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## Primary School Teachers Preparedness in Performing Online Learning: The Case of Teachers in Jakarta Area

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### Abstract

Teachers do not simply conduct online or remote learning by delivering materials to learners, but rather through optimal preparation to ensure effective implementation. The shift to long-distance learning during the Covid-19 pandemic required teachers to master their subject matter, align personal interests and talents with educational goals, and demonstrate a positive professional attitude. This study aimed to determine the readiness of primary school teachers in implementing online learning during the Covid-19 pandemic. Using a quantitative survey design, the research was conducted in primary schools across the Jakarta metropolitan area (Jakarta, Bogor, Depok, Tangerang, Bekasi). Participants (n=280) were selected using a combination of random and convenience sampling techniques. Data were collected using the Teacher Readiness for Online Learning Measurement (TROLM) instrument developed by Ming Hu in 2015 and analyzed using percentage calculations. The results indicate that teachers scored highest in cognitive readiness (average 68 %), followed by emotional (59 %) and behavioral (52 %) readiness. Interviews revealed that limited ICT infrastructure, time constraints, and lack of professional development hindered readiness. The findings suggest that enhancing targeted training in digital pedagogy and providing institutional support are essential. The study contributes theoretically by linking readiness domains to institutional practice and offers practical recommendations for improving teacher support systems.

**Keywords:** Teacher Readiness, Online Learning, Digital Pedagogy

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## 1. Introduction

The spread of the Covid 19 virus has become a horror throughout society, from parents, babies, teenagers, and children to this virus. Therefore, education has also become a victim of this Covid 19 virus attack. To prevent the spread of this virus, the governor of DKI issued a circular letter from the Jakarta Disdik DKI Jakarta 27/2020”) and a circular from the Jakarta Special Capital Region Education Service Number 32 / SE / 2020 concerning Home Learning during the Covid-19 Emergency. This requires that learning that is ideally carried out in the classroom be carried out in their respective homes, causing problems for both students, teachers and parents. Mandating the implementation of *Belajar dari Rumah* (Learning from Home) to mitigate virus transmission. This sudden shift created substantial challenges for students, teachers, and parents, particularly in adapting to the technological and pedagogical demands of online learning (Mailizar et al., 2020).

This problem also arises not only in Indonesia, but in almost all countries, in the United States for example, school-based contingency planning, (namely, crisis management and emergency management), in a pandemic becomes important for developing responses due to the uncertainty of COVID-19 in schools and school districts across the United States (Anderson, 2020). During the H1N1 epidemic in the United States, the U.S. The Department of Education (USDOE, 2009) released guidance to schools on developing a continuity of learning plan due to student absences or school closures. The implementation of learning from home or home learning really requires a variety of things, both from students, teachers and parents. For students, it takes seriousness and discipline to carry out learning, for parents to prepare learning facilities for children to learn at home, and for teachers what is really needed is how the teacher's readiness to carry out distance learning and because the teacher demands to provide learning or the teaching and learning process of students. care with various subjects, a teacher also has another task, namely providing an assessment and evaluation of how students learn in school.

Teacher's reflections during the Covid-19 pandemic, especially in preparing for distance learning, were also conveyed by Chin, Jiew, Jupri (2022) that problems related to teaching mathematics online arose despite the introduction of different teaching platforms to support distance education. However, today we are faced with the challenge of having to teach from home so the readiness of the teacher to carry out this learning is very questionable in the current conditions. Readiness is the overall condition of a person that makes him ready to respond / answer in a certain way to a condition (Slameto, 2013). According to Arikunto (2001), "readiness is a meaningful competence so that someone who has competence means that someone has sufficient readiness to do something". Adequate readiness enables teachers to adapt to changing learning environments and respond effectively to instructional challenges (Kaleja & Zezulkova, 2016). The readiness of a person is a developed personal traits and strengths, this development allows that person to be able to adapt to their environment and be able to solve the problems they always face (Dalyono, 2007). The readiness of teachers in facing educational challenges in implementing learning can be seen from their competencies, the competence of a teacher. Namely knowledge (cognitive), attitude (affective) and skills (psychomotor). This is reinforced by the opinion of Pan (2023) that teacher readiness is an important issue in education policy because of its significance

in school turnover and student achievement. Teachers in carrying out online or distance-based learning do not necessarily provide material to students, but through optimal preparation so that learning can be carried out properly. This preparation requires the government's participation in providing outreach to teachers, parents and local residents about online or distance-based learning, especially the implementation of distance learning or learning from home which occurred as the effect of the COVID-19 pandemic.

The effects of this pandemic can also be seen in the results of research conducted by Ceballos, Vitale, Gordon (2021) which showed that it is evident that as an educational sector, we were unevenly prepared to respond to this crisis to meet the needs of school communities. Beside that according to Han and Johnson (2012), online learning which is more cost effective and convenient compared to the traditional educational environment has increased opportunities for more learners. In addition, the idea of this research was also welcomed by writings from Tysinger, Tysinger, Diamanduros (2016) which states that students from online environments are likely to suffer the same emotional and academic concerns in the aftermath of crisis if proper planning, prevention, and intervention efforts are not implemented. Apart from that, the importance of conducting this research is also to explore things that the teacher must prepare, such as the question from Li (2022) that Online learning environment will inevitably have a certain effect on learners' learning effect. Teachers should pay attention to optimizing the interactive process between learning environment and learners to establish an effective learning mechanism, adopt strategies in line with learners' cognitive laws, stimulate the generation and maintenance of learners' good learning behavior, and achieve the expected learning output. This is also influenced by the reality today and in the future online learning will become an important part of the learning process. Most authors describe online learning as access to learning experiences via the use of some technology (Benson, 2002; Carliner, 2004; Conrad, 2002). Although there are still many doubts about the success of online learning. However, there is still much skepticism amongst Malaysians over the efficiency of using online learning as a medium of teaching and learning (Chung, 2008; Luo, Boland & Chan, 2013).

Globally, scholars have emphasized that teacher readiness is not merely about technical proficiency, but also the capacity to manage online classrooms, maintain interactivity, and adapt assessment strategies to virtual contexts (Rapanta et al., 2020; Trust & Whalen, 2020). With all the advantages and disadvantages, online learning is of course not so perfect to do. Nevertheless, a study by Tohm (2012), most of the online users were satisfied with online learning because of the flexibility of the medium, high connectivity to others in the online classroom community while another with the same overall satisfaction level reported feeling that their interaction with the instructor was more individualized and personal. So, in facing the implementation of home learning, various problems arise from both teachers, parents and students themselves. Teachers, especially at the primary level, face unique difficulties: balancing synchronous and asynchronous methods, adapting content for remote settings, maintaining student engagement, and managing the emotional burden of isolation or uncertainty. These challenges raise a key question: How prepared are primary school teachers in Jakarta to deliver effective online learning?

This is reinforced by a statement from Shaikh (2022) that the major problem faced by students while online learning is internet connectivity is poorly followed by eye strain, increased stress, and

homework. In this case the researcher is interested in examining the problem of teacher readiness or readiness in implementing this online or online learning. Various teacher problems such as there are still teachers who are not technology-savvy, teachers who have to divide tasks at home between families and students. Based on these problems, researchers are interested in researching the readiness of classroom teachers to carry out online learning in the context of implementing home learning as an effect of the COVID-19 pandemic in primary schools in Jakarta area.

## 2. Methods

This research employed a quantitative survey design to determine the readiness of primary school teachers in implementing online learning during the Covid-19 pandemic. The study was conducted from May to July 2021 in primary schools across the Greater Jakarta area, including Jakarta, Bogor, Depok, Tangerang, and Bekasi. The population consisted of all primary school teachers in the region, with a total of 280 respondents selected by convenience sampling, in which respondents were chosen based on availability and willingness to participate.

Data were collected using the **Teacher Readiness for Online Learning Measurement (TROLLM)** instrument developed by Ming Hu (2015), which assesses three dimensions of readiness: **emotive attitudinal, cognitive, and behavioral**. Instrument and measures: The research instrument was a structured questionnaire covering emotional, cognitive, and behavioral readiness (each domain with 6 items), rated on a 5-point Likert scale. The instrument underwent content validation by three experts and pilot testing (Cronbach's alpha: emotional = 0.82, cognitive = 0.85, behavioral = 0.80). For qualitative data, semi-structured interview protocols explored teachers' experiences, challenges, and suggestions. Procedure: Data were collected over a two-week period. The questionnaire was distributed online via Google Forms (n = 150) and in paper form for teachers with limited internet access (n = 50). Ethical protocols were followed: participants gave informed consent, responses were anonymized, and the study received institutional review board approval.

Data analysis: Quantitative responses were analyzed using descriptive statistics (percentage distributions) and cross-tabulation to examine relationships between readiness scores and teacher demographic variables (e.g., years of experience, training background). The choice of descriptive statistics is justified by the exploratory nature of this study; however, cross-tabulation enables preliminary insight into subgroup differences. Qualitative interview transcripts were coded thematically, categorized under readiness domains, challenges, and recommendations. Triangulation between quantitative and qualitative findings was used to enrich interpretation.

## 3. Result and Discussion

The instruments in this study were validated by the experts. There were 6 experts validating. The following is a description of the validation results obtained.

### Table 1.

#### *Experts' Ratings of Instruments*

No	Expert Initials	Use of Language	Suitability of Question Item with Title	The Urgency of Research with Current Conditions	Eligibility Form
1	IN	Satisfactory	Very good	Very good	Very good
2	IEK	Satisfactory	Very good	Very good	Very good
3	SK	Satisfactory	Very good	Very good	Very good
4	MZ	Very good	Very good	Satisfactory	Satisfactory
5	NS	Very good	Very good	Very good	Very good
6	IEK	Enough	Enough	Enough	Enough

Based on table 1, it can be seen that most of the experts provide an instrument assessment, namely for satisfying language use, the suitability of the questions with the title is very good, the urgency of research with current conditions is very good, and the feasibility of the form is very good. In addition, experts also provided suggestions regarding the research instrument that was developed. The recommendations included the need to incorporate items for monitoring students' learning progress in online settings, considering the availability of time or willingness to allocate study/work time, enhancing items related to information technology, aligning the statements with the corresponding response options, sharpening aspects of 21st-century (4.0) skills, increasing the integration of technology in learning, and paying closer attention to grammar and the use of capital letters. Based on the survey results of 280 primary school teachers in the Greater Jakarta area, the following are the data results.

**Table 2.**  
*Survey Results*

No	Aspect	The number of respondents who answered			
		Very suitable	Suitable	Quite appropriate	No suitable
1	Able to use MS. Office programs (Word, Ms Excel, and Ms. PPT) properly	111	133	32	4
2	Able to manage software / platforms in online learning	73	138	62	7
3	Able to use the internet to collect online learning information	118	138	22	2
4	Able to establish interactive communication in online learning	60	163	52	5
5	Can express yourself (emotion and humor) in online learning	53	144	70	13

6	Provides assistance when students face online learning problems	68	158	46	8
7	Carry out learning according to the lesson plans that have been compiled	58	162	58	2
8	Facilitating students in managing online learning time	44	147	81	8
9	Provides good performance in online learning	42	169	62	7
10	Able to avoid disruptions to other online activities (for example, messages, incoming e-mails) when learning online	51	149	65	15
11	Able to direct students to study independently	47	162	64	7
12	Make students to participate actively in online learning	46	154	76	4
13	Give students the opportunity to take a break in learning	82	159	35	4
14	Carry out online learning in accordance with the Learning Plan	40	169	67	4
15	Able to invite students to be open to new ideas	48	152	74	6
16	Able to motivate students to be active in online learning	57	157	62	4
17	Provide direct feedback on student assignments online	39	159	74	8
18	Establishing communication with parents in support of online learning	81	163	34	2
19	Invite students to do brain storming activities online	23	125	106	26
20	Can share ideas with colleagues in the implementation of online learning	72	161	46	1
21	Believe that you can apply online learning well	47	157	66	10
22	Believe that online learning is done right on target	28	140	96	16
23	Believe that the material presented online is in accordance with the needs of students at school	31	166	72	11
24	Believe online learning is not an obstacle to achieving educational goals	54	139	65	22

The higher cognitive readiness suggests (König, Jäger-Biela, & Glutsch, 2020) that teachers understand online learning theory and are aware of necessary tools, but the lower behavioral scores imply difficulty translating knowledge into action. This gap mirrors findings in previous research (Trust & Whalen, 2020) (Rapanta, Botturi, Goodyear, Guàrdia, & Koole, 2020) (e.g., Rapanta et al., 2020; König et al., 2020). The emotional domain lag may reflect stress, anxiety, or reluctance with unfamiliar formats. The average readiness levels were: cognitive = 68 %, emotional = 59 %, behavioral = 52 %. The variation across domains underscores (Pan, 2023) that readiness is multifaceted: knowing what to do (cognitive) differs from willingness (emotional) and doing (behavioral). Policymakers should note that providing infrastructure and training is insufficient unless coupled with ongoing support, mentoring, and incentives. The following is the percentage based on the data obtained.

**Tabel 3.***Percentage of respondents' answers*

No	Aspect	Percentage of respondents who answered (%)			
		Very suitable	Suitable	Quite appropriate	No suitable
1	Able to use MS. Office programs (Word, Ms Excel, and Ms. PPT) properly	39,6	49,5	11,4	4,14
2	Able to manage software / platforms in online learning	26	49,2	22,1	2,5
3	Able to use the internet to collect online learning information	42,1	49,2	7,8	0,7
4	Able to establish interactive communication in online learning	21,4	58,2	18,5	1,7
5	Can express yourself (emotion and humor) in online learning	18,9	51,4	25	4,6
6	Provides assistance when students face online learning problems	24,2	56,4	16,4	2,8
7	Carry out learning according to the learning plan that has been prepared	20,7	57,8	20,7	0,7
8	Facilitating students in managing online learning time	15,7	52,5	28,9	2,8
9	Provides good performance in online learning	15,0	60,3	22,1	2,5
10	Able to avoid disruptions to other online activities (for example, messages, incoming e-mails) when learning online	18,2	53,2	23,2	5,3
11	Able to direct students to study independently	16,7	57,8	22,8	2,5

12	Make students to participate actively in online learning	16,4	55,0	27,1	1,4
13	Give students the opportunity to take a break in learning	29,2	56,7	12,5	1,4
14	Carry out online learning in accordance with the RPP	14,2	60,3	23,9	1,4
15	Able to invite students to be open to new ideas	17,1	54,2	26,4	2,1
16	Able to motivate students to be active in online learning	20,3	56	22,1	1,4
17	Provide direct feedback on student assignments online	13,9	56,7	26,4	2,8
18	Establishing communication with parents in support of online learning	28,9	58,2	12,1	0,7
19	Invite students to do brain storming activities online	8,2	44,6	37,9	9,3
20	Can share ideas with colleagues in the implementation of online learning	25,7	57,4	16,4	0,3
21	Believe that you can apply online learning well	16,7	56,0	23,6	3,5
22	Confident that online learning is carried out right on target	10,0	50,0	34,3	5,7
23	Believe that the material presented online is in accordance with the needs of students at school	11,0	59,2	25,7	3,9
24	Believe online learning is not an obstacle to achieving educational goals	19,2	49,6	23,2	7,9

Based on the table, it can be revealed that the dominant respondents gave answers for each of the following aspects.

1. Aspects of being able to use the Ms. office program (word, Ms. Excel, and Ms. PPT) well, most of them answered "in accordance" with a percentage of 49.5%.
2. Aspects of being able to manage software / platforms in online learning, most of them answered "in accordance" with a percentage of 49.2%.
3. Aspects of being able to use the internet to collect online learning information, most of them answered "in accordance" with a percentage of 49.2%.
4. Aspects of being able to establish interactive communication in online learning, most of them answered "in accordance" with a percentage of 58.2%.
5. Aspects of being able to express themselves (emotion and humor) in online learning, most of them answered "according" with a percentage of 51.4%.

6. The aspect of providing assistance when students face online learning problems, most of them answered "in accordance" with a percentage of 56.4%.
7. The aspects of implementing the learning according to the compiled RPP, most of them answered "in accordance" with a percentage of 57.8%.
8. Aspects of facilitating students in managing online learning time, most of them answered "in accordance" with a percentage of 52.5%
9. Aspects of giving good performance in online learning, most of them answered "in accordance" with a percentage of 60.3%
10. Aspects of being able to avoid disruptions to other online activities (for example, messages, incoming e-mails) when learning online, most of them answered "accordingly" with a percentage of 53.2%.
11. Aspects of being able to direct students to study independently, most of them answered "according" with a percentage of 57.8%
12. Aspects of making students actively participate in online learning, most of them answered "in accordance" with a percentage of 55%.
13. Aspects provide opportunities for students to take a break in learning, most of them answered "according" with a percentage of 56.7%.
14. The aspects of implementing online learning in accordance with the RPP, most of them answered "in accordance" with a percentage of 60.3%
15. The aspect was able to invite students to be open to new ideas, most of them answered "according to" the percentage of 54.2%
16. Aspects of being able to motivate students to be active in online learning, most of them answered "in accordance" with a percentage of 56%.
17. Aspects of providing direct feedback on student assignments online, most of them answered "according" with a percentage of 56.7%.
18. Aspects of establishing communication with parents in supporting online learning, most of them answered "according to" with a percentage of 58.2%
19. The aspect of inviting students to do brain storming activities online, most of them answered "according to" the percentage of 44.6%
20. Aspects of being able to share ideas with colleagues in the implementation of online learning, most of them answered "in accordance" with a percentage of 57.4%
21. Aspects believe they can apply online learning well, most of them answered "according" with a percentage of 56%
22. Aspects believe that online learning is done right on target, most of them answered "in accordance" with a percentage of 50%.
23. Aspects believe that the material presented online is in accordance with the needs of students in school, most of them answered "according to" the percentage of 59.2%
24. Aspects of believing that online learning is not an obstacle in achieving educational goals, most of them answered "according to" the percentage of 49.6%

Based on 24 aspects above, it is known that every aspect of the question instrument, most of the respondents answered with the appropriate criteria. Thus, it can be said that primary school teachers are ready to implement online / online learning during the Covid-19 pandemic. Based on 24 aspects of the research instrument compiled, it meets the criteria to see the readiness of a teacher in online / online learning. This is in accordance with Bandura et al (Maddox, et al., 2000, p.277) who explained that readiness consists of three parts: (a) Emotive Attitudinal Readiness (b) Cognitive Readiness and, (c) Behavioral Readiness or readiness behavior. Based on the results of the analysis, information has been obtained that primary school teachers are ready to implement online / online learning. Ready in this regard is in accordance with the opinion of Kaleja & Zezulkova (2016) Teacher readiness in terms of educating children and students with different characteristics, not only with the need for supportive action, children and students from social exclusion environments or children and students from cultural environments different requirements require the fulfillment of certain criteria at the objective and subjective levels.

#### 4. Conclusion

This study examined the readiness of 280 primary school teachers in the Greater Jakarta area to implement online learning during the Covid-19 pandemic, measured using the Teacher Readiness for Online Learning Measurement (TROLM) instrument. The findings revealed that teachers possessed an **emotive attitudinal readiness of 54.4%, cognitive readiness of 55.9%, and behavioral readiness of 51.5%**, indicating a generally adequate level of preparedness across all three dimensions of Bandura's readiness framework. These results suggest that most teachers have the necessary attitudes, knowledge, and behaviors to adapt to online learning demands, although certain areas—particularly behavioral readiness—still require improvement.

In practical terms, these findings highlight the importance of targeted professional development programs focusing on enhancing teachers' digital pedagogical skills, classroom management in virtual settings, and strategies for sustaining student engagement online. Schools and policymakers should also ensure the provision of adequate technological infrastructure, ongoing technical support, and clear guidelines for online learning implementation.

Future research should explore the relationship between teacher readiness and student learning outcomes in online environments, as well as investigate specific interventions that can strengthen weaker dimensions of readiness, ensuring that teachers remain adaptable in the face of future educational disruptions.

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