

Online Learning Paradigm in Elementary Schools: An Evaluation by Teachers in Indonesia during COVID-19 Pandemic

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ABSTRACT

This research aims to explain in detail the evaluation of online learning in elementary schools during the COVID-19 pandemic in Indonesia. This research used a quantitative approach to the type of survey. The survey contains the evaluation of teachers in implementing online learning (pedagogic relations, collaboration teacher-parents, and developers and facilitators of learning access). The results of this research indicated that: 1) the teacher-student pedagogical relationship shows a good thing, although teachers experience limitations and difficulties in doing online learning, the teachers continue to carry out their professional responsibilities well by planning, implementing and evaluating their online learning activities, 2) in the context of teacher-parent collaboration, both of them are committed to collaborating in online learning, even though in practice the teacher is experiencing difficulties in communicating with parents, and 3) access to learning made and developed by teachers is fairly good, this is based on a variety of learning facilities provided such as the use of diverse applications as well as interactive media and teaching materials that help in the transfer of knowledge to students, although in learning it also sometimes experiences internet network constraints. The online learning paradigm in this research has become a new concept. So it is very important to do a detailed research. This research is expected to be an evaluation material for various parties in conducting online learning, besides this research can also facilitate other researchers to develop research on online learning, especially in elementary schools.

Keywords: *Online Learning, Online Learning Paradigm, Evaluation Teachers*

ARTICLE INFO

Article history:

Received

June 16, 2021

Revised

August 26, 2021

Accepted

September 05,
2021

How to cite

Fauzi, I., Salim, H., & Syafrudin, U. (2021). Online Learning Paradigm in Elementary Schools: An Evaluation by Teachers in Indonesia during COVID-19 Pandemic. *Jurnal Iqra' : Kajian Ilmu Pendidikan*, 6(2). 166-183.

<https://doi.org/10.25217/ji.v6i2.1610>

Journal Homepage

<http://journal.iaimnumetrolampung.ac.id/index.php/ji/>

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INTRODUCTION

The 4.0 industrial revolution has become a global issue over the past few years (Tinmaz & Lee, 2019) even that is often discussed in discussions in various countries (Yuberti et al., 2019), industrial revolution 4.0 is a sign of the changing times that are so fast (Salmon, 2019), these changes can be seen from various technological advancements that have emerged such as artificial intelligence, robotics, the internet,

autonomous vehicles, bio and nanotechnology, 3-D printing, material science, quantum computing and energy storage (Aziz Hussin, 2018), it has changed the pattern of human habits that were originally traditional in nature to become more modern (Mardiana & Daniels, 2019). Besides, technological advances have also resulted in various disturbances, especially in the field of education (Dewi et al., 2019). These disturbances must be anticipated immediately so that no serious problems occur, it is necessary to design a curriculum that builds a variety of capabilities to deal with the complexities and uncertainties of an uncertain era, these capabilities include problem-solving and innovation, skilled communication, collaboration, self-regulation and use of technology (Findikoğlu & İlhan, 2016).

At present, information and communication technology has become an inseparable part of people's lives (Klimova & Kacet, 2017) including being a lifestyle for children (Murati & Ceka, 2017), the number of children and adolescents using information and communication technology in Indonesia is very large, as evidenced by the results of a survey conducted by the Indonesian Internet Network Providers Association (APJII) in 2016 (APJII, 2016) which explained that 132.7 million Indonesians were connected to the internet, and at the age of children and adolescents (10-24 years) internet users in Indonesia totaled 24.4 million of the total 132.7 million people. This potential should be put to good use by involving elements of technology in education, this is the reason that the use of technology in education has also become a very interesting and often discussed issue (Raja & Nagasubaramani, 2018). The use of technology in education is an inevitable impact of the industrial revolution, according to Mitra (2014) that technology will play a major role in the delivery of learning to students, so teachers must be able to transform and adapt to the development of digital technology (Ally, 2019). A teacher must know how to combine various technologies to enhance the student experience and learning outcomes (Havard et al., 2018). The implication is that teachers must combine technological knowledge, pedagogy, and material to be developed into an educational framework (Koehler & Mishra, 2006).

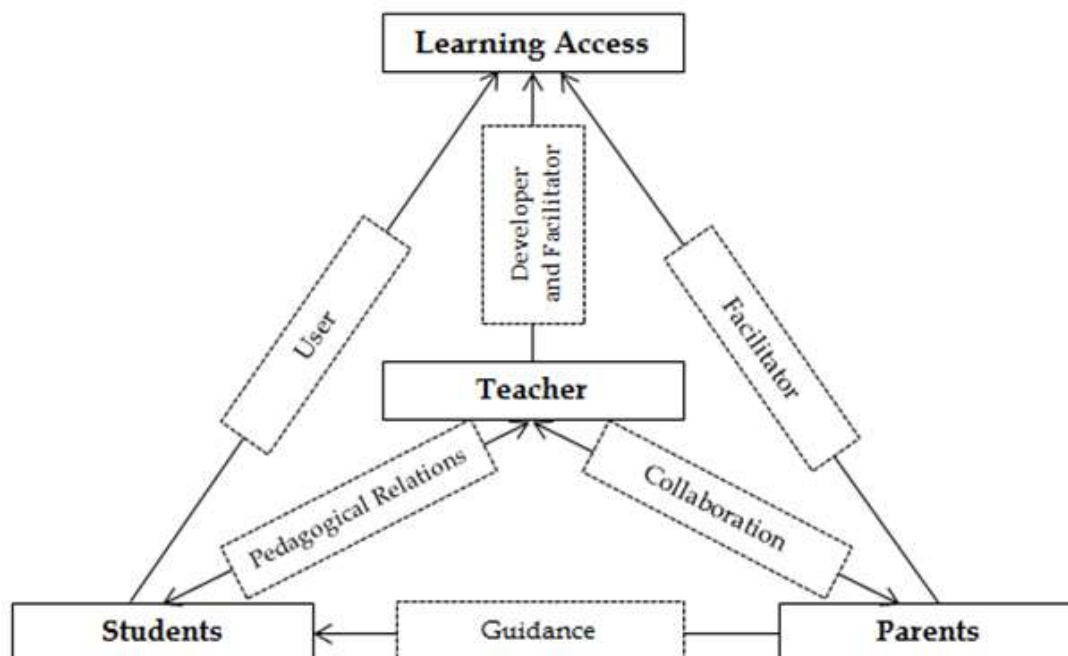
Digital technology is often used as a reason for various countries to develop future education systems that provide quality learning opportunities that are focused on students (Hood, 2018), even according to Cheng et al (2019) that almost all uses of technology can play a role in increasing student academic achievement. But the fact that the use of technology in education is still rarely done, including in Indonesia, this was stated by Bonitatibus (2018) that technology integration in learning has been applied inconsistently, according to Mahdum et al (2019), many teachers lack confidence in the use of information technology despite having adequate knowledge, even not infrequently teachers reject the use of technology because of fear of the adverse effects caused (Candra, 2016). Teachers should be able to take advantage of technological advances by involving them in learning activities, one thing that can be done is to apply online learning.

The term online learning model was originally used to describe a learning system that utilizes computer-based internet technology (Baig, 2011), online learning provides opportunities for students and teachers to engage in distance learning (Kaufmann & Buckner, 2019). Many studies that explain about online learning (Barbara & Deanna, 2019., & Hunt & Oyarzun, 2019) this is because online learning is seen to have provided significant changes in the learning process (Al-araibi et al., 2018). According to Delen & Liew (2016) that the development of online learning will greatly assist students in considering ways to use personal, behavioral, and environmental self-regulation strategies.

Throughout history, there have been many pandemics, but human responses to coronavirus disease that was discovered in 2019 (COVID-19) has never happened before (Matias et al., 2020). The COVID-19 pandemic, which initially hit Wuhan City in 2019, has spread to various countries quickly (Malik et al., 2020), because of this rapid spread, governments in various countries have implemented very serious and protective measures in areas where the pandemic has emerged such as social distance, quarantine independently, mandatory quarantine, travel restrictions, international flight cancellations, restrictions domestic travel, and curfew restrictions (Güzel et al., 2020). This has resulted in changes in the pattern of community life, all activities both work and learning are shifted to at home. The learning system that was originally directly faced to face turned into distance-learning or use online learning. So, During the COVID-19 pandemic, all levels of education from elementary education to higher education implemented an online learning system. However, in its application, many problems are found, especially in elementary schools, this can be seen from research by Fauzi & Khusuma (2020) which explained that the obstacles experienced by teachers in implementing online learning in elementary schools were related to facilities, access and use of the internet, the planning process, implementation, and evaluation of learning, and collaboration with parents.

The condition of the COVID-19 pandemic such as this has an effect on learning activities, a framework design is needed for how online learning can be applied, especially in elementary schools. Manno (2006) explained 3 basic elements in learning including the teacher, students, and material. However, this is not enough to help in implementing online learning in elementary schools. At least 4 things must be considered and become an important element in implementing online learning in elementary schools, these elements include teachers, students, parents, and access to learning. The framework of these elements is explained in the figure below.

Figure 1. The key elements of online learning success in elementary school



The figure above explains that the teacher becomes a central role in creating online learning, this is also in line with the opinion of Carmen & Salcedo (2017) in his research entitled “virtual learning environment: exploring the role of the teacher as a

central factor". Teachers and parents must be able to collaborate because online learning in elementary schools is different from what is done in secondary education or higher education, according to (Reid, 2018) Parent-teacher communication, and parent involvement are factors of online learning success. Parents must be able to provide learning facilities for children, because not all children in elementary schools already have good facilities and access to learning (technology and network access), besides that parents also play a role in guiding their children in the learning process. According to Borup et al (2019) that the role of parents in online learning is to communicate with and between students, monitor student progress, motivate students to engage in learning activities, manage and manage student learning time at home, and instruct students about learning strategies related to the material to be learned. The role of the teacher also builds a good pedagogical relationship with students, the teacher must be able to create didactic transposition, learn the content to be taught in various sources, feed them in the planning of learning, and convey it in learning activities (Maurício et al., 2017) besides, in compiling a learning design approach to online learning, teachers must be able to consider the perspective of students as the subject of learning (Morrison et al., 2011). The teacher's final role is as a developer and facilitator to create good access to learning in online learning, while the access is in the form of using technology facilities, internet access, applications, media, teaching materials, and learning resources. So that the learning access component can be obtained by parents to guide their children and also obtained by students to learn. The key elements for the success of online learning that have been described in Figure 1 are an important part that must be studied in detail, so that this research will greatly affect the development of education in implementing online learning during the COVID-19 pandemic.

Various studies have explained that online learning is very effective to apply (Larson & Vontz, 2018., Shelton et al., 2017., & Wei & Chou, 2020), however, this effect is because its application is mostly carried out in the scope of secondary and higher education, whereas it is very rarely found the application of online learning in elementary schools. Besides, the application of online learning in various studies only within a specified period, then this is the reason for the importance of various parties to study online learning during the COVID-19 pandemic in elementary schools, this situation is different from previous research, while the significant difference is 1) online learning has been applied for several months since the COVID-19 case in Indonesia, 2) online learning is applied within the scope of elementary schools, and 3) the four things explained in Figure 1 become the basic elements in online learning that should be studied in depth. So in this study will explain in detail how the evaluation of online learning in elementary schools during the COVID-19 pandemic in Indonesia. The aspects examined in this study are related to online learning that teachers have undertaken, including pedagogical relationships with students, collaboration with parents, and as developers and facilitators in creating access to learning. This research is expected to be able to provide an overview of the objective conditions experienced by elementary school teachers in applying online learning, so that it becomes an evaluation material for various parties in conducting online learning, especially in elementary schools, besides, this research can also be a material for study and development of other related researchers online learning in elementary school.

METHOD

This study uses a quantitative approach. According to Nenty (2009) that quantitative research seeks to uncover the truth and universal principles in the form of relationships between variables or phenomena. The hallmark of quantitative research is to use data analysis techniques with objective statistics (Creswell, 2010). While this type of research uses survey methods. According to Pinsonneault & Kraemer (1993) that survey research is seen as a method for quantitatively describing specific aspects of a particular population so that the collection of data is carried out to groups of people whose results can be generalized back into a particular population, survey research is best suited to reveal how evaluations of online learning during the COVID-19 pandemic period were viewed from the teacher's perspective.

Participants in this study were 77 teachers from Banten and West Java provinces taken using purposive sampling. The age of each respondent has a range of 20-50 years, and the length of teaching for each teacher is from 1-20 years, as for the participant data presented in the table below.

Table 1. Respondent data

Variable	N
Age	
20-30 years	68
31-40 years	8
41-50 years	1
The length of teaching	
1-5 years	65
6-10 years	4
11-15 years	7
16-20 years	1
From	
Banten	31
Jawa Barat	46

The instrument used in this study used survey data, while the survey was made relating to online learning by teachers, the aspects studied in this study were pedagogical relationships with students, collaboration with parents, and the development and facilities of learning access, surveys in this study in the form of a questionnaire made in Google form so that it is easily accessible by the teacher. The survey contains 30 questions that must be by the teacher.

Table 2. Survey question data

Variable	N
Questions	
1. Pedagogic Relations Teacher-Students	(17)
a. Learning Planning	7
b. Implementation of learning	6
c. learning evaluation	4
2. Collaboration with Parents	(5)
3. Developers and Facilitators of Learning Access	(8)
Total	30

The type of survey in this study uses a Likert scale. Sugiyono (2018) explains that a Likert scale is a tool used to measure in detail related attitudes, opinions, and perceptions of individuals or groups of people towards social phenomena that arise.

According to Dawes (2008) that the Likert response scale criteria consist of strongly disagree, disagree, neither disagree nor agree, agree, strongly agree, the explanation of the Likert scale table is presented below.

Table 3. Likert scale

Assessment criteria	Positive scale	Negative Scale
Strongly disagree	1	5
Disagree	2	4
Neither disagree nor agree	3	3
Agree	4	2
Strongly agree	5	1

The score of survey assessment results that have been obtained from various teacher responses is calculated using the respondent percentage formula, the calculations are explained in the figure below.

Figure 2. The formula for a respondent percentage score

$$\text{Index \% formula} = \frac{T \times Pn}{Y} \times 100$$

Information:

T : Total number of respondents who voted

Pn : Choice of Likert score

Y : Ideal Score

As for the interpretation of the score based on the intervals described in the following table.

Table 4. Criteria for interpretation of scores

Percentage	Positive Statement	Negative Statement
0 % - 19,99 %	Very poor	Very good
20 % - 39,99 %	Not good	Good
40 % - 59,99 %	Enough	Enough
60 % - 79,99 %	Good	Not good
80 % - 100 %	Very good	Very poor

The results of the calculations above, become the basis for in-depth analysis related to the evaluation of online learning in elementary schools during the COVID-19 pandemic in terms of the teacher's perspective.

RESULT AND DISCUSSION

An online learning evaluation survey during the COVID-19 pandemic period was given to 77 teachers in the Banten and West Java regions, while the details of the teachers who filled out the survey were 22 male teachers and 55 female teachers, the length of teaching for each teacher is different, 84.4% have taught for 1-5 years, 5.2% of teachers have taught for 6-10 years, 9.1% of teachers have taught for 11-15 years, and 1.3 % of teachers have taught for 16-20 years. The survey is given when online learning has been completed i.e. at the end of the school semester, this is done because it can see the objective conditions of online learning that have been carried out for the past 3 months (March-May) or during the prevention of transmission COVID-19 is enforced in Indonesia with its impact namely the application of study from home for all students from elementary education to higher education, The evaluation survey includes pedagogic relations teacher-students (planning, implementation, and evaluation of learning), teacher-parent collaboration, and the teacher as a developer and facilitator of learning access. The survey results are explained in detail below.

Pedagogic Relations Teacher-Students

Online learning activities do not make teachers forget about their professional tasks, namely learning planning, implementing learning, and evaluating learning, it is just that the concept created by the teacher is not as usual because it requires that all systems be made online, this is a challenge for teachers to be able to adapt and adjust to the conditions being experienced, to be able to build good pedagogical relationships, the teacher must be able to plan, implement, and evaluate learning in detail. The first aspect is related to learning planning. Learning planning is an important component of the success of learning activities, while the survey analysis that has been carried out is as follows.

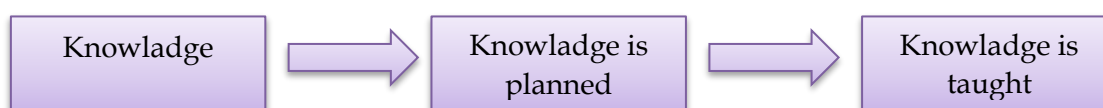
Table 5. Learning plans made by teachers in online learning

Learning Planning Indicator	Percentage	Criteria
I always use online learning during Pandemic COVID-19	80.51%	Very Good
Learning planning helps me in doing learning activities	81.82%	Very Good
I always analyze the content and teaching materials before learning	84.74%	Very Good
The learning plan that I made has been by the real conditions of students	77.66%	Good
I always analyze the objective conditions and characteristics of each student before carrying out learning	81.30%	Very Good
I always make learning plans and teaching materials during online learning	79.22%	Good
I use certain strategies and methods in implementing learning	77.40%	Good

Online learning during the pandemic COVID-19 has indeed become a key alternative for learning to continue to be carried out at all levels of education, as is evident from the table above that almost all teachers in elementary schools implement an online learning system, according to Sanjaya (2020) that in an emergency, online learning will be very helpful in implementing learning, because only technology is considered a solution so that teachers can give lessons to students. But some teachers have to go around to each house to check one by one student and make sure they continue to study at home, this is because of the limited facilities owned by each parent or network access that is less supportive, and it is felt by several teachers in rural. The learning planning aspect is a key to success in learning activities, there are various activities between students, teachers, and the learning environment that are controlled in learning planning. The more mature the teacher plans the learning, the learning process will be carried out well (Fauzi & Suryadi, 2020). The teachers consider that learning plans designed for learning activities both in normal conditions and in emergencies such as this (COVID-19) help them in carrying out the learning process, this is also evident from the survey results with a percentage score of 81.82% with very good criteria. Learning planning needs to be arranged in detail to describe the learning activities to be carried out, according to Kilpatrick et al (2001) Learning planning needs to be arranged in detail to describe the learning activities to be carried out. Meanwhile, in planning learning, various analyzes must be done by the teacher, including analysis of objective conditions of student characteristics and analysis of content and teaching materials. According to Şahin et al (2018) that the learning behavior of students in an

online learning environment can vary according to student characteristics. In the context of online learning during the COVID-19 pandemic, teachers always analyze student characteristics, even in the survey, the percentage was 84.74% with very good criteria, besides that the teacher also felt that the planning they had made was by the real conditions experienced by students, this was seen from the survey results which showed a percentage score of 77.66% with good criteria. Analysis of the objective conditions of students' characteristics is the basis for making teaching materials, so that from various possible responses that arise from students can be anticipated by the teacher in learning planning, content and teaching materials are the key to didactic transposition from teacher to students so that it is necessary to arrange the content and teaching materials based on various perspective studies both seen from the research, books or the applicable curriculum.

Figure 3. Didactic Transposition



From the survey results that the analysis of content and teaching materials conducted by teachers to prepare online learning planning during the COVID-19 pandemic is included in the criteria very good because it gets a percentage score of 81.30%. Meanwhile, in making learning plans and teaching materials during the COVID-19 pandemic, the percentage score of the survey that was distributed was 79.22% with good criteria, some things become an evaluation note that the limited facilities are the reason some teachers do not make learning plans and teaching materials, and even only give assignments and are delivered to each student's home or ask students to watch TVRI Channel which provides learning programs for students that are provided directly by the Indonesian government. These limitations do not become a barrier for teachers to be able to ensure students can learn during the COVID-19 pandemic. Learning planning also involves several components that must be compiled by the teacher, one of which is related to the use of learning strategies and methods. According to Samperio (2019) that the use of learning strategies can help students to understand the context to be learned so that it can affect their learning outcomes. Based on the results of a survey that has been done that the teacher's condition in determining strategies and methods in online learning during the COVID-19 pandemic period is fairly good, it was seen from the percentage score of 77.40% this indicates that even with adequate limitations, teachers still try to create effective learning activities using online learning strategies and methods, while the strategies used are quite varied namely the use of videos in learning, games, quizzes, or project-based problem-solving activities that make students challenged to find out and find solutions to each problem given and load projects that they can use in the context of everyday life, these activities provide significant benefits in encouraging students' critical and creative thinking skills. Training students to have critical and creative thinking skills is considered an important goal in the learning process, because both of these abilities can encourage students to have great potential so that they can apply high-level cognitive processes to learning in the classroom (Liu et al., 2015).

The second aspect related to pedagogic relations is learning activities. Learning activities must be a means of developing the ability of students both soft skills and hard skills so that they can be a provision for students to face life in the future. Yeung et al (2003) explained that for students to be active learners, the learning activities they

undertake must be useful for the future so they know the reasons for learning something. The results of a survey conducted related to online learning activities during the COVID-19 pandemic are as follows.

Table 3. Online learning activities that have been implemented

Learning Activity Indicators	Percentage	Criteria
Learning activities are by the plans that have been made	71.43%	Good
I have difficulty implementing online learning	73.25%	Not Good
I have difficulty in explaining the material to students	71.91%	Not Good
I feel learning activities are less effective	24.16%	Good
I feel students have difficulty understanding the material provided in online learning	71.17%	Not Good
I feel students have difficulty understanding explanations and instructions from the teacher	67.27%	Not Good

Learning activities carried out both directly and online begin with the planning that has been made by the teacher, and this becomes a guideline for teachers in carrying out learning activities, according to Vdovina & Gaibisso (2013) indicates that learning planning helps teachers to have a framework so that they can lead students towards the expected learning goals. Based on the survey results that the alignment between learning planning and online learning activities that have been carried out by teachers is included in both categories this can be seen from the survey percentage score of 71.43%. This indicates that not all learning activities can run smoothly, as usual, moreover online learning has become a new habit in education in the pandemic COVID-19 which is striking, meaning it needs adaptation and readiness of resources that support the learning process. The fact that teachers have difficulty in carrying out online learning, this can be seen from the survey percentage score of 73.25%, even they also have difficulty in explaining the material to students, it is clear that changes in the learning system during the COVID-19 pandemic have a significant impact towards the learning process especially in elementary schools, so the teachers consider that online learning is less effective, this is also in line with the research described by Fauzi & Khusuma (2020) that out of 45 teachers, 36 teachers (80%) viewed online learning as less effective, moreover this was implemented within a period of several months (during the COVID-19 pandemic). The impact experienced by the ineffectiveness of online learning is the difficulty of students in understanding the material provided and the difficulty of students in understanding explanations and instructions from the teacher.

The third aspect is related to the evaluation of learning, this is important to do to see how student learning outcomes during the COVID-19 pandemic, and what teachers usually do in assessing the learning process that has been done. The survey results are explained in the table below.

Table 4. The simulation of learning that has been carried out

Learning Evaluation Indicator	Percentage	Criteria
I evaluate objectively based on student learning outcomes	79.74%	Good
I make a report on the assessment of student learning outcomes during learning	82.60%	Very Good
I have difficulty implementing the learning evaluation	66.23%	Not Good

During online learning, student learning outcomes show satisfactory scores	68.05%	Good
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Evaluation of learning will greatly determine the effectiveness and quality of learning that has been carried out, according to Tudevdagva et al (2013) that evaluation plays an important role in the development, implementation, and realization of online learning frameworks or e-learning. This is also to see the extent of student achievement in the learning process, so teachers need to evaluate the learning activities that have been carried out. Based on the results of a survey that has been done that the teacher evaluates student learning outcomes objectively, this can be seen from the results of a percentage score of 79.74% with good criteria. The teacher always does is make a report on the achievement of student learning outcomes during learning activities, but the teacher has difficulty in assessing student learning outcomes, it can be seen from the teacher percentage score of 66.23%, one reason is that teachers cannot directly assess what students have done during learning activities, and this is what makes teachers difficult to make decisions and provide good value affective, cognitive, and psychomotor. Surely this difficulty must be anticipated directly by conducting intense communication with parents to get information on student development while studying at home, and this will greatly help the success of online learning. According to the teacher that student learning outcomes during the COVID-19 pandemic showed good results, it can be seen from the percentage score of 68.05%, although according to the teacher that when compared with direct learning as usual the results would be better than online learning as now.

Collaboration Teacher-Parents

The success of online learning is inseparable from the readiness and support of various parties, one of the things that are the key to success is the collaboration between teachers and parents, this is based because elementary school students are still at the teacher guidance stage during the learning process, but in COVID-19 conditions, the teachers have limitations to do direct guidance, so it takes the role of parents to be able to guide directly and monitor the learning activities during online learning, besides because not all elementary school students have information technology tools, the need for parental assistance to be able to provide learning facilities to support online learning. When students experience difficulties in learning during online learning, it is not only the teacher's responsibility but also the responsibility of parents to guide them, so this also agrees with the opinion of Maryani et al (2018) that the role of parents in supporting the learning process of children is to provide facilities for learning, supervise learning activities, monitor learning activities, find out children's learning problems and overcome these problems. The survey results related to collaboration between teachers and parents are explained in the table below.

Table 5. Collaboration with parents during online learning

Collaboration with Parents Indicators	Percentage	Criteria
I always do intense communication with parents	77.67%	Good
I have difficulty communicating with parents	55.58%	Enough
We (teachers and parents) are committed to collaborating in implementing online learning	80.78%	Very Good
Parents helped me guide students in online learning	78.96%	Good
I feel that parents are very cooperative during online learning activities	74.03%	Good

Teacher-parent communication during the online learning period is something that needs to be done to see how far online learning can be carried out properly, the teacher can ask about the successes of children who are done while at home, besides the teacher can also ask things that are difficult for children in the online learning process, with the communication the hope is that the difficulties encountered can be anticipated by the teacher by providing advice and solutions to parents, so parents can provide guidance directly to their children, survey results show that the teacher always communicates with parents during online learning, This can be seen from the survey score of 77.67% with a good category, but the teacher considers that it is not uncommon to find parents who are busy with their work, so communication is difficult and tends to slow response, this is also based on the survey score of 55.58% which shows that teachers have difficulty communicating with parents, but despite these difficulties, teachers and parents have a strong commitment to carrying out online learning during the Pandemic COVID-19. In practice, teachers assume that parents are very cooperative and want to help them in the online learning process.

Learning Access

It is undeniable that access to learning is one of the most indispensable needs in learning activities either in person or online. Access to online and face-to-face learning is clearly different, it takes many components that must be prepared in online learning, one of which is the involvement of technology in learning activities, technology is the main facility in organizing online learning, this is also conveyed by Korhonen et al (2019) that technology is needed to support the online learning environment. Students must be familiar with the tools (technology) to choose which one is suitable for learning. Besides, several other components that must also be considered are the availability of network access, the use of applications, and the creation of media and teaching materials which are the keys to success in organizing online learning. The survey results related to access to learning that have been carried out in organizing online learning are as follows.

Table 6. Learning access during online learning

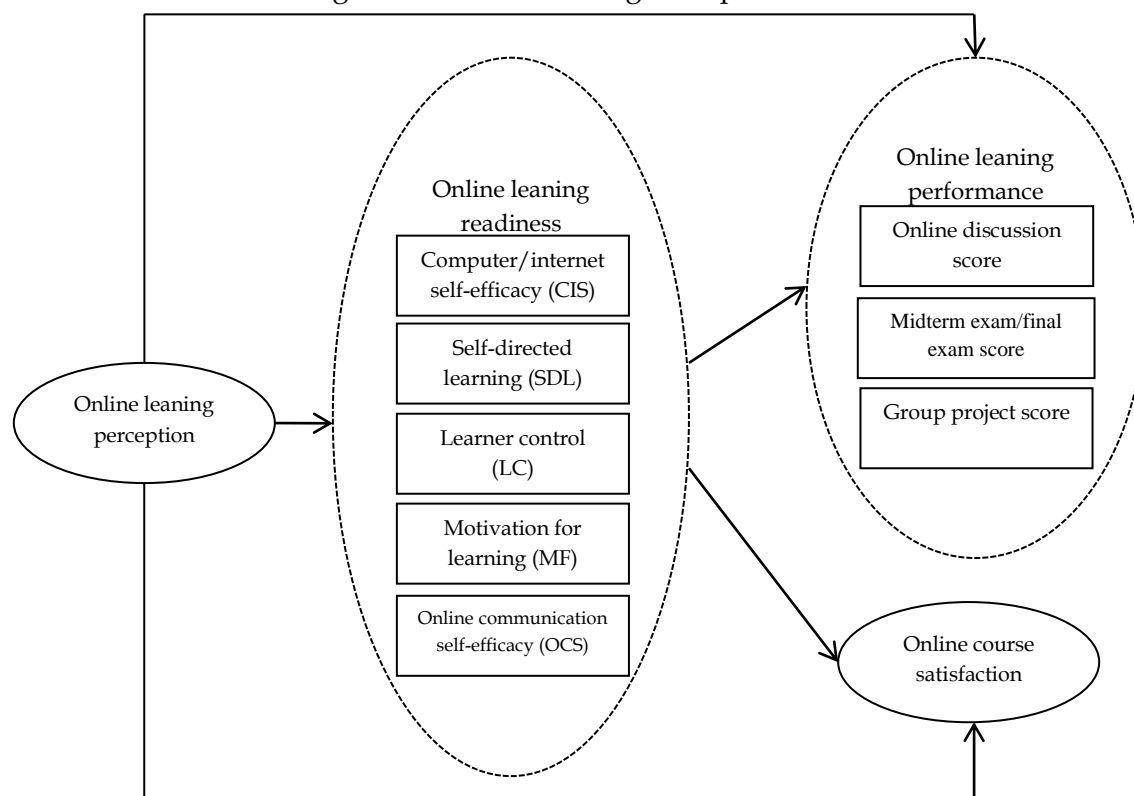
Learning Access Indicators	Percentage	Criteria
I use the right technology in implementing online learning	73.51%	Good
I use various applications in implementing online learning	66.23%	Good
The application that I have used helps students in understanding learning	68.31%	Good
Network access is very helpful in online learning activities	82.86%	Good
I am often constrained in implementing online learning because of network access	51.43%	Good
I use media and interactive teaching materials in online learning activities	71.43%	Good
I guide the form of tutorials, videos, practice exercises, student worksheets to the media and teaching materials	80.78%	Very Good
the media and teaching materials used are very effective in online learning activities	71.43%	Good

Access to learning must be carefully prepared by both teachers and parents, the teacher's job is to provide and develop access to learning for students, while the task of parents is to provide various learning facilities needed to support online learning at home. Based on the survey results above that the teacher uses the right technology, it is shown from the survey score of 77.67% with a good category, while the applications used are varied, for learning communication the teacher often uses the WhatsApp application, while for the learning process the teacher uses various applications such as zoom, google classroom, edmodo, youtube, learning house (*rumah belajar*), cisco, teacher room (*ruang guru*), and others. These various applications are certainly very helpful for teachers in carrying out learning (transfer of knowledge). The use of technology and various applications of course must also be supported by good internet network access, this is also confirmed by the teacher and can be seen from the survey score of 82.86%, however this is not in accordance with the reality, sometimes learning is constrained by the internet network, both experienced by teachers and by students, so that it results in students' understanding and imagining of concepts in understanding the subject matter. It is an important note that network access must be improved so that online learning during a pandemic can still be carried out properly. In learning the teacher uses interactive media and teaching materials as a means of conveying material in the learning process, the media and teaching materials are also equipped with tutorials, videos, practice questions, worksheets to help students in learning, so that the teacher judges that it is very important. effective and helpful in online learning activities.

Online learning is seen as having many benefits that are felt by students. This is seen from the flexibility of time and place, students can also interact directly and indirectly with their friends and teachers, and get easy access to the use of material content (Wei & Chou, 2020) (Wei & Chou, 2020). Online learning is often used in the context of higher education, and is sometimes combined with face-to-face learning to become a bland learning system. This system is used to being used in higher education and has even become the key to success in the learning system, this is because lecturers and students understand the context and perception of online learning.

Online learning is the only alternative when a pandemic occurs, it takes careful preparation to be able to organize online learning, especially in elementary schools, such as teacher-student pedagogic relationships, collaboration with parents, and providing access to learning that supports online learning, according to Hung et al (2010), that there are three things that must be considered in organizing online learning, including learning readiness, learning achievement, and learning satisfaction, these three things are explained in the picture below.

Figure 4. Online Learning Perception



From the picture above, readiness in online learning will greatly determine student achievement and learning satisfaction. The implementation of online learning activities also needs to be prepared in detail by teachers, especially in the context of elementary schools. If we see how online learning really works in college and shows good things towards learning (Joosten & Cusatis, 2020., & Berteau, 2009), it is different from the elementary school context that many components are of special concern. Teachers must prepare several things both in terms of content knowledge, the use of technology/internet that supports learning, relationships with students to prepare learning, and the involvement of parents to jointly help the student learning process. Besides, according to Joosten & Reddy (2015) things that must be of particular concern for students in online learning are 1) readiness of technology facilities and skills to use them; 2) able to organize himself to learn independently; and 3) requires students to interact and communicate with other people.

Then, There are several stages that the teacher must do before carrying out online learning, this is explained by Salmon (2003) there are 5 models that must be considered in online learning, among others are.

Table 7. Online Five-Stage Scaffolding Model

Model	Components that must be prepared
Access and motivation	Setting up the system Accessing, welcoming, and encouraging
Online socialization	Sending and receiving messages Familiarizing and providing bridges between cultural, social, and learning environments
Information Exchange	Searching, personalizing software Facilitating tasks and supporting the use

	of learning materials
Knowledge construction	Conferencing
	Facilitating process
Development	Providing links outside closed conference
	Supporting, responding

The stages described above are a form of flow for how teachers can prepare online learning to be carried out to students. The components above, both learning readiness and the stages of the model in online learning to complete the concept on Figure 1 regarding the key elements of online learning success, even in this picture the important role of teachers, students and parents in online learning activities. These 3 key elements (teacher-student pedagogic relations, teacher-parent collaboration, and learning access) are very important bases in organizing online learning, especially in elementary schools. The concept of online learning in this article can be used to see how the implementation of online learning, especially in elementary schools. Schools and the government can evaluate various possibilities that occur both in terms of success and obstacles by looking at the concepts described in Figure 1.

CONCLUSION

Based on the results and discussion above, the conclusion of this study is the teacher-student pedagogical relationship, teacher-parent collaboration, and access to learning show good things, but the teacher also realizes that it is difficult to carry out online learning. Even, some teachers who initially rarely using technology as part of learning must try to adapt to be able to use technology in the era of the COVID-19 pandemic. Teachers also have difficulty communicating with some parents, and this is an obstacle to online learning. Besides that, in terms of access to learning, both teachers and students often experience problems in the internet network, and when this happens, learning is not conducive. This research provides an overview of online learning in Indonesia, that there are still many things that need to be improved in online learning in the COVID-19 pandemic. The 3 key elements in this research can be used as an evaluation and improvement of the online learning process in the future. This research is a real picture of the implementation of online learning during the COVID-19 pandemic, so that it becomes an evaluation of various parties in conducting online learning in elementary schools. This research is expected to have an impact on education, especially in Indonesia, in finding the right formula for how to conduct online learning in the midst of the COVID-19 pandemic, and the 3 key elements described above are the answer to a new paradigm in conducting online learning.

ACKNOWLEDGEMENT

We would like to thank the teachers in Banten and West Java who have taken the time and sincerely filled out the questionnaire from the researcher.

AUTHOR CONTRIBUTION STATEMENT

This is a collaborative research which essentially discusses the evaluation of online learning during the COVID-19 pandemic. IF, US, and HS jointly designed the research, collected data, analyzed the data obtained, and compiled a research report.

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