



## Primary School Pre-Service Teachers' Perceptions of Effective Online Learning by Using LINE Application during Covid-19 Pandemic

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**Abstract:** The Covid-19 pandemic that has hit Indonesia since March 2020 suddenly forced learning from elementary to tertiary levels to be carried out online. The LINE application is a social media platform that has live features. This application is an alternative that is used as a means of emergency learning during the Covid-19 pandemic. This study aimed to describe the perceptions of Sanata Dharma University PGSD students on the effectiveness of online learning using the LINE application. The subjects of this study were 252 students. The method used is descriptive quantitative through online surveys. This study's results were the students' perceptions of using the LINE application on the effectiveness of learning showed that 73.4% of students received clear levels of information. As many as 67, 9% of students stated that they were ready to accept learning, as many as 71% of students were motivated, as many as 58.7% of students stated that they were effective in terms of time, 63.5% of students felt that the learning objectives were achieved, as many as 67.9% of students stated that the use of LINE was quite attractive and interactive, and 71% stated that the use of the LINE application was sufficient to support learning. Students also conveyed that the advantages of this application are saving on internet quota usage, while the weakness of this application is the absence of a recording feature. This research concludes that students' perceptions state that using the LINE application is effective for learning. 5% of students felt that the learning objectives were achieved, as many as 67.9% of students stated that the use of LINE was quite attractive and interactive, and as many as 71% stated that using the LINE application was sufficient to support learning. Students also conveyed that this application's advantages are saving on internet quota usage, while the weakness of this application is the absence of a recording feature.

**Keywords:** Perception, learning effectiveness, online learning, LINE application, live features

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### INTRODUCTION

The development of technology resulting in e-learning based learning has been encouraged since several years ago. Adjustments continue to be made so that the implementation of e-learning can be maximized. In some developed countries, of course, this e learning-based education is very easy to implement. In Indonesia, e learning-based education has also begun to be implemented. However, initially, this has not become a comprehensive custom at every level of education. Some education experts predict that Indonesia will implement e-learning based distance learning in the next 5-10 years. However, the story changed when the Covid-19 pandemic came.

The Covid-19 pandemic that has hit Indonesia since March 2020 has finally

forced learning to be done online. Learning that was originally done face-to-face now has to turn into an online system. No exception in the PGSD study program of Sanata Dharma University, face-to-face learning that is already running must suddenly turn into online learning.

Face-to-face learning sometimes still has several obstacles related to student understanding of the learning material. Moreover, online learning also has more challenging obstacles. Indeed, Sanata Dharma University already has a learning management system for online learning. However, this sudden change occurs; it is felt that sometimes it is necessary to add another alternative platform so that learning can be maximally implemented.

The limited data quota for students to access the platform as a means of learning or face to

face virtually is also an obstacle for students. Online learning has not been fully prepared optimally, so there needs to be lecturers' creativity to formulate "friendly" learning in the quota but can also hold virtual face-to-face lessons.

Not only that, it seems that generation Z-style learning is not enough just by giving them lectures via video, but the platform used also needs to accommodate the learning styles of Generation Z students. Therefore, there is a need for applications that meet the criteria (1) saving quota, (2) saving storage, but also (3) having sufficient features to support the effectiveness of learning.

Of course, the learning method using this online system is closely related to the effectiveness of learning.

Learning effectiveness is the success rate of learning from an effort following the learning objectives to be achieved. According to Slavin (2000), the effectiveness of learning can be measured by indicators (1) the quality of learning (quality of insurance), namely how much information is presented so that students can easily learn it, (2) The appropriateness of the learning level (the appropriate level of instruction), namely the extent to which where the teacher ensures the level of readiness of students in receiving new material, (3) Incentives, namely how much the teacher tries to motivate students to complete or work on assignments and study the material provided, (4) Time, namely the time needed to complete learning activities. Learning will be effective if students can complete the lesson according to the specified time. The characteristics of an effective learning program can also be seen from (1) the success of students in achieving predetermined instructional goals, (2) providing an attractive learning experience to support the achievement of learning objectives, (3) having facilities that support the teaching and learning process. Online learning certainly greatly affects learning effectiveness in terms of time, facilities, and data quota, so it is necessary to choose a platform that can accommodate

these interests. One application that has been widely used by students is LINE.

LINE application is LINE developed by a Japanese company called NHN Corporation. LINE was first released in June 2011 and initially could only be used on iOS and Android systems. After the success of these two systems, LINE entered the operating system made by BlackBerry. In 2012, LINE officially launched an application that can be used on Mac and Windows devices (id.wikipedia.org). One of the features that can be used is the live feature. The lecturer can convey explanations, and students can give direct responses, as shown in Figure 1.



Figure 1. Live features on LINE

Based on the experiences that have been made, students have their interest in using LINE, especially this live feature. Therefore, the researcher intends to see PGSD students' perceptions of using the LINE application on the effectiveness of learning in class.

## METHOD

The method used in this research is descriptive quantitative through surveys. The research subjects were 252 PGSD students consisting of 100 students from the 2019/2020 class who took SD Advanced Mathematics courses, 100 students from the 2018/2020 class who took the Mathematics Learning Model course, and 52 people from the 2017/2020 class who took the



Educational Research Methods course. Data collection techniques were carried out through online questionnaires and online observations. The instruments used were questionnaire sheets and observation sheets regarding the effectiveness of learning related to (1) the level of information received by students, (2) readiness to accept learning, (3) motivation, (4) time effectiveness, (5) achievement of learning objectives, (6) online learning interaction media, (7) the advantages and disadvantages of using the LINE application. The data analysis technique was carried out in a quantitative survey by looking at the percentage of instrument responses.

## RESULTS AND DISCUSSION

The research results on student perceptions of the effectiveness of learning using the LINE application are presented in the points of learning effectiveness criteria.

### Quality of information

The survey results showed that the quality of the information received by students when learning was carried out with the LINE application live feature, as many as 15.1% stated it was very clear, 73.4% stated it was clear, 11.1% stated it was unclear, and 0.4% stated it was not clear. In detail, the results of the survey on the quality of the information received by students can be seen in Figure 2. Seemingly dominant, as many as 73.4% stated clearly in receiving the level of information during learning.

### Appropriate Levels of Instruction

The appropriate level of learning is related to the readiness of students to receive learning delivered through the LINE application. As many as 21% are very ready, 67.9% are ready, and 10.7% of students say they are ready. 0% or nothing that says they are not ready. It looks dominant in detail when seen in figure 3, it is recorded that 67.9% stated that they were ready to accept learning.

### Incentive

Incentives are related to efforts to motivate students. Student motivation is shown through survey results, which show that as many as 15.5% of students are highly motivated, 71% are motivated, and 13.5% are less motivated, and no one states that they are not motivated. In detail, the students' motivation in participating in learning using LINE can be seen in Figure 4, which looks dominant 71% motivated.

### Time

In terms of time effectiveness, learning using LINE is considered effective. It can be seen from the survey results, which stated that 22.3% of students felt very effective, 58.7% were effective, 18.3% were less effective, and 0.8% stated that they were ineffective, and none said they were ineffective (0%). Figure 5 shows that 58.7% of the population states that learning using LINE is effective in terms of time.

### Learning objectives

Learning is said to be effective if it succeeds in bringing students to achieve learning goals. From the survey results, it can be seen that 12.7% stated that the learning objectives were very achieved, as many as 63.5% stated that the learning objectives were achieved, while 23.8% stated that they were not achieved, and none (0%) stated that they were not achieved. In figure 6, it can be seen that 63.5% of dominantly states that the learning objectives are achieved.

### Learning Experience

Learning that provides an attractive learning experience is one of the characteristics of learning effectiveness. The survey results showed that 26.6% of students stated that learning using the LINE application was very attractive and interactive, 67.9% stated that it was quite attractive and interactive, then the remaining 5.6% stated that it was less attractive and interactive, and 0% or nothing. It shows that 67.9% is visible in



figure 7; students stated that learning using LINE was quite attractive and interactive.

### Supporting facilities

The effectiveness of learning can also be seen if supporting facilities support it. The learning survey that uses the LINE application shows that as an alternative to online learning interaction media, 71% stated that the LINE application is sufficient to support learning. It can be seen in Figure 8, which is as much as 25.4% conveying that it supports learning, 71% is sufficient to support learning, and 3.6% does not support learning, and 0% or nothing states that it does not support learning.

### The advantages and disadvantages of the LINE application for alternative learning

Apart from being related to effectiveness, researchers also collected data related to student perceptions of the LINE application's advantages and disadvantages. From the data collected, the general results showed that students said that LINE is an application that saves data quota; the information received is clear, more practical, and easier. While the LINE application disadvantage, in general, is that it does not have a recording feature, it is often interrupted if the signal is not stable.

Kadar informasi yang saya terima ketika pembelajaran dilakukan dengan aplikasi LINE fitur live  
252 responses

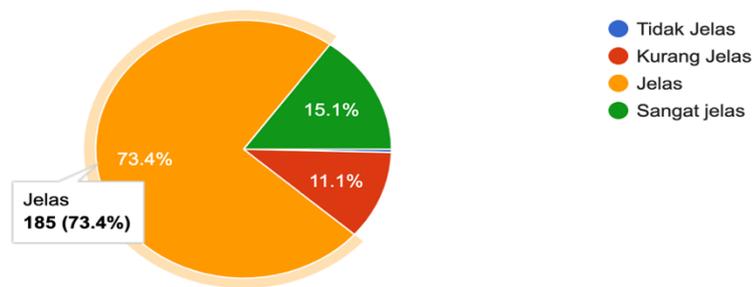


Figure 2. Percentage of quality information received by students

Kesiapan saya untuk menerima pembelajaran yang disampaikan menggunakan aplikasi LINE  
252 responses

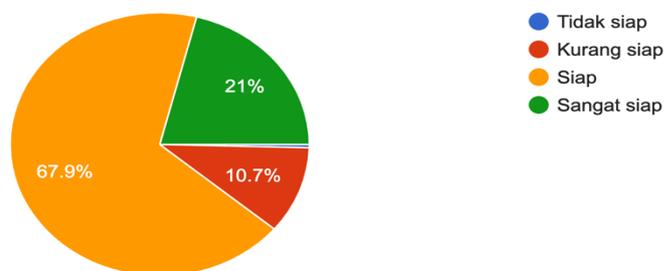


Figure 3. Percentage of learning level suitability

Motivasi yang saya rasakan ketika pembelajaran menggunakan aplikasi LINE  
252 responses

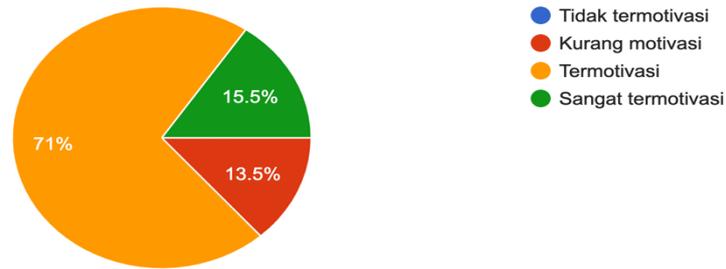


Figure 4. Incentive percentage

Dari segi efektifitas waktu, pembelajaran menggunakan LINE  
252 responses

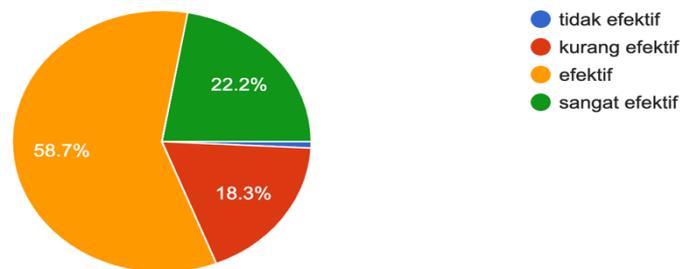


Figure 5. Percentage of time effectiveness

Dengan pembelajaran menggunakan aplikasi LINE, saya merasa tujuan pembelajaran  
252 responses

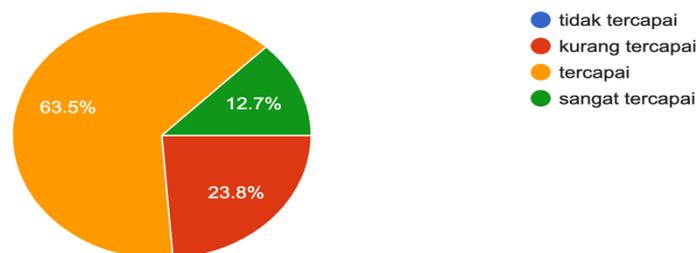
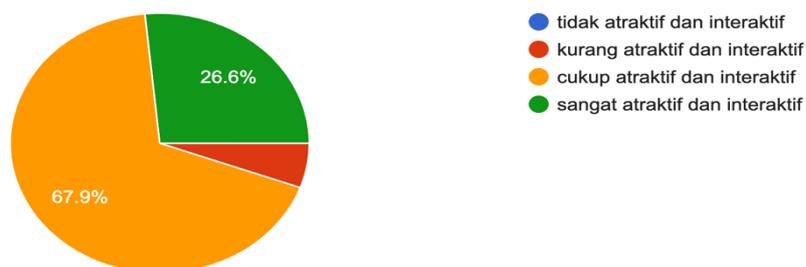


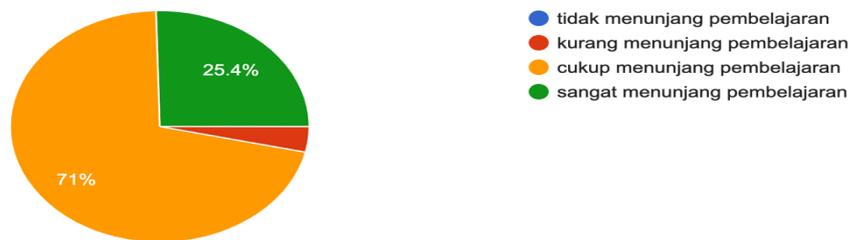
Figure 6. Percentage of learning objectives achieved

Di antara pembelajaran online yang menggunakan media lain, pembelajaran menggunakan aplikasi LINE memberikan pengalaman belajar yang  
 252 responses



**Figure 7.** Percentage of learning experiences

Sebagai alternatif media interaksi pembelajaran online, aplikasi LINE  
 252 responses



**Figure 8.** Percentage of supporting facilities

**Table1.** The summary of the percentage of student perceptions

| Learning Effectiveness Questions   | Answer | Information                      |
|--|--------|----------------------------------|
| 1. The level of information I received when learning was done using the LINE application live feature  | 73.4%  | Clear                            |
| 2. My readiness to receive learning delivered using the LINE application   | 67.9%  | Ready                            |
| 3. The motivation I feel when learning using the LINE application  | 71%    | Be motivated                     |
| 4. In terms of time effectiveness, learning using LINE is effective  | 58.7%  | Effective                        |
| 5. By learning using the LINE application, I feel that the learning objectives are being achieved  | 63.5%  | Reached                          |
| 6. Among online learning that uses other media, learning using the LINE application provides an attractive and interactive learning experience | 67.9%  | Quite attractive and interactive |
| 7. As an alternative to online learning interaction media, the LINE application supports learning  | 71%    | Enough to support learning       |



Based on the research results in table 1, it can be seen that 73.4% of students have a clear perception of receiving information through the LINE application in learning. It is consistent with the learning effectiveness indicator from Slavin (2000), which states that the quality of learning is determined by the level of information presented to students. It can also be seen from researchers' observations when delivering material and providing evaluation at the end of the lecture.

Likewise, 67% of students felt ready to accept learning. It means that it has met the indicators of learning level suitability, according to Slavin (2000), which states that evidence of learning effectiveness can be measured by how ready students are to accept new learning.

The motivation that is built by students through learning using the LINE application can also be seen from the responses given by students during learning. It is proven that 71% of It means students are motivated following Slavin's statement that the teacher's incentives or efforts to motivate students will determine effective learning or not. So, from these results, it appears that this incentive indicator is fulfilled.

Time is the basic thing for indicators of learning effectiveness because it relates to completing learning activities (Slavin, 2000). Learning with the LINE application proved effective in terms of time because as many as 58.7% of students said it was effective. It means that students can complete learning activities effectively.

If it is associated with the characteristics of learning it is said to be effective, then the results of the research show that the learning objectives are achieved (63.5%), are quite attractive and interactive (67.9%), and support learning as an alternative media (71%). By using the LINE application, it fulfills the characteristics of effective learning activities according to student perceptions. It is following what Slavin (2000) also stated that effective learning characteristics could deliver students to

achieve learning objectives, provide attractive learning experiences, and the means used to support the learning process. Another thing is related to this application; the rest can still be accommodated by combining with other platforms.

## CONCLUSION

Based on the results of research and discussion, the survey of students' perceptions regarding using the LINE application during the pandemic was effective. It shows 73.4% of students received clear levels of information, as many as 67.9% of students stated that they were ready to accept learning, as many as 71% of students were motivated, as many as 58.7% of students stated that it was effective time, 63.5% of students felt that the learning objectives were achieved, as many as 67.9% of students stated that the use of LINE was quite attractive and interactive. As many as 71% stated that the use of the LINE application was sufficient to support learning. Students also conveyed the advantages of this application, namely the efficient use of internet quota, while this application's weakness is the absence of a recording feature.

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