Learning in Teacher Education*, 35(4). <https://doi.org/10.1080/21532974.2019.1647579>
- Indriani, K. S., & Widiastuti, N. M. A. (2021). Students' Attitude Towards English Online Learning Through Moodle During the Covid-19 Pandemic. *Celtic: A Journal of Culture*, 8(2), 190–205. <https://doi.org/10.22219/celtic.v8i2.18174>
- Kanwar, A. S., Carr, A., Ortlieb, K., & Mohee, R. (2020). Opportunities and challenges for campus-based universities in Africa to translate into dual-mode delivery. In *Exploring Dual and Mixed Mode Provision of Distance Education*. <https://doi.org/10.4324/9780429287473-2>
- Kara, M. (2021). Transactional distance and learner outcomes in an online EFL context. *Open Learning*, 36(1). <https://doi.org/10.1080/02680513.2020.1717454>
- Kind, V., & Chan, K. K. H. (2019). Resolving the amalgam: connecting pedagogical content knowledge, content knowledge and pedagogical knowledge. *International Journal of Science Education*, 41(7). <https://doi.org/10.1080/09500693.2019.1584931>
- Kumar, A., Krishnamurthi, R., Bhatia, S., Kaushik, K., Ahuja, N. J., Nayyar, A., & Masud, M. (2021). Blended Learning Tools and Practices: A Comprehensive Analysis. *IEEE Access*, 9. <https://doi.org/10.1109/ACCESS.2021.3085844>
- Kuncahyono. (2021). Guru Profesional: Pola Transformasi Implementasi Pembelajaran

Online di Sekolah Dasar. *Jurnal Pemikiran Dan Pengembangan Sekolah Dasar (JP2SD)*, 9(1), 66–73.

- Lalima, Dr., & Lata Dangwal, K. (2017). Blended Learning: An Innovative Approach. *Universal Journal of Educational Research*, 5(1), 129–136. <https://doi.org/10.13189/ujer.2017.050116>
- Lemon, L. L., & Hayes, J. (2020). Enhancing trustworthiness of qualitative findings: Using leximancer for qualitative data analysis triangulation. *Qualitative Report*, 25(3). <https://doi.org/10.46743/2160-3715/2020.4222>
- Linjawi, A. I., & Alfadda, L. S. (2018). Students' perception, attitudes, and readiness toward online learning in dental education in Saudi Arabia: a cohort study. *Advances in Medical Education and Practice*, 9(2), 863. <https://doi.org/10.2147/AMEP.S175395>
- Mahalli, Nurkamto, J., Mujiyanto, J., & Yuliasri, I. (2020). Students' perception of blended learning implementation in EFL learning. *International Journal of Innovation, Creativity and Change*, 11(8).
- Mailizar, M., Hidayat, M., & Al-Manthari, A. (2021). Examining the impact of mathematics teachers' TPACK on their acceptance of online professional development. *Journal of Digital Learning in Teacher Education*, 37(3). <https://doi.org/10.1080/21532974.2021.1934613>
- Malasari, S., Kurniawati, L. A., & Martanti, I. F. R. (2021). Students' Perceptions on the Implementation of Blended Learning in English for Mathematics. *Metathesis: Journal of English Language, Literature, and Teaching*, 4(3). <https://doi.org/10.31002/metathesis.v4i3.3314>
- Marlin, Saehu, A., & Yundayani, A. (2022). Investigating Students' Language Learning Strategies during Online Learning: How They Deal with Speaking Ability. *JEELS (Journal of English Education and Linguistics Studies)*, 8(2), 229–261.
- Moon, M. D. (2019). Triangulation: A Method to Increase Validity, Reliability, and Legitimation in Clinical Research. *Journal of Emergency Nursing*, 45(1). <https://doi.org/10.1016/j.jen.2018.11.004>
- Müller, C., & Mildenerger, T. (2021). Facilitating flexible learning by replacing classroom time with an online learning environment: A systematic review of blended learning in higher education. In *Educational Research Review* (Vol. 34). <https://doi.org/10.1016/j.edurev.2021.100394>
- Nurani, S. G., & Widiati, U. (2021). Students' Perceptions about the Online Listening Courses during the Covid-19 Pandemic. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, 8(1), 126–139. <https://doi.org/10.22219/celtic.v8i1.16607>
- Purnama Sari, R., & Dahniyal, I. (2022). Impact of Massive Open Online Course (MOOC) as Best Practice in Indonesia Medan Marelan District Elementary School. *JP2SD (Jurnal Pemikiran Dan Pengembangan Sekolah Dasar)*, 10(2), 122–133. <https://doi.org/10.22219/jp2sd.v10i2.20379>

- Putria, H., Maula, L. H., & Uswatun, D. A. (2020). Analisis Proses Pembelajaran dalam Jaringan (DARING) Masa Pandemi Covid- 19 Pada Guru Sekolah Dasar. *Jurnal Basicedu*, 4(4), 861–870. <https://doi.org/10.31004/BASICEDU.V4I4.460>
- Rachman, L. A., Sudiyono, S., & Phonix, E. (2021). The Blended Learning Implementation of ELT Based on Teachers and Students' Perspective in New Normal Condition of Covid -19. *PROJECT (Professional Journal of English Education)*, 4(3). <https://doi.org/10.22460/project.v4i3.p457-468>
- Rahmawati, L., Ruminda, & Juhana. (2023). Empowering Students' Integrated Language Skills Through the Use of Teachers' Learning Videos in Blended Learning Class. *Indonesian EFL Journal*, 9(1), 53. <https://doi.org/10.25134/ieflj.v9i1.7577>
- Rusnak, I., & Vasylyk, M. (2021). Modern Technological Approaches in English Teaching of Future Teachers-Philologists at Ukrainian Universities. *Studia Gdańskie. Wzje i Rzeczywistość*, XVII. <https://doi.org/10.5604/01.3001.0014.9109>
- Shand, K., & Farrelly, S. G. (2018). The art of blending: Benefits and challenges of a blended course for preservice teachers. *Journal of Educators Online*, 15(1). <https://doi.org/10.9743/JEO2018.15.1.10>
- Srivara Buddhi Bhuaneswari, S., & Dharanipriya, A. (2020). Attitude of Ug Students Towards E-Learning. *International Journal of Humanities and Social Sciences*, 9(2), 35–40.
- Suardi, S., & Pratiwi, W. R. (2022). WhatsApp Group-Based English School in Covid-19 Pandemic. *Lentera Pendidikan : Jurnal Ilmu Tarbiyah Dan Keguruan*, 25(1), 102–115. <https://doi.org/10.24252/lp.2022v25n1i9>
- Sunubi, A. H., & Bachtiar, B. (2022). Blended Learning Method in Enhancing Students' Critical Thinking Skills: Challenges and Opportunities. *AL-ISHLAH: Jurnal Pendidikan*, 14(4), 6817–6824. <https://doi.org/10.35445/alishlah.v14i4.2163>
- Torrise-Steele, G., & Drew, S. (2013). The literature landscape of blended learning in higher education: the need for better understanding of academic blended practice. *International Journal for Academic Development*, 18(4). <https://doi.org/10.1080/1360144X.2013.786720>
- Trentin, G. (2014). Networked collaborative learning in the study of modern history and literature. *Computers and the Humanities*, 38(3). <https://doi.org/10.1007/s10579-004-1110-8>
- Utomo, M. N. Y., Sudaryanto, M., & Saddhono, K. (2020). Tools and Strategy for Distance Learning to Respond COVID-19 Pandemic in Indonesia. *Ingenierie Des Systemes d'Information*, 25(3). <https://doi.org/10.18280/isi.250314>
- Vallee, A., Blacher, J., Cariou, A., & Sorbets, E. (2020). Blended learning compared to traditional learning in medical education: Systematic review and meta-analysis. In *Journal of Medical Internet Research* (Vol. 22, Issue 8). <https://doi.org/10.2196/16504>
- Wang, C. (2021). Employing blended learning to enhance learners' English conversation: A preliminary study of teaching with Hitutor. *Education and Information Technologies*, 26(2). <https://doi.org/10.1007/s10639-020-10363-5>



Widodo, H. P. (2014). Methodological consideration in interview data transcription. *International Journal of Innovation in English Language Teaching and Research*, 3(1). <https://doi.org/https://doi.org/10.18219/isi.250352>