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Exploring Teachers' TPCK: Are Indonesian Language Teachers Ready for Online Learning during the COVID-19 Outbreak?

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Abstract Online learning decisions during the COVID-19 pandemic have problems in its application. Besides infrastructure, teachers' ability to integrate technology in learning is also an important factor that affects the success of online learning. In the current online learning, teachers are required to master Technological Pedagogical Content Knowledge (TPCK). Thus, this research aims to explore the Indonesian language teachers' TPCK and readiness to conduct online learning during the COVID-19 outbreak. This research applied a survey method with 318 participating teachers in Lampung, Indonesia. The data were collected using questionnaires related to attitude, technological knowledge, content knowledge, pedagogical knowledge, pedagogical content knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge. They were then analyzed quantitatively using factor analysis and qualitatively based on the teachers' answers to learning during the COVID-19 pandemic. The results demonstrate that Indonesian language teachers have adapted to the implementation of online learning related to the use of technology such as the variety of learning media and educational platforms used as well as TPCK skills. In general, teachers' TPCK tends to be positive about online learning even though some senior teachers have a negative attitude to the technological aspects. They have difficulty using technology in learning so that the class looks monotonous and does not vary. The results of this research can be used as evaluation material by policymakers to improve the learning system.

Keywords Online Learning, Indonesian Language Teachers, COVID-19 Outbreak, TPCK

1. Introduction

1.1. Background

That WHO declared the 2019 Coronavirus disease (COVID-19) to be a pandemic resulted in the closure of national schools. UN Education, Scientific and Cultural Organization estimates that 107 countries have implemented school closures affecting 862 million children and adolescents, about half of the global student population [1]. Through the Minister of Education's Circular Letter number 4 of 2020, Indonesia confirms that all schools implement online learning from home. Online learning separates students and teachers physically. Online learning platforms that contain learning materials, assessment tasks, and communication media are used to deliver the material [2]. Students continue to study through online learning and via video calls with their teachers. It is

the best alternative model as opening schools open puts students at risk.

In fact, the decision of online learning during the sudden COVID-19 pandemic turned out to be problematic in its application. Many schools were not ready to apply it due to a lack of preparation. Another problem that arises is the lack of device and Internet access to participate in online learning and schools' not having the capacity to teach online. Many students attending online learning say that they have a heavier workload during online learning compared to face-to-face learning. Based on these, the important factors that influence the success of online learning are facilities and infrastructure, and the ability of teachers to innovate in managing online learning for creating interesting and meaningful learning. However, the ability to integrate technology in online learning and deliver meaningful subject matter is not easy [3]– [5].

Technology brings new challenges to teaching, including developing knowledge about technology and its integration with content, teaching, and learning in specified contexts [6], [7]. The technology referred to here is the technology that can help teachers to represent concepts, principles, or laws. To implement online learning, students need to do Internet searches (library websites and databases) and use email or instant messaging to communicate with peers to accommodate learning activities [8]. Teachers need competencies that include content knowledge, pedagogical knowledge, and technological knowledge or Technological Pedagogical Content Knowledge (TPCK) in accommodating online learning activities [9]. TPCK is a framework that introduces the relationships and complexities between the three basic components of knowledge (technology, pedagogy, and content) [10], [11]. Teachers can take certain approaches to design online materials and assessments while encouraging peer support [12], [13] to inspire students to take ownership of their own learning experience since it can increase the depth of student engagement while also reducing the onus on the teacher to deliver student learning outcomes [14].

Several studies suggest that teachers' TPCK should be framed with content and pedagogical considerations [15]. The TPCK skills of teachers must be supported by the availability of ICT (Information and Communication Technology) tools to produce content and pedagogical transformation that cannot be realized without technology [16]. Koh [17] suggests five dimensions of meaningful learning with ICT as a pedagogical framework that can promote teachers' TPCK skills. They are authenticity, deliberation, activeness, constructiveness, and collaboration of learning in line with the emphasis of 21st-century education [17], [18]. The importance of TPCK skills for teachers is shown by many studies examining TPCK skills in various fields, such as the investigation on the TPCK skills of Mathematics teachers [19] and identification of TPCK of science teachers [20]; even, studies on TPCK analyses for English teachers have been widely carried out [21]–[24]. However, studies on the TPCK of Indonesian language teachers are still rare.

The Indonesian language subject cannot be underestimated because there may be obstacles encountered during learning like other subjects. In teaching the practice of writing texts such as exploratory texts, opinions, and narrative stories, teachers had difficulty explaining students online as it was not easy to make sure that the students understood the materials explained [25]. Most teachers only accept the result without knowing the writing process, so it is difficult to control where the students get writing material from and their integrity. Monotonous learning using one repeated medium makes students easily bored and not interested in taking the next online class [2]. This makes Indonesian language teachers innovate to create fun and "new" learning through collaboration with technology.

COVID-19 will directly and can permanently change education in the future given that teachers and students must be able to adapt to working and studying online for any reasons and situations. Teachers must start adapting as quickly as possible by doing online learning from now on. This adaptation can be performed by increasing the TPCK skills of teachers and their ability in using e-learning technology [26], [27]. This research aims to explore the Indonesian language teachers' TPCK and readiness to conduct online learning during the COVID-19 outbreak. It is to answer three questions on the use of technology in online learning in the Indonesian language, the TPCK skills of Indonesian language teachers in Lampung today, and problems and possibilities of online learning experienced. This research is expected to provide an overview and an evaluation material for policymakers to improve the learning system.

1.2. TPCK Literature Review

Various theoretical works and large-scale empirical studies have highlighted the importance of teachers' professional knowledge for the quality of classroom teaching and student learning success [28]–[30]. One thing that makes the difference between teachers and subject experts is their pedagogical content knowledge (PCK)–the combination of content and pedagogy to form a unique knowledge base for the teaching of a particular discipline [29], [31]. PCK is simply described as the knowledge that allows teachers to help their students access specific content knowledge in a meaningful way [32]. A professional teacher must have good Pedagogical Content Knowledge (PCK) skills [29]. PCK is knowledge, experience, and expertise gained through classroom experiences [33]–[35]. Furthermore, PCK is important knowledge in the process of developing literacy and the ability of teachers to transform knowledge into the learning process. PCK is also the knowledge that will develop further over time [36]. From this perspective, it can be

concluded that PCK is a comprehensive knowledge that combines two types of knowledge, namely content and pedagogical knowledge into one unit that leads to better knowledge for students.

In practice, the rapid development of information technology in the 21st century increases the need for PCK. The combination of the two types of knowledge can lead to better knowledge for students and utilize information technology in the process. Therefore, TPCK is needed [37], [38]. Based on Shulman's ideas about PCK, Mishra and Koehler (2006) have added technology to PCK and described TPCK as a linkage of technology, pedagogy, and content. TPCK is the foundation of good teaching with technology and requires an understanding of the representation of concepts using technology; pedagogical techniques that constructively use technology to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help fix some of the problems students face; knowledge of students' prior knowledge and epistemological theories [7], [39].

TPCK has been introduced as a conceptual framework for the knowledge base; teachers need to teach effectively with technology. This framework stems from the idea that the integration of technology in an educational context would benefit from aligning content, pedagogy, and technology. Teachers who wish to integrate technology in their teaching practice must consider these three domains [37].

Over the years, ICT has been considered essential for the delivery of innovative learning in schools. However, teachers face challenges in undertaking innovative ICT-supported learning. They can overcome this challenge with TPCK–a form of knowledge theorized to emerge when teachers make connections between technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK) [37], [38]. TPCK emerges when teachers engage in collaborative ICT lesson design as it enables them to model and integrate technology, pedagogical knowledge, and content into ICT integrated instructional solutions. This design is a challenge that encourages TPCK of teachers and can influence teachers to change their ICT pedagogy practice [18], [40]–[42]. It has also been found that teachers' design competence can be a major barrier to school-based ICT integration. Therefore, it is important to examine how teachers design and implement technology-based learning [42].

TPCK is a framework that introduces the relationships and complexities between the three basic components of knowledge (technology, pedagogy, and content) [37], [38]. Among these three types of knowledge is an intuitive understanding of the teaching content with appropriate pedagogical methods and technologies. The TPCK framework can be used to design and evaluate teacher knowledge that is concentrated on effective student learning in various fields [6], [43], [44]. Thus, TPCK is a useful framework to think about what knowledge teachers must have to integrate technology into teaching and how they can develop their knowledge. The use of TPCK as a framework for measuring and evaluating teaching knowledge is expected to serve as a basis to improve teaching/training programs for teachers and prospective teachers.

2. Materials and Methods

2.1. Research Method

This research employed a quantitative approach with a survey method. The stages of the research include preliminary research, development of instruments, conducting surveys in Lampung Province, data analysis and synthesis, and reporting. The questionnaire used is in the form of statements and questions.

2.2. Research Instrument

The instrument or questionnaires used were prepared according to the literature and previous research. [2], [28]. A total of 30 statements in the questionnaire with 5 answer-choice scales from Strongly Disagree (SD), Disagree (D), Undecided (U), Agree (A), Strongly Agree (SA) were developed based on the teacher TPCK indicators. The statements were adapted from the results of the questionnaire development by Schmidt et al. [29], while 8 open-ended questions were used to find out the teacher's opinion about the Indonesian language online learning during the COVID-19 outbreak.

2.3. Respondents

The respondents in this study were randomly selected. The questionnaire instrument was distributed online using the google form. This questionnaire was distributed to Indonesian language teachers in Lampung province at the junior high school, high school, and vocational school levels. A total of 318 Indonesian language teachers volunteered to participate in this study. The respondent demographic is shown in table 1.

Table 1. Respondent Demographics

Demographics variable	N	%	SD
Gender			
Male	90	28.3	97.6
Female	228	71.7	
Education			
BA	223	70.1	
PPG (Teacher Professionalism Training Program)	79	24.8	105.7
MA	17	5.1	
Teaching experience			
< 5 years	46	14.4	
5-10 years	74	23.3	15.9
10-15 years	71	22.3	
15-20 years	47	14.8	
< 20 years	80	25.2	
Level			
Junior High School	202	63.5	83.1
Senior High School	57	17.9	
Vocational High School	59	18.6	
School of teaching			
Public	227	71.4	96.2
Private	91	28.6	

2.4. Data Analysis Technique

The data were analyzed quantitatively and qualitatively. The quantitative data analysis was used to process questionnaire data with SPSS through factor analysis and Spearman correlation, while the qualitative data analysis was used to process the data about the problems and possibilities that Indonesian language teachers felt during online learning in the COVID-19 outbreak. The qualitative data analysis is extracted based on the open-ended questioner.

2.5. Research Questions

This research uses three problem formulations to be discussed, namely:

1. What technology has been used for learning Indonesian online?
2. How are the TPCK skills of Indonesian language teachers?
3. What problems and possibilities do Indonesian language teachers face during online learning?

3. Result and Discussion

3.1. Technology Used in Indonesian Online Learning

Conducting online learning is highly interrelated with the Internet and technology as a support system. Particularly in this COVID-19 outbreak, online learning is to accommodate distance learning because a protocol is imposed to maintain distance in this pandemic. Some information and technology products can be used to support the online classroom. Media, applications, and platforms can be used by teachers in delivering material and teaching skills to students, especially Indonesian language material [46]. The survey data reveals the media used by Indonesian language teachers during online learning which has been ongoing for more than 20 weeks. Table 2 displays 21 kinds of learning media, applications, and platforms used by teachers in Lampung. This media variation is to make students not get bored easily during online learning because they are introduced to something new in every meeting.

One of the functions of this media is that it serves as a means of communication between the teacher and his/her students in conveying messages in the form of materials or skills. The messages need to be received well to affect their understanding and induce changes in their behavior [47]. The effectiveness of communication in learning also affects the success of learning activities [48]. Of the various available media, Google Classroom and WhatsApp are the most widely chosen and used media in online learning by teachers. Nearly half of the participants (45.6%) chose Google Classroom as the main media used in teaching during the COVID-19 pandemic. In Google Classroom, teachers can provide materials on the subject being taught. The teachers can post some teaching materials, assign tasks to students, and upload the students' grades so that they can see the scores obtained in the course instantly [49]. Teachers chose Google Classroom because most schools have provided Google Apps for Education, an online learning facility for teachers and students to open a space for online discussions. As Azhar & Iqbal [50] implied that using Google Classroom, teachers can manage the classroom activity effectively and efficiently.

The second media chosen by the teachers is WhatsApp, which account for 42.5%. WhatsApp is an unpaid and the most frequently used chat application. The advantages of WhatsApp such as ease of use, high access, high interaction between students and teachers, facilitating learning at anytime and anywhere [51] become the reason why teachers use it. WhatsApp is effective in increasing success in learning and developing students' positive opinions toward the use of WhatsApp in courses [52]. It is also an applicable tool to improve students' motivation to learn [53], [54].

There are still many platforms that offer facilities in online learning such as Ruang guru, Schoology, and Smart School, but their application is still minimal among Indonesian language teachers. One of the reasons is that senior teachers with more than 20 years of teaching experience are less capable of mastering technology so they prefer "simpler and more common" ones such as WhatsApp. They do not have significant prior exposure to ICT making them afraid to engage ICT in their classrooms [55]. Referring to the important role of technology in online learning during this pandemic, it will be more effective if teachers are equipped with ICT skills so that they "dare" integrate it into their classrooms. Teachers

must find ways to make students interested in learning in class and help them to learn how to learn with innovations by combining ICT with Indonesian language materials.

Table 2. Technology-Based Media Used in Online Learning

No	Types of Media	Frequency	No	Types of Media	Frequency
1	TVRI	2	12	Quizizz	5
2	E-learning from Education Office	5	13	Written Task	2
3	Skype	1	14	Cisco Webex	7
4	Line Group	1	15	Email	3
5	Ruangguru	1	16	Blogspot	1
6	Google Classroom	145	17	Telegram	2
7	Zoom Meeting	49	18	Canva	1
8	WhatsApp	135	19	Moodle	1
9	Microsoft Office 365	23	20	Smart School	8
10	Schoology	4	21	Facebook	1
11	Google Form	4			

3.2. TPCK Skills of Indonesian Language Teachers

Current educational practice reflects the growing integration of computer tools and technology applications into the curriculum [56]. The idea of integrating content knowledge, learning, and technology has now become clear due to the implementation of an online learning system, which is a solution to preventing the spread of COVID-19. Therefore, technological, pedagogical, and content knowledge has become an integral part of teacher education programs to use technology in teaching [39].

TPCK is introduced as a conceptual framework for the knowledge base needed by teachers to teach effectively with technology. This framework stems from the idea that the integration of technology in an educational context benefits from the careful alignment of content, pedagogy, and potential technology. Regarding the importance of mastering the TPCK skills for teachers in online learning now, we surveyed the readiness and TPCK skills of Indonesian language teachers to find an overview of the conditions of learning for approximately 20 weeks. The results of the survey related to the trend of the TPCK skills of Indonesian language teachers can be seen in Figure 1, where there are seven TPCK components of teachers.

Based on Figure 1, content knowledge and pedagogical knowledge are the variables that have the most positive tendencies. This indicates that most teachers have mastered Indonesian language materials and skills in creating effective teaching and learning environments because most Indonesian language teachers have more than 10 years of experience in teaching Indonesian, so they have a lot of experience and are already “experts” in the field. They know how to manage classes, assess student learning using various methods, and adjust teaching styles to improve instructional practice and student learning [57], [58].

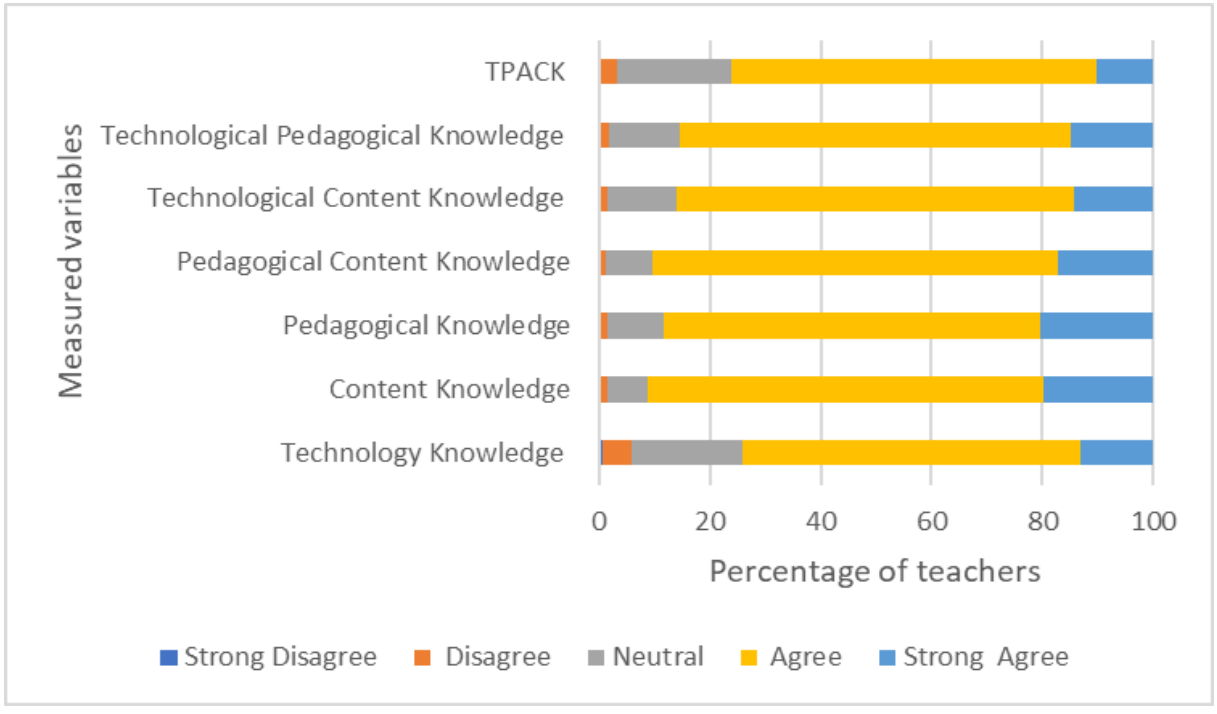

Figure 1. The Trend of the Variable Ability of TPCK Indonesian Language Teachers

Another fact is revealed in Table 3 regarding the components that contain technology such as technological knowledge, technological content knowledge, technological pedagogy knowledge, and TPCK, which still have a negative tendency (Disagree-Strong Disagree). This is dominated by teachers who have work experience over 20 years. These senior teachers do not have good ICT skills and are not “updated” on technological developments, so they find it difficult to apply online learning. In the technological knowledge component in the form of statements regarding knowledge about technology and opportunities to work with technology, 7% of the teachers responded that they were less capable of both. Technological knowledge refers to the skills in using e technology, including teachers' skills in operating computer systems and hardware and using software tools like spreadsheets, web browsers, and email. Digital technology is continuously changing. Teachers are required to have the ability to keep up and adapt to the changes [59].

TPCK is a useful framework for thinking about what knowledge teachers must have to integrate technology into teaching and how they can develop knowledge. The survey results in Table 3 indicate that many teachers have not been able yet to choose technology that can improve content for Indonesian language subjects and have difficulty helping others to coordinate the use of technology in integrating it into Indonesian language teaching and content. In this model of teacher learning, teachers need to construct artifacts (such as online courses, digital video, and podcasts) is based on the content of the subjects taught to be used in their own classroom [16]. On the other hand, many young teachers have tried to incorporate ICT into their classrooms even though, in its application, many obstacles are still encountered. It is important for teachers to always improve their knowledge about technological developments to apply and integrate it into learning. Technical skills in this use of technology can be useful in creating more efficient and interesting learning [60], [61].

Table 3. Answer Frequency and Loading Factor of the TPCK Questionnaire

Questionnaire Components	Answer Frequency					Loading Factor	Cronbach's Alpha	Communalities
	SD	D	U	A	SA			
Technology knowledge (TK)								
I know how to solve technical problems in teaching.	2	3	25	225	63	.573	.948	.452
I can use technology easily.	1	19	44	206	48	.714	.948	.328
I keep up with new technological developments that are important to me.	2	5	17	215	79	.721	.947	.510
I like to try new technology.	3	20	60	195	40	.602	.950	.519
I know a lot about different technologies.	4	24	131	144	15	.698	.949	.363
I have the technical skills I need to use technology.	1	20	85	191	21	.711	.948	.487
I have enough opportunities to work with different technologies.	1	25	84	182	26	.673	.948	.505
Content Knowledge (CK)								
I have sufficient knowledge about Indonesia language content.	1	4	9	223	81	.817	.947	.667
I usually apply scientific thinking.	1	6	38	226	47	.793	.948	.629
I have various ways and strategies to develop my understanding of chemical content.	0	3	22	232	61	.825	.947	.681
Pedagogical Knowledge (PK)								
I know how to assess student performance in class.	0	3	9	217	89	.801	.947	.609
I can adjust my teaching to what is currently understood or not understood by the students.	1	4	24	220	69	.781	.947	.641
I can adjust my teaching style with different students.	2	3	27	223	63	.759	.947	.610
I can assess student learning in various ways.	0	3	28	213	74	.810	.947	.576
I can use a variety of teaching approaches in classroom settings.	0	4	40	214	60	.741	.947	.656
I am familiar with students' understanding and misconceptions.	0	11	92	185	30	.653	.948	.549
I know how to organize and manage classes.	2	2	15	222	77	.780	.947	.426

Table 3. Continuous

Questionnaire Components	Answer Frequency					Loading Factor	Cronbach's Alpha	Communalities
	SD	D	U	A	SA			
Pedagogical Content Knowledge (PCK)								
I can choose an effective teaching approach to guide students' thinking and learning of Indonesian language.	0	4	26	226	62	.920	.946	.847
I can choose an effective teaching approach to guide students' thinking and learning of literacy.	0	4	28	238	48	.920	.947	.847
Technological Content Knowledge (TCK)								
I know about the technology that I can use to understand and practice Indonesian Language material.	0	5	39	229	45	.784	.946	.615
Technological Pedagogical Knowledge (TPK)								
I can choose technology for an effective teaching approach.	1	4	50	228	35	.844	.946	.658
I can choose technology that enhances student learning.	1	5	36	234	42	.855	.946	.712
The teacher education program has made me think more deeply about how technology can affect the teaching approach I use in class.	0	6	27	221	64	.733	.947	.730
I think critically about how to use technology in the classroom.	1	4	46	215	52	.748	.947	.538
I can adjust the use of technology that I learn to various teaching activities.	0	7	44	227	40	.811	.946	.560
Technological Pedagogical Content Knowledge (TPCK)								
I can teach the appropriate subject by combining Indonesian Language material, technology, and teaching approaches.	0	7	55	215	41	.775	.947	.658
I can choose technology to use in the classroom that enhances what I teach, how I teach, and what students learn.	0	4	39	230	45	.815	.947	.600
I can use strategies that combine content, technology, and teaching approaches that I learn in courses in the classroom.	0	5	70	215	28	.834	.947	.665
I can help others coordinate the use of the content, technology, and teaching approaches in my school and/or district.	1	22	107	169	19	.787	.947	.696
I can choose technology that enhances content for a subject.	0	10	60	222	26	.811	.947	.620

Based on Table 3, the TPCK components have a loading factor, and the alpha reliability of the instrument looks promising. However, some instruments have communalities extraction of less than 0.5. This means that some statements in the questionnaire cannot represent the TPCK factors being measured. Based on the value of Extraction Sums of Squared Loadings for the seven factors analyzed, namely TK, CK, PK, PCK, TCK, TPK, and TPCK, they only have one variation of factors. Meanwhile, Eigenvalues shows that TK has the greatest contribution, which accounts for 70.063% of the overall factors. This result indicates that knowledge of technology is important for Indonesian language teachers to carry out online learning that requires the technology to support learning. The ability of teachers to integrate technology into learning is important because of the rapid advances in technology in the twenty-first century [6], [62], [63]. These advances have changed the way to teach and learn in school settings. Researchers have shown a growing interest in studying how teachers incorporate technology into learning. Past studies have shown that teachers need to have a sound understanding of how technology can be coordinated with pedagogy and content knowledge to effectively integrate technology into learning [64]–[66]. Although TK contributes the most to teachers' TPCK skills, based on the correlation results for each factor in Table 4, each factor has a positive correlation with one another. In general, the correlation between factors is more than 0.5, meaning that each factor is correlated and supports each other for TPCK.

TPCK requires teachers to have professional

competence in using technological resources (hardware and/or software) to enhance a wide variety of teaching and learning activities [67], [68]. TPCK requires Indonesian language teachers to know how to find and use digital technology such as online animations that effectively demonstrate drama or theater, use digital technology to facilitate writing practice activities in the form of journalistic texts or drama scripts, use digital technology to collect data such as linguistic symbols, and help students use digital technology to collect information and material in developing knowledge. The TPCK framework can be used to design and evaluate teacher knowledge that is concentrated on effective student learning in various fields [6], [44], [60]. Using TPCK as a framework for measuring and evaluating teaching knowledge can serve as a basis to improve teaching/training programs for teachers and pre-service teachers.

Table 4. Correlation of TPCK Components

	TK	CK	PK	PCK	TCK	TPK	TPCK
TK	1	.433	.483	.393	.546	.544	.540
CK	.434	1	.632	.586	.452	.539	.479
PK	.483	.632	1	.689	.520	.656	.651
PCK	.393	.586	.689	1	.520	.603	.541
TCK	.546	.452	.520	.520	1	.680	.617
TPK	.554	.539	.656	.603	.680	1	.742
TPCK	.540	.479	.651	.541	.617	.742	1

3.3. Problems and Possibilities of Indonesian Language Teachers in Online Learning

The data on the problems and possible opportunities faced by teachers during Indonesian online learning were obtained from an analysis of the open-ended questionnaires that were distributed. The teacher's answers were then elaborated and reduced to saturated qualitative data. The results of the analysis of the answers are presented in table 5.

Distance learning currently applied by most schools in Indonesia is the best solution for teachers to implement learning amid this pandemic by replacing face-to-face learning with online learning. There are many advantages of online learning for both teachers and students as mentioned in Table 5, one of which is that distance learning makes teachers and students understand more about technology and increases student literacy because the learning resources used become more varied. ICT-based online learning has not been widely used by teachers and students, so this becomes a new trend for education. Besides, the implementation of online learning is flexible in both place and time. Students are given longer opportunities to understand the material and work on assignments. In online learning, students can easily access learning materials or media so that they can understand the content more easily by reviewing the learning material and interacting with others despite the long-distance [69].

The implementation of online learning which requires the use of technology for both teachers and students has a positive effect on their mastery of ICT. This can prepare them for the future, especially for students. Good digital literacy will affect the self-efficacy of a student [2], [70]. The use of technology in online learning can also increase students' activity in learning because they feel more confident when asking questions about things they don't understand [71], [72]. They do not need to be afraid of being laughed at by their friends and can ask the teacher individually via WhatsApp. Technology in online learning affects students' confidence building and their interaction with their teacher and friends. Technology also facilitates teachers to recap and archive material files, student data, and other learning files. They can easily access the data because it is stored well in the form of files.

Table 5. Problems and Possibilities in Online Learning

Characteristics	Indonesian Teacher Response
Possibilities	• The learning technique meets physical distancing during the COVID-19 pandemic and facilitates children to continue learning at home. • Learning can be done anytime and anywhere by students and teachers where the material sources and the use of learning media are more varied. Students are freer to exploit the material, and the material can be studied repeatedly so that students can better understand. • The introduction of technology can provide students with future abilities by following the current technology so that they are not left behind. Online learning can direct students to an independent learning system and find out information through learning media that can be done independently from various websites. Students are more confident in expressing opinions and questioning activities through online learning. • Teacher planning and evaluation can be carried out in more detail and the process of administering the assessment can be done automatically.
Problems	• In the disadvantaged area, it is difficult to get a signal, and 40% of the children cannot carry out online learning because they do not have facilities such as the device (mobile phone or laptop). • The accuracy of the assessment with the facts of the learning process is difficult to prove because the teacher cannot directly control student activities. The teacher cannot identify students who have and have not understood effectively because many students are not active in class. • Learning is less effective because teachers have not mastered ICT and not all children understand technology, so parental assistance is needed when learning online • Lack of teacher monitoring of student attitudes, morals, and examples. Online learning also makes it difficult for teachers to monitor and review the psychomotor competencies of every student carefully and in detail.

On the other hand, online learning has some problems during its implementation, as shown in Table 5. The implementation of online learning highly depends on the signal and connection of each user. Not all regions have good signals that make communication not run smoothly. Remote areas that do not yet have a good Internet network have difficulties in implementing this learning model. In addition to a stable signal in online learning, infrastructure such as computers, mobile phones, and webcams must also be prepared so that learning can run well. However, many students come from low-economic families and they find it difficult to fulfill these facilities. Teachers and students must look for technical alternatives to implement online learning that does not depend on Internet networks, for example, distributing the material and question exercises to students offline and submitting the answers collectively every week. No physical contact occurs between students and teachers as instruction is delivered over the Internet [73]. This overdependence on technology is a major drawback to online learning. In case of any software or hardware malfunction, the class session will come to a standstill, something that can interrupt the learning process. Moreover, the complicated nature of the technology used in distance learning only limits online education to students who are computer and tech-savvy.

Another problem faced by teachers in online learning is that the teacher cannot control students, and do not know whether they have understood the material and done the assignment given. The accuracy of the assessment with the facts of the learning process is difficult to prove because the teacher cannot directly control student activities. Without face-to-face interaction and classmates who can help with constant reminders about pending assignments, the chances of getting distracted and losing track of deadlines are high [73]. Students must remain motivated and focused if they want to complete the course in online learning. Online learning is not a good system for students who tend to procrastinate and cannot meet deadlines [74].

In general, online learning becomes a solution to continue learning amid this pandemic [75]–[79], but the implementation requires a lot of preparation and evaluation to solve the existing problems properly. The response of the teachers to the implementation of online learning that lasts for approximately 20 weeks is that it is necessary to make an offline learning application to facilitate children in disadvantaged areas to learn. Central education platforms such as E-learning of Way Kanan Education Office are very helpful for teachers as a reference to conduct learning so that teachers are not confused in making and creating technology in learning because the quality of the teaching is an important factor influencing student satisfaction [73]. These facilities such as E-learning need to be reproduced and complemented at various levels of education in various subjects.

It should also be noted about the duration of online learning every day because it is easy for students to get bored and distracted when it takes too long. The role of the teacher is to make learning as attractive as possible and easy to understand. This so-called difficult material will be more difficult if the teacher cannot choose learning strategies smartly, such as learning media and methods [80]. Amid the COVID-19 outbreak, the teacher has a bigger responsibility for the implementation of learning with the amount of material to be taught in a limited time. To ease the burden of teachers, the government should not demand the completion of basic competencies but focus on students' learning experiences and the benefits of current learning.

This study offers an overview of the problems, possibilities, and readiness of teachers in implementing Indonesian language learning during the COVID-19 period. However, the small number of respondents and the limited scope of the survey area can be the limitations of this study. Increasing the number and types of respondents, such as students, parents, and stakeholders, expanding the coverage of the survey area, and using various qualitative and quantitative data collection techniques for further research will increase the validity of the data obtained for generalization. Finally, further studies on the effectiveness of the implementation of Indonesian language online learning are still needed.

4. Conclusion

Online learning can be a widely applied solution to education during the COVID-19 outbreak. Indonesian language teachers responded positively to the implementation of online learning during the COVID-19. They try to create interactive classes using various technologies such as social media or learning applications. However, their TPCK still needs to be improved considering that many seniors find it difficult to integrate technology into Indonesian language learning. They do not have significant prior exposure to ICT, making them afraid to engage ICT in their classrooms. Teachers face the problems and possibilities of online learning. On the one hand, online learning allows students to learn independently and encourages teachers to be more creative by exploring various technologies as learning resources for their students. On the other hand, infrastructure problems and the unpreparedness of teachers and students should be addressed seriously.

Online learning has become the new normal during the COVID-19 outbreak or even beyond. As an implication, mastery and integration of technology into learning is a must. Teachers are encouraged to improve their TPCK competencies to provide better online learning. The discussion about problems and possibilities of learning Indonesian online in this article is expected to contribute to Indonesian teachers and other subject teachers in general who are struggling to carry out online learning in their respective places. Besides, the results of this study

are expected to be used as evaluation material by policymakers in Indonesia to improve the learning system.

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