Transitioning to Post-Pandemic Learning Modes: A Study On Teachers' Perspectives Regarding Technology Utilization

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Abstract

The Covid-19 pandemic has brought a major shift toward educational system in Indonesia. The face to face interaction in classroom was forced to change in online classroom. Despite some major challenges in adapting to the new situation during the pandemic, recent studies have shown that teachers are getting used to it. After approximately two years of adaption to online learning, as the government of Indonesia officially declares that social distancing and restrictions to people's activity is null and void. This means that teachers need to shift once again to offline instructional process. Even though the instructional process is shifting back, there is still unanswered questions regarding the readiness of the teacher to teach offline since many scholars state that it is impossible to leave the technology behind. This study employs a quantitative survey design to examine the readiness of teachers during the transition of learning process after pandemic from their perspective. There are 15 teachers involved in this study who have passed the criteria to be subjects of the study. The findings and discussion of this study is hoped to give contribution to the knowledge of continuous professional development, technological acceptance model, and technological and pedagogical content knowledge.

Keywords: Teachers Perception; Technological Acceptance Model; Continuous Professional Development

Introduction

The outbreak of the Covid-19 pandemic has had a profound impact on the education system in Indonesia, significantly altering the implementation of learning processes and access to quality education. Several studies (Martoredjo, 2020; Siahaan, 2020; Widagdo et al., 2020) have shed light on the effects of the pandemic on the quality of education. These effects include: (1) the closure of educational institutions as a preventive measure against the spread of the Covid-19 virus, enforced through the Government's implementation of the Restrictions on Community Activities (PPKM); (2) the transition from face-to-face instruction to online learning, as outlined in Permendikbud No.15 of 2020, which introduced emergency mode learning systems. This transition has disproportionately affected students from lower-income households who face greater challenges in accessing reliable internet connectivity, exacerbating educational inequalities; (3) Aldiyah (2021) and Dianasari et al. (2020) have also highlighted a significant decrease in student motivation due to the lack of direct interaction between students and teachers, which is crucial for effective learning; (4) Furthermore, many teachers have encountered difficulties in adapting to the sudden shift in the teaching and learning paradigm, resulting in unpreparedness for the new educational landscape.

Among the aforementioned impacts, the effect of the pandemic on teacher preparedness in the learning process has been particularly prominent (Holimi, 2021; Rushton et al., 2022). Indonesian teachers, who were accustomed to face-to-face instruction, were compelled to adapt to a new learning environment in 2020. Previous

studies (Hidayat et al., 2021; Răducu & Stănculescu, 2022; Truzoli et al., 2021) have identified both internal and external factors that contribute to teachers' lack of preparedness in adapting to these changes. Internal factors encompass the emotional state of teachers, as they must grapple with the risk of contracting the Covid-19 virus while ensuring the continuity of student learning. External factors primarily revolve around the absence of training for remote instruction. Consequently, a considerable number of teachers resorted to utilizing simple applications such as WhatsApp and Google Classroom during emergency situations. In the initial stages of the pandemic, teachers primarily relied on assigning tasks and sending voice recordings, which led to concerns regarding learning gaps (Pratiwi & Utama, 2020).

According to Batac et al. (2021), teachers face similar challenges as students when it comes to accessing information technology and the internet, which are essential for facilitating online learning. Additionally, the shift from face-to-face instruction to online modes does not alleviate teachers' administrative responsibilities. They are still required to conduct teaching activities, manage administrative tasks related to assessments, provide written feedback, and effectively respond to student inquiries.

However, over time, teachers are gradually becoming more prepared to navigate online learning environments. This preparedness is largely influenced by teachers' self-driven professional development through the utilization of technology (Shahroni et al., 2020). The readiness of teachers is manifested in the reduction of parental complaints, the availability of diverse alternative teaching channels, and government regulations that adapt to the evolving situation in managing the pandemic.

This situation makes the researcher to delve deeper into the factors that influence teachers' progress in adapting to distance learning. The initial observation was conducted at SMKN 1 Tampaksiring as vocational education is considered one of the sectors most affected by the shift to remote learning. Vocational education differs from general academic education, as it places a greater emphasis on practical experience rather than theoretical knowledge. Consequently, distance learning poses additional challenges, particularly since practical training cannot be easily conducted.

Based on preliminary observations and interviews with teachers of relevant subjects, several problems were identified that both teachers and students encountered during the Covid-19 pandemic. These include: (1) Changes in learning activities; (2) Dependence on internet connectivity for educational implementation; and (3) Difficulties faced by educators and students in adapting to technology mastery for learning purposes. To facilitate teachers' adaptation to online instruction, extensive training has been provided on the effective utilization of technology, designing online learning experiences, and fostering student engagement. Furthermore, teachers now have improved access to technology. Initial data from interviews also revealed a collaborative and supportive environment among teachers. Those who possess a better understanding of technology willingly assist their peers who may struggle with its implementation in the learning process.

Following a two-year period, the government lifted restrictions in various sectors through Minister of Home Affairs instructions number 50 and 51 of 2022. This removal of restrictions implies a return to pre-pandemic conditions and an expectation for normalcy. However, expecting teachers to immediately adapt to these changes is challenging. Technology has become ingrained in teachers' routines, and it is difficult to revert to previous practices even after the pandemic concludes (Goh & Sandars, 2020). The world, after all, cannot regress. It is crucial to recognize that technology has become an integral part of educators' lives and should be viewed as a complementary tool.

Given these circumstances, it is paramount to ascertain the level of teaching readiness from teachers' perspectives regarding the implementation of post-pandemic technology. This understanding is essential for continuous professional development among teachers and for assessing the extent to which technology is utilized in alignment with the principles of TPACK (Technological Pedagogical Content Knowledge).

Method

This study employs a quantitative research approach, utilizing a survey design to explore teacher readiness concerning their initial knowledge of face-to-face learning, online teaching skills, and preparedness to utilize technology in the post-pandemic era. The research sample consists of 15 participants who were selected through purposive sampling. The selected subjects must meet specific criteria, including being permanent teachers and having teaching experience spanning both the pre-pandemic and post-pandemic periods. Data collection will be conducted through the administration of questionnaires, which will be analyzed using a Likert scale consisting of five points. The questionnaire blueprint, encompassing the aforementioned aspects, is outlined as follows:

Table 1. Blueprint of Teacher Readiness in Transition Learning Mode Questionnaire

No	Aspects	Factor	Item
1	Face-to-face learning experiences before the pandemic and during the pandemic	External/Internal	1,2, 3,4, 10, 18
2	Post-pandemic learning readiness	Internal	5, 8, 9, 12, 13, 14, 15,16,17, 20
		External	6,7,11, 19,

If we examine Table 1 above, it can be observed that the factor of post-pandemic learning readiness pertaining to internal factors holds the largest proportion. This observation aligns with the principles of TPACK (Technological Pedagogical Content Knowledge) and TAM (Technology Acceptance Model), which emphasize the significance of internal readiness. Subsequently, this questionnaire blueprint is translated into items that possess both positive and negative indicators, thereby enhancing the instrument's validity. The rubric for the questionnaire in this study is presented as follows:

Table 2. Teacher Readiness Questionnaire in Teaching Mode Transition

No	Statement	SD	D	M	A	SA
1	I have good knowledge about offline learning before the pandemic					
2	I had good preparation in terms of using technology for learning before the pandemic					
3	I often attended training on teaching techniques using technology before the pandemic					
4	I always prepare learning modules, assessments before online learning begins					
5	I have good confidence in the learning transition process from online to offline					
6	The school helped me prepare to return to teaching offline					
7	I get help from colleagues to prepare for offline teaching					
8	Even though learning is back to face-to-face, I do not leave the use of technology					

9	I feel ready if I have to return to teaching offline because I'm used to it	
10	I feel offline learning before the pandemic was more effective	
11	I feel more prepared to teach offline armed with the knowledge of using technology that I got while learning online	
12	In post-pandemic offline learning, I use technology as a medium of communication	
13	In post-pandemic offline learning, I use technology as a learning interaction medium	
14	In post-pandemic offline learning, I use technology for media presentations	
15	In post-pandemic offline learning, I use technology as learning materials in class	
16	In post-pandemic offline learning, I use technology to assess student progress	
17	I seriously prepared for every stage needed to return to teaching offline	
18	I prepared learning equally well both online and offline before and during the pandemic	
19	I think the school has prepared classes and systems well to return to offline learning after the pandemic	
20	I feel that my long-term teaching experience has helped me become a person who is more prepared for any changes in learning modes	

The findings and data obtained in this study will be expressed using a percentage index, reflecting the level of readiness among teachers for the learning process. Subsequently, the perception index will be classified into distinct categories, including Bad, Below Average, Average, Good, and Very Good. These categories serve to provide a comprehensive assessment of teachers' readiness. It is noteworthy that the data collected in this study will be critically examined in relation to pertinent previous research findings and linked with relevant theoretical frameworks, thereby establishing a comprehensive understanding of the research domain. The categorization of the perception index is presented in table 3.

Tabel 3. Teacher Perception Index

Score	Category
80-100	Very Good
60-79	Good
40-59	Average
20-39	Below Average
0-19	Bad

Result and Discussion

1. Pre-Pandemic Face-to-Face Learning Experience

As delineated in the preceding section, it is imperative for teachers to possess prior experience in preparing themselves for teaching. In line with this, the researchers conducted a survey involving a sample of 15 participants, carefully selected for this study. The responses provided by the respondents are summarized in the table presented below:

Tabel 4. Teacher Responses on the Teaching Readiness Before the Pandemic

No	Item	Total Score (%)
1	I have good knowledge about offline learning before the pandemic	85
2	I had good preparation in terms of using technology for learning before the pandemic	77,3
3	I often attended training on teaching techniques using technology before the pandemic	76
4	I always prepare learning modules, assessments before online learning begins	82,6
10	I feel offline learning before the pandemic was more effective	49.3
18	I prepared learning equally well both online and offline before and during the pandemic	85,6
Mean Score		76

Based on the aforementioned data, it is evident that the overall perception index of teachers stands at 76%, categorizing it as "good." This indicates that teachers, as a collective, have demonstrated familiarity and commendable preparation in teaching during both the pre-pandemic and pandemic eras. The primary contributing factor to this finding can be attributed to the substantial teaching experience possessed by the majority of teachers prior to the pandemic. This extensive experience has instilled a sense of conscientiousness and spontaneity in teachers when it comes to preparing learning modules and assessments. Although challenges were encountered during the initial stages of the pandemic, with the aid of internal and external support, teachers gradually adapted to the new circumstances.

While it is advantageous for teachers to have established a sense of routine in preparing lessons during both the pre-pandemic and pandemic periods, the subsequent data will shed light on their preparedness in transitioning from online to offline learning modes after the pandemic while still integrating the application of technology. The data pertaining to teacher readiness in teaching, specifically regarding internal factors, is presented below:

Tabel 5. Teacher Readiness to Integrate Technology in Teaching from Internal Factors

No	Item	Total Score (%)
5	I have good confidence in the learning transition process from online to offline	84
8	Even though learning is back to face-to-face, I do not leave the use of technology	81.3
9	I feel ready if I have to return to teaching offline because I'm used to it	81.3
12	In post-pandemic offline learning, I use technology as a medium of communication	81.3
13	In post-pandemic offline learning, I use technology as a learning interaction medium	85.3
14	In post-pandemic offline learning, I use technology for media presentations	85.3
15	In post-pandemic offline learning, I use technology as learning materials in class	82.6
16	In post-pandemic offline learning, I use technology to assess student progress	82.6

17	I seriously prepared for every stage needed to return to teaching offline	84
20	I feel that my long-term teaching experience has helped me become a person who is more prepared for any changes in learning modes	88
	Mean Score	83.6

Based on the aforementioned data, a conclusive observation can be made regarding the overall readiness of teachers in embracing offline learning mode while simultaneously incorporating the use of technology, indicating a highly favorable index of 83.6%. This finding signifies that teachers possess a positive outlook on teaching by integrating technology. It is noteworthy that 88% of the respondents attributed this readiness to their extensive years of teaching experience, which has facilitated their enhanced adaptability to changes.

The enthusiastic disposition towards resuming face-to-face teaching is further reflected in teachers' perceptions, with a remarkable index of 84% demonstrating their earnestness in preparing teaching materials, assessments, and requisite instructional media. Moreover, the data also illuminates the multifaceted utilization of technology in the context of offline learning, serving various purposes such as communication with students, fostering interactive learning experiences, facilitating material presentation, incorporating authentic teaching resources, and conducting student assessments. Consequently, it can be deduced that teacher readiness in transitioning to offline learning in the post-pandemic era while maintaining the integration of technology resides within the highly commendable category, primarily owing to the teachers' internal factors.

In addition to examining internal factors, this study also investigated teachers' perspectives on their readiness in relation to external conditions that facilitate learning. The external factors considered encompassed support from the educational institution or school, colleagues who have prior knowledge of technology usage, as well as the training received during the transition from the pandemic to the post-pandemic period. The data pertaining to teachers' perceptions of their readiness, as influenced by external factors, are presented below.

Tabel 6. Teacher Readiness to Integrate Technology in Teaching from External Factors

No	Item	Total Score (%)
6	The school helped me prepare to return to teaching offline	81.3
7	I get help from colleagues to prepare for offline teaching	85.3
11	I feel more prepared to teach offline armed with the knowledge of using technology that I got while learning online	77.3
19	I think the school has prepared classes and systems well to return to offline learning after the pandemic	81.4
	Mean Score	81.3

As depicted in table 6, the teacher's overall perception of external supporting factors exhibits a notably high index of 81.3%. While the majority of indicators contributing to this perception fall within the very good category, one component—specifically, the belief in utilizing the experience gained from online learning in offline settings—attains a good rating with an index of 77.3%. Consequently, it can be inferred that external factors such as the school environment and colleagues play a crucial role in fostering positive perceptions among teachers during the transition from online to offline learning mode.

The aforementioned findings hold significant implications for further discussion. The favorable response to the first item, concerning teachers' perception of possessing proficient skills in pre-pandemic teaching practices, serves as a positive indicator of teachers' overall condition and professionalism. It suggests that teachers possess a solid foundation encompassing principles, theories, concepts, and pedagogical practices. These principles encompass teaching strategies, curriculum development, student assessment, and classroom management in face-to-face settings. The acquisition of adequate pre-pandemic competence and knowledge assumes paramount importance, as it enables teachers to adapt to their environment, demands, and various challenges (Satpute, 2021; Stoiljković, 2020). Furthermore, as evident in the subsequent item, teachers have demonstrated some degree of technology integration in their instructional practices, albeit to a lesser extent than during the pandemic. This observation is reflected in items aimed at gauging teachers' diligence in participating in training programs to enhance the integration of technology in teaching. Comparatively, the results indicate a slight decline when contrasted with respondents' answers during the pandemic period.

The process of habituation is evident in the respondents' answers, where they perceive that the fundamental aspects of teaching preparation remain unchanged in their current circumstances. They continue to fulfill their responsibilities in preparing teaching materials, assessments, and administrative tasks, demonstrating their commitment to professionalism (Muhayimana, 2020). This response signifies that teachers possess an understanding of effective learning principles that persist even in the face of a pandemic, showcasing their adaptability. Effective learning entails comprehensive planning, delivering content that is tailored to students' needs, fostering meaningful learning experiences, and adapting to change (Yan & Wang, 2022).

Interestingly, over 50% of the respondents stated that current learning is no less effective than pre-pandemic learning. This perception is largely influenced by the integration of technology in the teaching and learning process. The pandemic compelled teachers to swiftly transition to distance learning (Agu et al., 2021; Duran, 2021). During this transition, various digital platforms and related technologies emerged, further enhancing the effectiveness of learning. This culture of innovation has persisted into the post-pandemic era, with teachers exhibiting a heightened focus on student-centered learning. Moreover, the widespread adoption of technology has increased flexibility in the learning process, prompting teachers to depart from traditional teaching methods.

The post-pandemic learning process has shown improvements in socio-emotional aspects, as learning has become more attuned to students' socio-emotional needs (Servant-Miklos, 2022). Aristovnik et al. (2020) highlighted the increased stress levels experienced by students during the pandemic. Therefore, teachers have been required to develop a better understanding of students' socio-emotional states through the implementation of interactive technology, student-centered learning approaches, and gamification.

As discussed earlier, internal factors play a significant role in preparing for the transition from the pandemic to the new normal. The overall response to the questionnaire indicates that a majority of teachers have a high level of confidence in embracing this transition period. This self-confidence stems from teachers' experiences closely linked to learning technology during the pandemic. When teachers become comfortable with certain technologies, they are also able to determine the most effective teaching methods. Teachers expressed their commitment to continue using technology even after the pandemic, albeit to a lesser extent. Interactive technology serves as a medium for mutual interaction during learning, facilitates communication between teachers and students outside the classroom, supports presentations, and allows access to various learning materials from the internet.

Regarding internal factors, years of teaching experience received the highest percentage among other items, with 88%. Teachers with extensive experience have typically discovered and developed effective teaching practices (Riyanti, 2021; van der Spoel et al., 2020). They possess a deep understanding of the dynamic nature of the classroom, how to engage students actively in learning, and how to manage classes comprising students with diverse characteristics. Experienced teachers also exhibit greater composure and confidence in their teaching abilities, which are crucial for making quick and accurate decisions in unexpected situations.

In addition to internal factors, external factors also play a crucial role in the transition of learning modes. According to the questionnaire responses, the majority of teachers acknowledged the support they received from their schools in facilitating the transition process. Schools, as the organizers of the educational process, play a vital role in ensuring the continuity of learning, maintaining teacher quality, improving student learning outcomes, and facilitating adaptation to changes. Ensuring the continuity of learning involves efforts to guarantee that students continue to receive quality education in a supportive environment. Failing to prepare for this transition may result in a significant risk of academic setbacks for students. Maintaining quality education entails providing support and recognizing teachers' contributions to create a comfortable environment for them to carry out their duties effectively.

Furthermore, peer-to-peer collaboration among teachers significantly influences the transition process of learning modes. Colleagues can serve as valuable sources for sharing teaching experiences and best practices in both online and offline settings. Those with more experience and knowledge can provide support and assistance to those with less experience, promoting a collaborative and supportive learning atmosphere. Collaboration with colleagues fosters a sense of belonging within the teaching community and allows for emotional support in addition to formal assistance. Sharing experiences with colleagues contributes to professional growth and creates a supportive network among educators.

The findings of this study align with various theoretical frameworks, including the Technology Acceptance Model (TAM). The TAM is a well-established theoretical framework utilized to comprehend individuals' adoption of technological innovations (Zaineldeen et al., 2020). As stated by Su and Li (2021), this model was originally proposed by Davis and has undergone further refinement and expansion through subsequent research. The TAM revolves around two central constructs: perceived usefulness and perceived ease of use (Almenara et al., 2018). Perceived usefulness refers to an individual's belief that a particular technology can enhance their performance and assist in achieving their goals. On the other hand, perceived ease of use refers to the level of ease associated with utilizing the technology, indicating the minimal effort required for its effective usage.

If we delve deeper into the Technology Acceptance Model, it becomes evident that the awareness of the usefulness and ease of use of technology is significantly influenced by external factors experienced by the users themselves (Al-Rahmi et al., 2018). One such factor is social influence, where individuals are more inclined to accept and adopt a specific application if it is widely used within their social environment. For instance, if the majority of smartphone users in a community utilize a messaging application like WhatsApp, it creates a social pressure for others to also adopt the same application in order to achieve common goals. This social influence can be observed in the initial study conducted by the researcher at SMKN 1 Tampaksiring, where the school adopted Moodle as a distance learning platform despite some teachers lacking readiness and knowledge about the application.

The frequency of training and other forms of assistance also plays a significant role in shaping individuals' awareness of the usefulness and convenience of technology. During the pandemic, various training programs conducted by ministries, local governments, and schools themselves, such as Google master trainer training or sessions on creating innovative presentations using Canva, have provided necessary support to help individuals understand and utilize information technology effectively.

Additionally, understanding the risks associated with technology is another crucial factor. Every technology, whether in the form of a device or an application, possesses inherent weaknesses and potential risks. By having a comprehensive understanding of these weaknesses, users can effectively and efficiently utilize the technology while mitigating potential risks such as personal data hacking, addiction, adverse impacts on personal health due to prolonged usage, and privacy concerns.

2. Continuous Professional Development

Teachers bear the responsibility of continually enhancing their professionalism, as mandated by Law No. 14 of 2005 concerning teachers and lecturers. This obligation entails the development of four fundamental competencies: pedagogical competence, personal competence, social competence, and professional competence. Technology, in relation to education, serves as a tool to support and expedite teachers' pedagogical and professional competencies. Numerous previous studies have demonstrated that appropriate utilization of technology by teachers can improve the quality of learning.

Continuous professional development (CPD) is crucial for teachers to remain updated personally, cater to students' needs, enhance teaching quality, foster innovation, advance their careers, promote collaboration, and cultivate positive relationships, as highlighted by Tanang and Abu (2014). CPD can be understood as an ongoing process of learning and self-development undertaken by individuals to pursue their professional interests, encompassing the enhancement of skills, knowledge, and other supporting competencies (Robiyah et al., 2021).

Drawing upon the perspectives of various experts in teacher professionalism development (Asiyah et al., 2021; Haerani et al., 2020; Syah et al., 2022), several factors underscore the significance of CPD theory and its application. Firstly, CPD enables teachers to stay updated with current information, such as engaging with research on the latest teaching methods and emerging educational technologies that align with pedagogical demands. Secondly, CPD creates a space for teachers to reflect upon their daily teaching practices by receiving feedback through collaborative efforts, leading to improvements in teaching methods. This reflective activity, in turn, positively impacts student learning outcomes. Thirdly, teachers who consistently enhance their self-quality are better equipped to engage students in the learning process, thus increasing overall student motivation. Fourthly, CPD plays a constructive role in nurturing innovative and creative teachers by integrating technology in their teaching practices. Finally, with a strong mastery of technology, teachers experience greater satisfaction in their teaching, as confidence in effectively utilizing technology contributes to successful learning experiences.

The pursuit of professional growth for educators necessitates a thorough understanding of CPD principles. Educators must recognize that CPD can take various forms, encompassing both formal and informal approaches. Teachers, as educators, can engage in formal programs such as seminars, workshops, conferences, and structured training sessions. Additionally, CPD can be fostered through informal means, where teachers leverage their surroundings, including colleagues, superiors, and even learning from their students themselves (Alawani & Singh, 2017; Shibankova et al., 2019).

Furthermore, the enhancement of teacher professionalism is closely intertwined with the planning and evaluation process (Collins, 1997). Teachers are expected to discern the competencies they need to improve, develop strategies to attain them, establish mechanisms to monitor progress, and evaluate their accomplishments. In essence, teachers position themselves as autonomous learners who assume responsibility for their own professional growth. Considering that this professional growth is intricately linked to the development of learning autonomy, its effects are inherently personal.

3. TPACK (*Technological Pedagogical Content Knowledge*)

The enhancement of teacher professionalism and preparedness in teaching is closely linked to the TPACK (Technological Pedagogical Content Knowledge) framework, which underscores the significance of integrating technology, pedagogy, and content knowledge for effective instruction. TPACK highlights the understanding that technology can serve as a teaching tool that is tailored to the specific learning subject and the students involved (Paidi et al., 2021). Building on this notion, Aditama and Pratiwi (2021) propose that TPACK can also be viewed as a process of technology integration by teachers, which is preceded by a comprehensive grasp of the teaching material.

Azmina & Solihah (2019) further explicate TPACK by dividing it into three distinct components. Firstly, Technological Knowledge (TK) pertains to the teacher's proficiency and skills in utilizing relevant technologies as the primary resources in teaching. This entails the ability to navigate software, applications, hardware, and network platforms. Secondly, Pedagogical Knowledge (PK) encompasses the teacher's understanding and competence in teaching practices, including instructional strategies, assessment methods, classroom management, and student-centered learning approaches. Lastly, Content Knowledge (CK) denotes the teacher's expertise and knowledge within their specific subject area, encompassing theories, concepts, and principles associated with the field. By integrating these three dimensions of TPACK, teachers are able to effectively employ technology in their instructional practices, ensuring the seamless integration of technology, pedagogy, and content knowledge to optimize student learning experiences.

Conclusion

The Covid-19 pandemic has changed the order of human life in many sectors, including education. The education system that originally operated as a face-to-face system quickly became networked and required stakeholders involved in the world of education to adapt quickly, including teachers. From the results of research conducted on 15 teachers of SMK Negeri 1 Tampaksiring, it was found that teachers had good readiness to implement certain learning modes before entering the pandemic period with an index of 76% and were in the good category. Likewise in the post-pandemic learning mode transition which is influenced by internal and external factors. The index of perceptions of readiness for the post-pandemic learning mode transition from internal factors obtained a result of 83.6% and was in the very good category. Likewise in terms of external factors, the level of teacher perception is also in the very good category with 81.3%. Statistics on teacher readiness before and after the pandemic show that there has been an increase in readiness for the implementation of learning modes from the perspective of teacher perceptions. In line with that, this increase in readiness cannot be separated from various supporting aspects such as long teaching experience, good adaptation processes, support from the institution or in this case the school, and fellow teachers.

References

Aditama, V., & Pratiwi, D. R. (2021). Integrasi Technological Pedagogical Content Knowledge (Tpack) Dalam Perangkat Pembelajaran Daring Guru Bahasa Indonesia. *Basastra*, *10*(2), 196.

Agu, C. F., Stewart, J., McFarlane-Stewart, N., & Rae, T. (2021). COVID-19 Pandemic Effects On Nursing Education: Looking Through The Lens Of A Developing Country. *International Nursing Review*, *68*(2).

Al-Rahmi, W. M., Alias, N., Othman, M. S., Alzahrani, A. I., Alfarraj, O., Saged, A. A., & Rahman, N. S. A. (2018). Use of E-Learning by University Students in Malaysian Higher Educational Institutions: A Case in Universiti Teknologi Malaysia. *IEEE Access*, *6*, 14268–14276.

Alawani, A. S., & Singh, A. D. (2017). A Smart Mobile Learning Conceptual Framework for Professional Development of UAE In-Service Teachers. *International Journal Of Management and Applied Research*, *4*(3).

Aldiyah, E. (2021). Perubahan Gaya Belajar Di Masa Pandemi Covid-19. *CENDEKIA: Jurnal Ilmu Pengetahuan*, *1*(1).

Almenara, J. C., Marín-Díaz, V., & Sampedro-Requena, B. E. (2018). Technology Acceptance Model In Higher Education. *Revista de Investigacion Educativa*, *36*(2), 435–453.

Dianasari, A. & Kusumaningtyas Febri Wijayanti. (2020). Upaya Meningkatkan Motivasi Belajar Di Masa Pandemi Covid-19 Melalui Konseling Kelompok Dengan Strategi Self Management. *HELPER : Jurnal Bimbingan Dan Konseling*, *37*(1).

Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability (Switzerland)*, *12*(20).

Asiyah, S., Wiyono, B. B., Hidayah, N., & Supriyanto, A. (2021). The effect of professional development, innovative work and work commitment on quality of teacher learning in elementary schools of Indonesia. *Eurasian Journal of Educational Research*, *2021*(95), 227–246.

Azmina, B., & Solihah, M. (2019). Persepsi Mahasiswa dan Instruktur tentang Technological Pedagogical Content Knowledge (TPACK) Instrukstur Bahasa Inggris di Indonesia. *Teknodika*, *17*(1), 76.

Batac, K. I. T., Baquiran, J. A., & Agaton, C. B. (2021). Qualitative content analysis of teachers' perceptions and experiences in using blended learning during the COVID-19 pandemic. *International Journal of Learning, Teaching and Educational Research*, *20*(6).

Collins, J. M. (1997). Becoming a Critically Reflective Teacher. *The Journal of Continuing Education in Nursing*, *28*(2).

Duran, M. (2021). The Effects of COVID-19 Pandemic on Preschool Education. *International Journal of Educational Methodology*, *7*(2).

Goh, P.-S., & Sandars, J. (2020). A Vision Of The Use Of Technology In Medical Education After The COVID-19 Pandemic. *MedEdPublish*, *9*.

Haerani, R., Masunah, J., Narawati, T., Rochyadi, E., & Mujiarto. (2020). Models of Arts Teacher's Professional Development. *International Journal of Higher Education*, *9*(6), 77–86.

Hidayat, M. A., Nikmah, S. Z., & Nurfitriani, R. (2021). Teacher Strategies in Learning during the Covid-19 Pandemic at Madrasah Ibdidaiyah Negeri (MIN) 2 Central Aceh. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *4*(3), 3465–3472.

Holimi, M. (2021). Penerapan Pembelajaran Daring Di Paud Baiturrahman Di Masa Pandemi Covid 19. *Muhadasah: Jurnal Pendidikan Bahasa Arab*, *3*(1).

Martoredjo, N. T. (2020). Pandemi Covid-19: Ancaman atau Tentangan bagi Sektor Pendidikan? *Jurnal Pendidikan*, *2*(1), 1–15.

Muhayimana, T. (2020). Teacher Professional Learning During the Global Pandemic: Five Critical Areas to Address. *Journal of School Administration Research and Development*, *5*(S2).

Paidi, Subali, B., & Handoyo, L. D. (2021). The Mastery Of Technological, Pedagogical, And Content Knowledge Among Indonesian Biology Teachers. *European Journal of Educational Research*, *10*(3), 1063–1073.

Pratiwi, I., & Utama, B. (2020). Kesenjangan Kualitas Layanan Pendidikan Di Indonesia Pada Masa Darurat Covid-19: Telaah Demografi Atas Implementasi Kebijakan Belajar Dari Rumah. *Jurnal Kependudukan Indonesia*, 81-86.

Răducu, C. M., & Stănculescu, E. (2022). Teachers' Burnout Risk During the COVID-19 Pandemic: Relationships With Socio-Contextual Stress—A Latent Profile Analysis. *Frontiers in Psychiatry*, *13*(April), 1–10.

Riyanti, D. (2021). Teaching Without Students: Efl Pre-Service Teachers' Experiences Teaching In Pandemic Time. *Journal of English Educational Study (JEES)*, *4*(2), 122–130.

Robiyah, S., Koderi, K., Muin, J. A., & Hijriyah, U. (2021). Continuous Professional Development Of Junior High Schools' Islamic Religious Education Teachers At Bandar Lampung City, INDONESIA. *International Journal of Educational Management and Innovation*, *2*(1), 44.

Rushton, E. A. C., Murtagh, L., Ball-Smith, C., Black, B., Dunlop, L., Gibbons, S., Ireland, K., Morse, R., Reading, C., & Scott, C. (2022). Reflecting On 'Classroom Readiness' In Initial Teacher Education In A Time Of Global Pandemic From The Perspectives Of Eight University Providers From Across England, UK. *Journal of Education for Teaching*, *00*(00), 1–18.

Satpute, K. (2021). Challenges and Adaptability Of Language Teachers Towards Virtual Classrooms During Covid-19. In *Journal of Teaching English for Specific and Academic Purposes* (Vol. 9, Issue 3).

Servant-Miklos, V. (2022). Environmental Education And Socio-Ecological Resilience In The Covid-19 Pandemic: Lessons From Educational Action Research. *Environmental Education Research*, *28*(1).

Shibankova, L. A., Ignatieva, A. V., Belokon, I. A., Kargapoltsev, S. M., Ganaeva, E. A., Beroeva, E. A., Trubenkova, S. N., & Kozlova, E. B. (2019). Institutional Mechanisms Of University Teacher Professional Development. *Humanities and Social Sciences Reviews*, *7*(4).

Siahaan, M. (2020). Dampak Pandemi Covid-19 Terhadap Dunia Pendidikan. *Jurnal Kajian Ilmiah*, *1*(1), 73–80.

Stoiljković, Č. (2020). The Impact of the Covid-19 Pandemic On The Educational Work Of Kindergarten Teachers. *International Journal of Cognitive Research in Science, Engineering and Education*, *8*(3).

Su, Y., & Li, M. (2021). Applying Technology Acceptance Model in Online Entrepreneurship Education for New Entrepreneurs. *Frontiers in Psychology*, *12*.

Syah, M. F. J., Janudin, S. E., Mansor, M., Fuadi, D., Harsono, Widiastuti, R., Romadhoni, D. N., & Hafidah, A. S. (2022). The development of Indonesian accounting teacher professional identity measurement: An exploratory factor analysis. *European Journal of Educational Research*, *11*(1), 33–49.

Syahroni, M., Dianastiti, F. E., & Firmadani, F. (2020). Pelatihan Media Pembelajaran Berbasis Teknologi Informasi untuk Meningkatkan Keterampilan Guru dalam Pembelajaran Jarak Jauh. *International Journal of Community Service Learning*, *4*(3).

Tanang, H., & Abu, B. (2014). Teacher Professionalism and Professional Development Practices in South Sulawesi, Indonesia. *Journal of Curriculum and Teaching*, *3*(2).

Truzoli, R., Pirola, V., & Conte, S. (2021). The impact of risk and protective factors on online teaching experience in high school Italian teachers during the COVID-19 pandemic. *Journal of Computer Assisted Learning*, *37*(4), 940–952.

Van der Spoel, I., Noroozi, O., Schuurink, E., & van Ginkel, S. (2020). Teachers' online teaching expectations and experiences during the Covid19-pandemic in the Netherlands. *European Journal of Teacher Education*, *43*(4).

Widagdo, B. W., Handayani, M., & Suharto, D. A. (2020). Dampak Pandemi Covid-19 terhadsap Perilaku Peserta Didik pada Proses Pembelajaran Daring Menggunkan Metode Pengukuran Skala Likert (Studi Kasus di Kabupaten Tangerang Selatan). *Jurnal Teknologi Informasi ESIT*, *15*(2).

Yan, C., & Wang, L. (2022). Experienced EFL teachers switching to online teaching: A case study from China. *System*, *105*.

Zaineldeen, S., Hongbo, L., Koffi, A. L., & Hassan, B. M. A. (2020). Technology acceptance model' concepts, contribution, limitation, and adoption in education. *Universal Journal of Educational Research*, *8*(11), 5061–5071.