

# ASSESSMENT OF STUDENT PERFORMANCE ON ONLINE LEARNING DURING PANDEMIC IN INDONESIA

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#### **ABSTRACT**

The pandemic has had a negative impact in the form of learning loss. Learning loss during a pandemic was not only experienced by students but also by teachers. Some teachers have difficulty providing an objective assessment, especially psychomotor aspects. This quantitative descriptive research aims to determine teachers' constraints and solutions when assessing student performance. This research was conducted by distributing questionnaires in the form of Google Forms and distributing them to several teachers on Java and outside Java. Fifty-two teachers are willing to fill out the questionnaire completely. Based on the data processing results, it was found that one of the obstacles faced by teachers when giving assessments was the unfriendly internet network, the poor quality of videos or images sent by students, and confusion about who was doing the work (selfmade or assisted by others). Some teachers think about and do ways to handle it. At the same time, some others allow the existence of competence that is not achieved.

### Keywords:

teacher, learning loss, pandemic, assessment, performance, psychomotor, performance

#### INTRODUCTION

During the two years that the pandemic has lasted in Indonesia, schools have been forced to carry out the learning process from home or what has become known as online learning. Septiani & Samputra (2021: 243) summarize several definitions of online learning as "a learning process carried out in an educational unit that separates space and time between teachers and students using certain methods and media". Online learning is defined by Singh & Thurman (2019) as a learning experience that uses the internet in asynchronous or synchronous conditions where students can still interact with educators and their friends even though they are far apart.

Online learning turns out to have an impact on student learning processes and outcomes. The Asian Development Bank (ADB) reports that although various learning strategies have been implemented, learning is effective in only a few areas (ADB, 2021). According to ADB (2021: 4), there are three reasons for this. The first reason is the condition of events that are not planned or predicted in advance. The second reason is the learning process that involves early childhood. Finally, some distractions are often present when children try to concentrate on learning from home. As stated by Megawanti et al. (2020) that based on the results of their research, students also find it difficult to complete the tasks given by the teacher. For students, teachers are expected to be physically present and teach subject matter directly, especially those related to learning that requires practice.

The pandemic and the change in the school learning process from offline to online without any prior preparation have resulted in what is commonly known as learning loss. Learning loss is a situation where students cannot learn the content of



the lesson and master skills or abilities at a level where they should be able to learn and master them (Andriani et al., 2021; Donnelly & Patrinos, 2021; Pier et al., 2021). Based on Wahyudi's explanation, Indonesia experienced a learning loss before the pandemic. However, "during the pandemic, the term learning loss refers more to the loss of learning opportunities due to the reduced intensity of interaction with teachers during the face-to-face learning process" (2021: 21). This is as written by Alifia et al. (2020) that learning from home activities are continuously being extended, causing difficult situation for teachers since they had no adequate preparation".

The difficulty experienced by teachers, apart from how to provide learning materials that can be accessed equally by all their students, is when giving assessments. The assessment consists of three things: cognitive, affective, and psychomotor. The psychomotor is an interesting thing to study. Kasenda et al. (2016) mention that these three aspects of assessment are more commonly referred to as "head for cognitive, heart for affective, and hand for psychomotor. They explained that cognitive, affective, and psychomotor are criteria teachers should consider to assess students' success levels during the learning process. Public awareness of the importance of mastering a skill, shown in the psychomotor aspect, is increasing along with the need for experts. Baharom and Khoiry (2015) state that psychomotor assessment has not been considered as important as cognitive assessment.

According to Yuniarti et al. (2014), in conducting a psychomotor assessment, an educator can conduct a performance assessment. During online learning, there were various obstacles experienced by teachers and students in achieving the competencies targeted by the curriculum. The difficulties experienced by teachers in conducting performance assessments during online learning were also explained by Husna et al. (2021). Teachers have difficulty knowing the actual learning achievements of students. Husna et al. state that in the teacher's function as an evaluator, the teacher should collect all information regarding the success and achievement of students in absorbing lessons. That way, the teacher can determine whether he has succeeded in carrying out learning. At the same time, the teacher can find out which part of the lesson the students do not understand and master. However, Husna, et al. added that during online learning, evaluation and assessment are difficult to do. Teachers have difficulty seeing and supervising students directly when they do their assignments. Teachers also have difficulty knowing the authenticity of students' work, because it could be that their work was made by someone else.

The problem of assessing the psychomotor aspect cannot be separated from the cognitive and affective aspects; the three are interrelated (IDRI & Banten, 2020). Students who are said to be intelligent are those who are not only proficient in cognitive terms but also proficient in affective and psychomotor matters. However, aligning these three aspects in practice is not as easy as turning the palm of the hand. Gabriel, Anamaria, and Mihaela (2019) explain that the psychomotor domain covers hard and soft skills. The benefits resulting from mastery of this domain may not be immediately felt by students but will be seen in the future. The benefits will be not only felt by the students themselves but by others. Therefore, psychomotor skills must still be taught and assessed during online learning.

The research problems based on the background above are (1) How do teachers conduct psychomotor aspects in the form of performance/performance during a pandemic, (2) What obstacles do teachers face when carrying out these assessments, (3) what competencies do teachers find difficult to teach and grades,



and (4) how do teachers deal with cheating that students might do when performing online performances. Thus, there are four research objectives: to find out how teachers assess student performance during a pandemic, the obstacles faced by teachers when assessing psychomotor aspects, competencies that are difficult to teach and assess by teachers, and how teachers deal with students who cheat during online demonstrations.

### **METHOD**

The method used in this research is descriptive quantitative. According to Rukajat (2018), the descriptive method is defined as research steps that try to solve problems. The problems that occur are reviewed to provide an overview of the condition of the subjects and objects of research. The reason for using this approach is to find out the description in the field regarding the teacher's efforts in assessing the performance or performance of students. Appropriate descriptive-analytical research will be very useful in establishing or improving an applicable policy to impact social change or development in society positively (Prajitno, 2015).

The subjects of this study were teachers who taught from kindergarten to high school. The reason is that it can be seen whether there are differences and similarities between kindergarten and high school teachers in assessing their students' performance.

Data was collected by creating a questionnaire in the form of a Google Form and distributed to many teachers through social media. However, of the many questionnaire links distributed over several weeks, only 52 respondents were willing to complete the questionnaire.

The questionnaires distributed contained columns of respondent identity such as gender, age, last education, and teaching location. The questionnaire also contains questions about how the teacher assesses student skills, what obstacles they face, and what solutions they come up with.

The collected data were analyzed descriptively and compared with the results of previous studies. Descriptive analysis was performed on each question item. Respondents are allowed to provide reasons for the answers given. Thus it can be examined in depth regarding teachers' perspectives and perceptions regarding assessing student performance during a pandemic.

## **RESULTS AND DISCUSSION**

The teachers who participated in completing the questionnaire came from various regions in Indonesia. Respondents are further divided into two, namely those from Java Island and outside Java Island, to facilitate data processing and interpretation. Respondents from outside Java Island consisted of 2 people from Maluku, 2 from Medan, 1 from Pekanbaru, 1 from Jambi, and 3 from South Sumatra. The total number of respondents who teach outside Java is 9 people. Meanwhile, there were 43 respondents who taught in Java, consisting of 10 people from Bandung, 10 people from Jakarta, 1 person from Klaten, 5 people from Tegal, 5 people from Bogor, 1 person from Sidoarjo, 6 people from Serang and Banten, 2 people from Depok, 2 people from Bekasi, and Tangerang 1 person. The total number of respondents who teach on the island of Java who are willing to be the respondents of this research are 43 people.



Based on the status of the school, most of the teachers 60.8% who filled out the questionnaire were teachers who taught in public schools. The remaining 39.2% are teachers who teach in private schools.

The identity of the respondents is in the form of gender, age, and educational background (Table 1). Based on Table 1, the proportion of female teachers was dominant, both in Java and outside Java. Meanwhile, there is variation in age. The distribution of respondents who filled out this questionnaire looks almost even for age levels. In contrast, in terms of educational background, there is a contrast between those with undergraduate and master's degrees. Due to the policy of the ministry of education and culture requiring teachers to have a minimum bachelor's degree, most of the teachers are undergraduates. The percentages presented here certainly cannot represent and describe the overall condition of teachers in Indonesia. In fact, currently, there are many teachers in Indonesia who hold master's degrees and some even have or are currently pursuing doctoral degrees.

**Table 1:** Percentage of Respondents by Gender, Age, and Educational Background Based on Teaching Locations

Teachi ng Locatio n	Gender		Age (year)			Educational Background			
	Male	Female	< 30	30 <b>–</b> 40	> 40	Diplo ma	Under gradu ate	Maste r	Postd octor al
Inside Java	23%	60%	37%	23%	23 %	6%	65%	12%	0
Outside Java	4%	13%	6%	8%	4%	0	15%	2%	0
Total	27%	73%	43%	31%	27 %	6%	80%	14%	0

Source: Processed Data

Table 2 shows the percentage of respondents based on the length of time they have taught and the level of the school where they teach in terms of teaching location. The respondents who were inside Java taught, on average less than 5 to 10 years. While 17% of respondents have taught for more than 15 years. It is no different from the respondents who came from outside Java.



**Table 2:** Percentage of Respondents' Teaching Period and School Level Based on Teaching Locations

	Te	eaching Pe	eriod (ye	ear)	School Level			
Teaching Location	< 5	5 – 10	10 – 15	> 15	Kinder garten	Eleme ntary Schoo I	Junior High Schoo I	Senior High Schoo I
Inside Java	27%	29%	8%	17%	12%	27%	15%	29%
Outside Java	6%	8%	2%	2%	0	2%	12%	4%
Total	33%	37%	10%	19%	12%	29%	27%	33%

Source: Processed Data

The pandemic motivates educators and students always to learn how to use effective learning media when online learning the question of what media or platform teachers generally use when online learning (Figure 3) that messaging media such as Whatsapp is the teacher's favorite application.

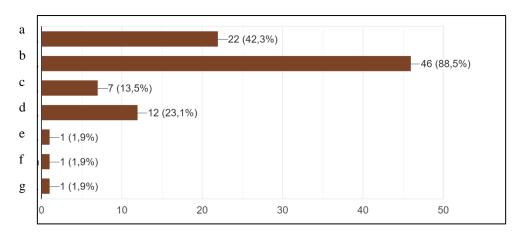
Most of the respondents (88.5%) answered that online learning was carried out during a pandemic with the help of message-sending media. This is the same as what was researched by Fahmi (2020) that messaging media such as the Whatsapp application have several advantages, such as saving internet quota and not requiring a strong signal network. The application also supports teachers and students to exchange pictures, photos, and videos more easily and quickly. All information that has been stored can be accessed again even if there is no internet network. Of course, these advantages make it easier for teachers and students whose digital literacy is still limited and ordinary. Fahmi also mentioned that since the beginning of the pandemic, messaging media has become an application that teachers and students rely on during online learning.

Apart from using messaging media, as many as 42.3% of teachers choose conference platforms such as Zoom to carry out the learning process. The rest use LMS (Learning Management Systems) such as Google Classroom, Moodle, and so on as one-spot learning. Teachers don't only use 1 type of media or platform. Often online learning is done by combining LMS, Zoom, and Whatsapp. In Figure 3 it can also be seen that there are teachers who are still carrying out learning at school and there are also teachers who do not use any online learning platforms.

When viewed based on the location of teaching, most respondents who teach on the island of Java have used media and online learning platforms, at least messaging applications such as Whatsapp. This is in line with what was explained by Nunung, Nugroho, and Berliani (2019) that the Java and Sumatra regions are islands with a relatively large population and support for access to transportation and good communication networks. Almost no problems were found in the development of education. As a result, these two islands can be said to have relatively more advanced educational quality compared to other islands. Conversely, due to the lack of availability of qualified educators and education staff, easy access to transportation,



and smooth communication networks, the quality of education in areas outside Java Island still needs special attention.



**Figure 3.** Percentage of Learning Media Used by Respondents During Online Learning

## Information:

- a: conferencing platforms like Zoom, Google Meet, and the like.
- b: Messaging media, such as Whatsapp, Telegram, and the like.
- c: Learning Management System (LMS) from the government or built by the school itself.
  - d: LMS-like media such as Google Classroom, Edmodo, and the like.
  - e: Not using any online learning platform.
  - f: Students still come to school during a pandemic (not doing online learning).
  - g: Send teaching materials to students at their homes.

In the second year of the pandemic in Indonesia, several teachers, facilitated by a smooth internet network, have started exploring conference applications that allow teachers and students to meet in virtual spaces. Seeing the pandemic conditions where there is no clear picture of when it will end, some teachers have started to realize that they should not stop learning and always explore other applications or platforms. Some teachers even develop their own LMS or use LMS that can be accessed via the internet through their devices.

Along with the increasing number of learning platforms used by teachers, various techniques for assessing student skills during online learning (Figure 4). Most teachers ask students to send photos as proof of performance or performance to assess student skills.

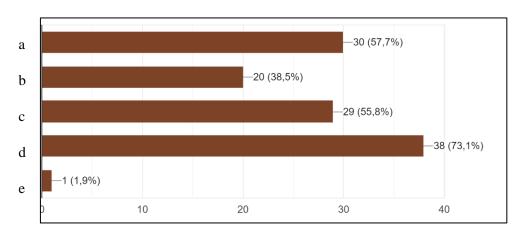
The second most are the assessment of performance via video or audio recordings. Because video recordings require quite a large amount of memory space, teachers generally limit the duration of the video. This results in the limited ability of teachers to observe the performance of students.

In addition, there are also teachers who assess students' skills directly. This is done in schools that implement 50% Face-to-Face Learning or in schools that are already in the green zone. Conversely, for schools that do not yet allow their students to come to school, some teachers assess students' skills through media conferences such as Zoom, Google Meet, and so on. The reason why these teachers use conference media is to make it easier for the teacher to explain the material and



students can immediately ask questions if there is something they don't understand from the instructions are given by the teacher (Maulana et al., 2021). According to Maulana, et al. during online learning there are many students who experience network problems which result in students being unable to be active in the learning process. The impact occurred during the process of collecting assignments on the grounds that they still did not understand the teacher's explanation. For that reason, Maulana, et al. used the Zoom Cloud Meeting and Google Meet applications.

The media most used by teachers to assess aspects of students' skills are images or photos because they are practical, fast, do not require a strong internet connection and do not require large internet quotas. However, media images or photos have limitations because they cannot capture all the stages carried out by students, so the assessment of skills aspects is less objective.



**Figure 4.** Percentage of Student Skills Assessment Techniques Information:

- a: Direct performance in school.
- b: Performance with Zoom, Google Meet, and such.
- c: Provide video/audio recording.
- d: Send photos of performance results.
- e: Collect a collection of performance evidence in the form of a portfolio.

Next, respondents were asked which assessment technique was more effective for assessing skills. Teachers stated that direct performance during PTM was the most effective skills assessment technique (69.2%). The teacher can see obviously whether the student has reached a certain competency stage or not. Only 11.5% of respondents stated that performance appraisal through photos is an effective technique. When viewed from the perspective of time efficiency and ease of use in the application for taking and sending it, photos are indeed effective. Students or parents can use the Whatsapp application and camera features on their respective devices. Without requiring as much memory as video, photos can be sent to teachers quickly. As many as 9.6% of respondents chose video or audio recordings. The rest, with the same percentage, 9.6% of respondents chose to assess student's skills and abilities directly by using Zoom conference media, Google Meet, and so on.

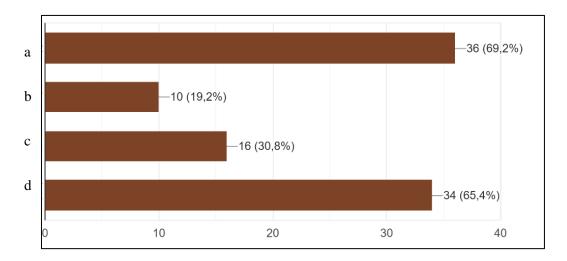
The respondent's answer above is very closely related to the obstacles the respondent faces when assessing students' skills during online learning. Basar (2021) explained that based on the Minister of Education and Culture No. 4 of 2020, a teacher



should be able to adjust the assignment collection technique according to the interests and conditions observed by students. Teachers should also consider the gap in access or learning facilities that students have at home. As students have problems collecting assignments related to performance, so do teachers. As can be seen in Figure 6, respondents stated that there were several obstacles in the skills assessment process.

The biggest obstacle for respondents (69.2%) is an internet connection. The difficulty of internet connection to submit assignments and performance results is felt by both teachers and students. In addition to the internet connection, teachers also consider that student performance is prone to bias (65.4%). The teacher cannot directly see the performance process carried out by students. Is it true that students do it themselves or are assisted by others? As many as 30.8% of respondents stated that even if students had succeeded in sending photos or video recordings, some teachers could not see things clearly. This can be due to poor camera quality, inaccurate shooting, inadequate lighting, and many other factors.

The teacher's efforts to minimize students cheating in assessments include the teacher conducting oral tests and opening a discussion room with students so that the teacher can find out how far they have understood the material that has been given. In addition, some teachers give assignments in the form of project-based learning. Most answered that submitting assignments in the form of videos was an effective solution. In the video, the student's face must be visible, and the competence being assessed must be seen. Some teachers said that they try to monitor students and observe the overall process that students do. Efforts to minimize cheating when students work on exam questions online are also carried out at Daarul Adab. As explained in the results of Rahmatya and Wicaksono's research that the Daarul Adab school has attempted to develop its own Learning Management System by applying the provision of test questions or exams that are arranged so that the arrangement of questions is sorted randomly. Thus, there are differences in the composition of one student to another. This is Daarul Adab's way of preventing acts of fraud (2022).



**Figure 6.** Obstacles to Assessment of Student Skills When online learning Information:

a: Internet connection.

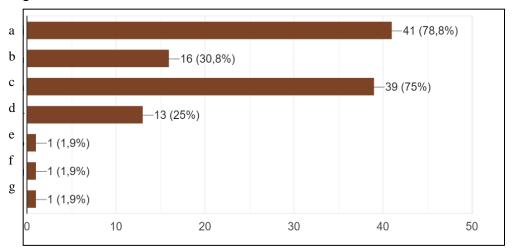
b: The video/audio quality of the students is not good.



- c: Taking pictures is not good enough so not all work can be photographed or recorded.
- d: Assessment bias because the teacher cannot clearly determine who is doing the

## performance.

The things that were assessed by respondents related to the skill aspect were as much as 78.8% of students' mastery of the subject and 75% of students' accuracy in performing work according to teacher instructions. As many as 30.8% of respondents answered that voice clarity is important in assessing performance. Meanwhile, as many as 25% of respondents assessed the clarity of the images sent by students. The rest, of the respondents, considered that students' understanding of concepts, activeness during class, and independence and self-confidence were things that could be used as a reference when assessing student skills. The details can be seen in Figure 7 below.



**Figure 7.** Things that Respondents Valued on Student Performance When online learning

### Information:

- a: Mastery of subject matter.
- b: Clarity of voice when answering a question or when singing a song.
- c: Accuracy of steps during the performance.
- d: Image clarity.
- e: Students' understanding of concepts when answering questions.
- f: Activeness during class.
- g: Independence and confidence during Zoom, Google Meet, and the like.

Teachers realize that not all subject matter can be taught and there are missing competencies. Some teachers state that there are values in life that are difficult to teach students, such as spiritual, social skills, independence, honesty, cooperation, manners, and ethics. While there are also skills that teachers cannot teach, such as lessons that need to be tried out, some movements in sports lessons, handicrafts, and others.

As previously explained, learning loss is a negative impact of one of the learning losses that is felt is the existence of subject matter that is difficult to teach to students if not directly. As a result, there are student competencies that have not been



thoroughly taught. Including difficulties for teachers to assess the psychomotor domain objectively if learning does not occur directly or face to face. Several respondents overcame learning loss by making their own video tutorials about explaining the subject, looking for learning resources and providing internet links to students, and replacing other competencies with competencies that were easy to assess during online learning. There are even many schools/educational institutions holding competitions for making learning videos, and creative learning competitions during online learning to explore the creativity of teaching teachers which in the end can overcome learning loss. Some teachers even become YouTubers and routinely make learning videos. This is the teacher's creative effort in trying to convey the material well to students (Herry et al., 2021).

Regarding competencies that cannot be taught to students during online learning, some teachers leave them alone because it is difficult to find a solution. Meanwhile, there are other teachers who continue to try to provide online teaching and provide repetition when their students seem incomplete in mastering a competency.

This research has limitations such as the number of respondents who are not too many. This, of course, reduces the general depiction of what exactly happened. Consequently, what is described in this study is not necessarily the same as the reality experienced by teachers in Indonesia. Thus, it is necessary to carry out further research to explore why teachers choose to let some competencies not be taught to students. Further research needs to be carried out with a larger number of respondents than this research so that it can generalize to the situation that happened in real life.

### CONCLUSION

The distribution in this study uses data from 52 respondents from various regions in Indonesia. The conditions experienced by the 52 respondents can be said to represent the learning conditions that occurred during online learning. However, this research cannot describe the conditions that occur in Indonesia in general. However, this research can represent all teachers in the area where the respondents come from.

The media for assessing aspects of student skills that are mostly used are pictures/photos, followed by direct media conferences and learning videos. Not all competencies can be taught and assessed/observed through these media because each medium has limitations. This results in learning loss, especially in the psychomotor aspect.

Video media is used by teachers to assess aspects of skills to capture the real conditions of aspects of student skills so that teachers can know for sure the mastery of student skills. Video media is suitable for use during distance learning, but video media has a weakness which is less practical. Students take a long time to edit, need compatible tools for video editing, need a strong internet connection for sending files, and need a large internet quota.

Some teachers creatively make their own learning videos or provide video links from YouTube as a learning resource for students. These teachers understand that to understand competencies that are difficult to teach through online learning, students must be given examples in video form. With videos, the steps of doing assignments can be observed by students. Students can pause and rewind the video when they need to watch it repeatedly.

The willingness of some teachers to make their own videos was a positive impact on online learning during the pandemic. The pandemic encourages teachers to learn



continuously where teachers have automatically become lifelong learning agents and continue to innovate so that learning remains interesting and learning objectives are achieved. If students are found who have not completed their competency achievement, the teachers carry out remedial. Even so, it is very unfortunate that there are still teachers who leave competencies that cannot be taught and cannot be assessed.

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