



Senior High School Students and Teachers' Perceptions of Economics Online Learning in Badung Regency

Ni Made Firayanti Pratiwi; Dewi Kusuma Wardani; Khresna Bayu Sangka

Economic Education, Faculty of Teacher Training and Education, Sebelas Maret University, Indonesia

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Abstract

This study aimed to determine the perceptions of students and teachers towards economics online learning using Context, Input, Process, and Product measurements. The method used is a quantitative method with a descriptive approach. The population in this study were all students and economics teachers of class XI at Senior High School in Badung Regency, Bali. The method used for data collection is in the form of questionnaires and interviews. The data analysis technique used in this research is descriptive analysis. The results showed that students' and teachers' perceptions of online learning in terms of Context, Process, and Product aspects had good perceptions, while from the Input aspect they had deficient perceptions.

Keywords: *Perceptions; Students; Teachers; Online Learning*

Introduction

Online learning is one of the policies issued by the Government during the pandemic to break the chain of the spread of Covid-19. Online learning in Indonesia itself has been carried out for approximately two years. Although online learning is being carried out in Indonesia due to the pandemic, online learning has become a demand in the world of education in recent years (Husamuddin et al., 2022), due to entering the era of information, communication, and technology, there is a great need for the importance of improving the quality of learning (Laksana, 2021). Online learning is very much needed in learning in the era of the industrial revolution 4.0 (Qureshi et al., 2021), namely optimizing technological progress by changing the way humans work into digitalization (Kuswara & Sumayana, 2020). Online learning can be a momentum for the world of education to create the concept of sustainable learning in improving the quality of educational services in the future (Firmansyah et al., 2021) therefore, the development of education and technology in tandem can have a major impact on the quality of students and teachers as they face the changing world (Silvana et al., 2021). Online learning is a learning activity that uses the Internet as a means of delivery, interaction and facilities, and is supported by various other forms of learning services (Anugrahana, 2020). Online learning is carried out using the internet synchronously and asynchronously, which can provide opportunities for student interaction with learning resources, both educators or the environment and their peers (Dong et al., 2020). Synchronous online

learning usually uses the help of applications such as Zoom, Google Meet, and Webex, while asynchronous learning teachers often use the help of applications such as Google Classroom, WhatsApp, and several other applications.

The number of applications that support the application of online learning systems makes students and teachers have to understand the use of these applications. However, many teachers and students are not ready for the changes that occur, causing preparation for various changes to be not optimal (Pongkendek et al., 2022). Teachers are required to try to create learning so that it continues to run well even though they do not meet in person (Sakkir et al., 2021). The existence of online learning is a new thing in the world of education. A very significant difference between students' online learning process and conventional learning in general will affect the sharpening of students' thinking towards their learning. Students are required to be able to understand the material without direct interaction from the teacher, and the teacher is not able to provide the material in its entirety to students (Syafa'ati et al., 2021). This will affect student achievement. Every learning process must have advantages and disadvantages. In online learning, usually the obstacles that occur are limited facilities and infrastructure, lack of mastery in using communication or technology, as well as internet networks and quota fees (Haryadi & Selviani, 2021). According to Alberta et al. (2022); Fahmalatif et al. (2021), in their research stated that another obstacle in online learning is that students easily feel bored during learning so that teachers are required to think of new strategies in learning. Another problem that many students feel in online learning is that communication access becomes more difficult in conducting discussions with teachers and peers (Hermida, 2020). Not only that, online learning also has weaknesses, namely decreased student interaction and decreased student motivation in learning (Hong & Quoc, 2021), while according to Pujoandika & Sobandi (2021); Yu et al. (2021), students' learning motivation can improve learning outcomes. This negative perception can affect the readiness of students in participating in learning to be reduced (Saifuddin, 2018). Online learning not only makes it difficult for students, but teachers also find it difficult to adapt to new teaching methods. Teachers are not yet familiar with the online learning process, as most of them grew up in traditional face-to-face classes (Das, 2022).

Online learning not only has obstacles and weaknesses but also has advantages, namely in online learning some students feel more focused because they are not disturbed by students who are often noisy in class when face-to-face learning is carried out (Kamble et al., 2022). Another advantage of online learning is that students can repeat the subject matter at any time and learn to be more efficient (Milla et al., 2021). Online learning is also considered very flexible by students because they can study wherever and whenever they want (Nurdiyanti et al., 2021). In line with this, the research conducted by Saleh et al. (2021) also stated that the advantages of online learning are increasing technological literacy, flexibility in learning, and increasing student independence. Furthermore, the advantages of online learning are that it is easy to access subject matter and flexible learning times (Thamri et al., 2022). According to research conducted by Batubara (2021), for online teaching activities to run smoothly, three elements must be satisfied as the main requirements, namely the existence of an internet connection, the existence of technical facilities as a tool and the use of online media, and the willingness of teachers/lecturers to provide online services for teaching. Based on the initial preliminary study that the researcher conducted at the Badung Regency Senior High School, the reality on the ground stated that online learning support facilities such as the internet network still did not support the implementation of the online learning process, some students did not have a conducive room at home to do online learning, some students difficult to understand economic material during the learning process, and another problem is that there is a gap between students' understanding and the grades that students get during online learning. Some students stated that there was an increase in student learning outcomes in economics subjects, even though they felt they did not understand the subject matter given.

Based on several research results and problems in the field, several perceptions of students and teachers emerged during the online learning process. Perception is the result of two different types of input that interact to form an individual picture which is the experience of each individual, which is

influenced by needs, experiences, and expectations (Schiffman & Kanuk, 2008). Perceptions of students reflect the attitudes or behaviors that they do after following the online learning process on economic subjects. Their attitudes and behaviors come from observations during the online learning process. The results of these observations will lead to a perception where the perception can be positive or negative depending on the observations of each individual. There are several aspects used in assessing the perceptions of students and teachers in this study, namely aspects of context, input, process, and product. Research conducted by (Hidayati & Fikri, 2021), states that in general online learning is considered effective. However, research conducted by Oktafina et al. (2021); Sembiring & Oktavianti (2021), stated that in general online learning has not been going well and effectively. Based on these findings, gaps were found in previous studies, so this study aims to examine students' and teachers' perceptions of online economics learning, especially in senior high school students in Badung Regency.

Research Method

The method used in this research is quantitative with a descriptive approach. This research was conducted at senior high schools throughout Badung Regency, namely SMA Negeri 1 Kuta, SMA Negeri 2 Kuta, SMA Negeri 1 Kuta Utara, SMA Negeri 1 Kuta Selatan, SMA Negeri 2 Kuta Selatan, SMA Negeri 1 Abiansemal, SMA Negeri 1 Mengwi, SMA Negeri 2 Mengwi, and SMA Negeri 1 Petang. The population in this study were all students of class XI in Badung Regency with a total of 3,741 students, all teachers in class XI in State SMA in Badung Regency with a total of 14 teachers. In this study, two types of sampling techniques were used, namely proportional random sampling and saturated sampling. The saturated sampling technique was used to determine the teacher sample, while the sampling technique of proportional random sampling was used to determine the distribution of the student sample with a sample of 361 students who had been calculated using the Slovin formula, that is:

$$n = \frac{N}{1+Ne^2} \text{ (Sugiyono, 2011)}$$

Description:

n = sample

N = total population

e = error rate of 5% (0.05)

Tabel 1 Distribution of samples of teachers and students in state senior high schools in Badung regency

No.	Schools Name	Students' Sample	Teachers' Sample
1	SMA N 1 Kuta	52 students	2 teachers
2	SMA N 2 Kuta	31 students	1 teachers
3	SMA N 1 Kuta Utara	57 students	2 teachers
4	SMA N 1 Kuta Selatan	32 students	1 teachers
5	SMA N 2 Kuta Selatan	39 students	1 teachers
6	SMA N 1 Mengwi	40 students	2 teachers
7	SMA N 2 Mengwi	32 students	1 teachers
8	SMA N 1 Abiansemal	47 students	2 teachers
9	SMA N 1 Petang	31 students	2 teachers
	Total	361 students	14 teachers

Data collection methods in this study used questionnaires and interviews. Before the questionnaire was given, the validity and reliability tests were first carried out. The data analysis technique used is descriptive analysis according to Irianto (2004), the procedure is as follows:

- 1) Determine the lowest score and the highest score from all answer choices
 Highest total score = (highest score x number of questions x number of respondents)
 Lowest total score = (lowest score x number of questions x number of respondents)
 Highest score = 5
 Lowest score = 1
- 2) Determine the perception interval of students and teachers

$$\text{Interval} = \frac{\text{Highest total score} - \text{Lowest total score}}{\text{Category}}$$

The determination of the category is determined by the calculation of the total score compared to the data interval that has been obtained, there are five categories in this study according to Irianto (2004), namely *Very Good*, *Good*, *Deficient*, *Not Good*, and *Very Bad*.

Result and Discussion

Students' Perceptions of Economic Online Learning in Terms of Context, Input, Process, and Product Aspects

Students' perceptions of economics online learning are measured using four aspects, namely aspects of *Context*, *Input*, *Process*, and *Product*. The following are the results of calculations for each aspect using descriptive analysis.

Table 2 Result of students' perceptions of economic online learning

Aspect	Score	Score Range	Category
Context	7,812	7,364.4 – 9,096.1	Good
Input	17,066	13,140.4 – 17,182.6	Deficient
Process	13,199	12,273 – 15,161	Good
Product	5,406	5,054 – 6,136	Good

Based on the results of the analysis in Table 2, it can be concluded that students have a good perception of online economic learning. This can be seen from the three aspects used to measure students' perceptions that are included in the good category, although there is one aspect, namely the *Input* that is included in the deficient category. In the first aspect, namely *Context*, the score obtained from the context aspect of 7,812 which is in the score range of 7,364.4 – 9,096.1, so it can be categorized as "Good". Students judge that the purpose of online learning is good, namely so that learning continues even in any situation. Students also feel that online learning develops students' ability to learn independently, although some of them stated that they still need to adjust to the way of online learning. In line with the research conducted by Hidayat et al. (2020), stated that students' learning independence during online learning was still low because students' habits of face-to-face learning suddenly turned into online learning. Students also have a good perception of the need for online learning. Students assess that online learning helps break the chain of the spread of the coronavirus. Research conducted by Rahma & Pujiastuti (2021), also stated that one way to help break the chain of the spread of Covid-19 is to conduct online learning. Students also agree with the opinion that online learning is needed for students to be ready to face the digital era because the development of the era does not rule out the possibility that after the pandemic ends learning will continue to be carried out online. This is also reinforced by research conducted by

Anugrahana (2020); Patima et al. (2021), which states that online learning will continue to be carried out after the pandemic ends to train the skills of teachers and students in the era of the 4.0 century.

From the aspect of the *Context* of online economic learning, it is also influenced by the background of students' parents, because when learning online parents have an important role in supervising students in learning (Ningsih et al., 2022). Based on the research results, parents of senior high school students in Badung Regency, Bali has various professions, such as private employees, entrepreneurs, and farmers. Then, for the last education, parents of senior high school students in Badung Regency, Bali are dominantly senior high school graduates. The educational background of parents affects the learning outcomes of these students because parents with higher education backgrounds can adapt to the increasingly rapid advances in science and technology so that they can help students during the learning process carried out at home (Erawati & Winata, 2021). Parental occupation also affects the success of online learning because work is related to parental income. Students whose parents are well off will get good facilities during online learning, such as Wi-Fi facilities, a supportive laptop, and a large quota, while students who have parents with a minimum income do not necessarily get these facilities (Al Zuhry & Ghofur, 2021). In addition, students get less attention, because parents are busy making a living to make ends meet (Patta et al., 2022). This is corroborated by the results of research by Khairinal et al. (2021), which states that the income of parents has a significant effect on student learning outcomes.

The *Input* aspect is in the “Deficient” category with a score obtained of 17,066 which is in the range of scores 13,140.4 – 17,182.6. In the *Input* aspect, students stated that most of the teachers and students were able to use technology, information, and communication. Although some teachers still do not fully understand how to use technology, this is usually influenced by the age of the teacher (Zabidi, 2019). Some students stated that the most common obstacle in online learning is internet connection problems, this is reinforced by research conducted by Cahyana (2021), stating that internet access in Indonesia is considered to be relatively slow. Some students even have to buy internet data plans or install wi-fi to get a better network. This makes students pay more for online learning. From the indicators of facilities and infrastructure, students not only have problems with the internet network, but not all students have a conducive room at home to carry out economic learning online. This was also revealed in a study conducted by Roslan & Halim (2021), which stated that there were still 22.5% of students who did not have a study room at home. The home environment did not support their learning activities, so they could not concentrate on learning activities. This is because their home situation is different from the school environment which has been conditioned to learn in a comfortable, orderly, organized, and supervised atmosphere by the teacher (Sihombing & Fatra, 2021). A learning environment that is not conducive makes it difficult for students to concentrate which will affect students' understanding of the subject matter given.

Furthermore, the *Process* aspect obtained a score of 13,199 which was in the score range of 12,273 – 15,161, which could be categorized as “Good”. Students assess the learning process carried out by the teacher as good. The teacher provides material via WhatsApp/Google Classroom before learning begins so that students can read the material before the lesson begins. Limited data plans and internet networks cause students to only be given assignments by the teacher without explaining the subject matter (Sa'id, 2021). This causes some students to find it more difficult to understand the subject matter. Asmuni (2020) suggests that the method of presenting material by sending it through an application is ineffective. A similar opinion was also expressed by Nuraini et al. (2021), who stated that students' understanding was also slightly reduced because the intensity of the material delivered and explained by the teacher was very limited. Students also stated that there was less direct interaction between teachers and students because learning was more often done asynchronously using WhatsApp compared to using video conferences. Learning by using video conferencing does consume more internet quota, this is also revealed by research conducted by Gaffar & Surjani (2021), which states that the total quota used up only for video conference is 16 hours multiplied by 60 minutes times 96,8 MB divided by 5 minutes times 4 weeks or about 72 GB. Another student's perception of the online economics learning process is that

when teachers conduct lessons using video conferencing, more students turn off their cameras. This is because students' internet connections are weak, by turning off the camera students can hear what the teacher is saying. In addition, research conducted by Gaffar & Surjani (2021) stated that another reason students turn off the camera when online learning is problems with students' electronic devices such as laptops that cannot access the camera. Some students also state that they do online learning accompanied by other activities (Castelli & Sarvary, 2021).

The *Product* aspect is also in the “Good” category with a score of 5,406 which is in the score range of 5,054 – 6,136. Students have a positive assessment because the dominant learning outcomes obtained by students from economic online learning have increased. However, in reality, some students stated that they did not understand the subject matter given. According to research conducted by Zuliyanti et al. (2021) during online learning, it is easier for students to cheat on their friends' assignments and tests because they feel they are not supervised by the teacher. Academic cheating is often done by students not only during online learning but also during face-to-face learning, but when online learning cheating is easier for students to do (Frigillano, 2021). Some respondents stated that they cheated when given assignments or online exams because they were stressed with many assignments, did not understand the material, and were worried that their grades would get worse (Abdelrahim, 2021). Facts found to the results of research conducted by Valizadeh (2022), as many as 82.2% of students cheated on exams by copying answers from the internet, and 75.5% of students cheated by cooperating with their classmates. This one can improve student learning outcomes but reduce students' understanding of economics subject matter.

Teachers' Perceptions of Economic Online Learning in Terms of Context, Input, Process, and Product Aspects

Teachers' perceptions of economics online learning are measured using four aspects, namely aspects of *Context*, *Input*, *Process*, and *Product*. The following are the results of calculations for each aspect using descriptive analysis.

Table 3 Result of teachers' perceptions of economic online learning

Aspect	Score	Score Range	Category
Context	350	285.6 – 351.8	Good
Input	793	618.8 – 808.2	Deficient
Procces	659	618.8 – 763.4	Good
Product	208	190.4 – 234.2	Good

Based on the results of the analysis in Table 3, it can be concluded that teachers have a good perception of online economics learning. This can be seen from the three aspects used to measure teachers' perceptions that are included in the “Good” category, although there is one aspect, namely the *Input* that is included in the “Deficient” category. In the first aspect, namely *Context*, the score obtained is 350 which is in the score range of 285.6 – 351.8, so it can be categorized as “Good”. Some teachers agree that the purpose of online learning is for learning to continue even though it is done online, as well as to assist the government in minimizing the spread of the coronavirus. However, some teachers do not agree with the statement that online learning develops students' learning abilities independently, because several economics teachers in Badung Regency state that some students do not yet have an attitude toward independent learning. This was said by several economics teachers because when giving assignments, students often depended on answers written by other students or relied on the help of others (Supanti & Hartutik, 2018). Some teachers also consider that online learning helps teachers and students to be more literate in the use of technology, due to the demands of the digital era. Online learning conducted by high school teachers in Badung Regency has also been supported by the internet network and data package assistance provided by the Government, although according to some teachers and students, the internet

data package assistance provided by the Government is relatively slow (Hartono et al., 2022), even though an internet connection is one of the things that makes online learning work effectively (Assidiqi & Sumarni, 2020).

The *Input* aspect is in the “Deficient” category with a score obtained of 793, which is in the range of scores 618,8 – 808,2. The teacher's perception of input from online economic learning is the most dominant, namely from the technological aspect which is one of the things that supports the success of online learning. This is reinforced by the opinion of Yuliansyah & Ayu (2021), which state that technology plays an important role both in teaching and learning during the online learning process. Some teachers stated that they already had laptops to support the online economics learning process, and already understand how to use technology properly, even some teachers often make material for students in the form of videos of subject matter that will be distributed to students before the lesson begins with the hope that students have studied the material beforehand. However, in online learning, it is indeed difficult to increase students' motivation and interest in learning because of changes in student habits (Fauziyah, 2020). Some teachers also stated that they did not yet have a conducive room at home to conduct online learning, thus disturbing the teacher's concentration while teaching. This is also stated in a study conducted by Mamolo (2022), which states that teaching in this informal environment causes them to be easily distracted, especially because they don't have enough space and a peaceful place to do online learning. Not only the problem of a less conducive room, but the most common obstacle experienced by teachers during online economics learning is also the problem with the internet connection of teachers and students. Internet disturbances often make it difficult for teachers and students to communicate in conducting discussions during lessons, so discussions are more often carried out using WhatsApp compared to video conferencing applications such as Google Meet or Zoom. Some research results from Baticulon et al. (2021); Castelli & Sarvary (2021); Zboun & Farrah (2021), stated that the obstacle that is often experienced by students during online learning is an internet connection because not all students live in areas that have good internet connections.

Furthermore, the *Process* aspect obtained a score of 659 which was in the score range of 618.8 – 763.4, which could be categorized as “Good”. In the aspect of the learning process, some students were often active in answering questions during the discussion. Discussion sessions are usually carried out using the WhatsApp application to save up their data plans. Some teachers stated that students were more active in discussing through WhatsApp because they did not feel shy in answering or asking the teacher. In line with this, the research conducted by Wulan et al. (2021), states that in online learning students are more active because students are not ashamed of their opinions. During the online learning process, it is undeniable that students will feel bored, so teachers must prepare effective learning strategies. The reality in the field that occurs, some teachers are not able to prepare a lot of learning tools, because of the limited learning media that can be used. Economics teachers at Senior High Schools in Badung Regency are given a policy that synchronous learning using video conferencing such as Zoom, Google Meet, and others should be carried out for a maximum of 60 minutes. This is because students do not spend a lot of internet data plans in the learning process, so teachers can maximize learning using WhatsApp. According to Hariani (2021), online learning using WhatsApp is effective because the data plans used are not wasteful as other applications, students are familiar with using the application, and the material sent by the teacher is easily accessible when using WhatsApp. The weakness of learning that only relies on asynchronous learning according to the teacher is that the provision of material cannot be carried out optimally, because the teacher cannot explain the subject matter to students. The teacher uses the WhatsApp application solely as a medium for giving and receiving materials and assignments. As a result, online learning cannot be carried out optimally because there is no direct interaction with students. This makes students tend to be lazy and have difficulty concentrating on learning so students tend to lack understanding of the subject matter (Budhayanti & Praba, 2021). The ineffective use of the WhatsApp application was also stated by Baalwi (2020), who said that one of the obstacles for teachers in carrying out online learning was that the delivery of the material was not optimal because it was still through

WhatsApp.

The *Product* aspect is also in the “Good” category with a score of 208 which is in the score range of 190.4 – 234.2. In the last aspect, namely the *Product*, the teacher has a good perception because there is an increase in the value of students' economic learning outcomes during online learning. Although student learning outcomes have improved, the assessment in online learning is said to be non-objective because the teacher cannot guarantee that the assignments given are purely student work (Arumanda & Daryanto, 2021). Similar research was also conducted by Muarifah et al. (2021), which stated that teachers could not control or limit parental assistance when students did assignments so the scoring became less objective. Some teachers also stated that the learning independence possessed by students during online economic learning was still low, and some students did not have a sense of responsibility for the tasks given. The reason that students often say when they are late in submitting assignments is that there is no internet quota so they don't know there is an assignment from the teacher and there are signal constraints so that assignments cannot be accessed. The results of research conducted by Yuliani et al. (2022) also stated that students often submit assignments not on time due to quota and signal constraints in the area where students live.

Conclusion

Based on the results of the data analysis and discussion above, the conclusion in this study is, according to students' perceptions of economics online learning, assessed from the *Context* aspect, a score of 7,812 is included in the score range of 7,364.4 - 9,096.1, so it can be categorized as “Good”. Then from the *Input* aspect, the score obtained is 17.066, which is included in the score range 13,140.4 – 17,182.6, so it is categorized as “Deficient”. The third aspect, namely the *Process* aspect, got a score of 13,199, which was included in the score range of 12,273 – 15,161, so it could be categorized as “Good”. The last aspect is that the *Product* gets a score of 5,406, which is included in the score range of 5.054 – 6,136, so it can be categorized as “Good”. Then, the teacher's perception of economics online learning is assessed from the *Context* aspect, obtaining a score of 350 which is included in the score range of 285.6 – 351.8, so it can be categorized as “Good”. Then from the *Input* aspect, the score obtained is 793, which is included in the score range of 618.8 – 808.2, so it is categorized as “Deficient”. The third aspect, namely the *Process* aspect, got a score of 659, which was included in the score range of 618.8 – 763.4, so it could be categorized as “Good”. The last aspect is that the *Product* gets a score of 208, which is included in the score range of 190.4 – 234.2, so it can be categorized as “Good”. Based on these results, it can be concluded that the perceptions of students and teachers of economics online learning for senior high school students in Badung Regency, Bali are included in positive perceptions because of the four aspects, three aspects such as *Context*, *Process*, and *Product* are in a “Good” category, although there is one aspect, namely the *Input* that is included in the “Deficient” category. So in this study, it is recommended for teachers to further improve learning strategies and tools that can help improve learning effectiveness. Students are expected to be able to increase their learning independence, for example by looking for other references on the internet. It is recommended for the government that the internet data plans assistance is further increased, and the quality of the network is further improved. This research can still be reviewed by further researchers, using other aspects in assessing the perceptions of students and teachers and conducting research in different locations, so that different opinions are obtained.

References

- Abdelrahim, Y. (2021). How COVID-19 Quarantine Influenced Online Exam Cheating: A Case of Bangladesh University Students. *Journal of Southwest Jiaotong University*, 56(1), 137–146.
- Al Zuhry, M. V, & Ghofur, M. A. (2021). The Influence of Education Level, Parents' Income,

- Enthusiasm for Learning, and Learning Facilities on Student Achievement During the Pandemic. *Edukatif: Jurnal Ilmu Pendidikan*, 3(5), 2501–2512.
- Alberta, L. T., Norontoko, D. A., & Hamid, I. N. (2022). Description Study of Student Nursing Perceptions on Online Learning During the Covid-19 Pandemic. *International Journal of Advanced Health Science and Technology*, 2(1), 26–31.
- Anugrahana, A. (2020). Barriers, Solutions and Hopes: Online Learning During the Covid-19 Pandemic by Elementary School Teachers. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 10(3), 282–289.
- Arumanda, H. R., & Daryanto, J. (2021). Profile of Elementary School Teachers in Implementing Application Media-Based Online Learning. *Didaktika Dwija Indria*, 9(6), 1–5.
- Asmuni, A. (2020). Problems of Online Learning in the Covid-19 Pandemic Period and Solutions to Solve it. *Journal of Pedagogy*, 7(4), 281–288.
- Assidiqi, M. H., & Sumarni, W. (2020). Utilization of Digital Platforms during the Covid-19 Pandemic. *Prosiding Seminar Nasional Pascasarjana*, 298–303.
- Baalwi, M. A. (2020). Teacher Constraints in the Online Learning Process During the Pandemic In View of the Advances in Information Technology [IT] Teachers. *Lintang Songo: Jurnal Pendidikan*, 3(2), 38–45.
- Baticulon, R. E., Sy, J. J., Alberto, N. R. I., Baron, M. B. C., Mabulay, R. E. C., Rizada, L. G. T., Tiu, C. J. S., Clarion, C. A., & Reyes, J. C. B. (2021). Barriers to Online Learning in the Time of COVID-19: A National Survey of Medical Students in the Philippines. *Medical Science Educator*, 31(2), 615–626.
- Batubara, B. M. (2021). The Problems of the World of Education in the Middle of the Covid-19 Pandemic. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1), 450–457.
- Budhayanti, C. I. S., & Praba, L. N. (2021). Online Learning Strategy Training for Teachers at O1 and O5 Elementary School in Pluit. *Dinamisia : Jurnal Pengabdian Kepada Masyarakat*, 5(5), 1170–1180.
- Cahyana, A. (2021). Cellular Telecommunication Market and Internet Quota Assistance during The Covid-19 Pandemic: Policy Economic Review. *Jurnal Paradigma*, 2(2), 14–28.
- Castelli, F. R., & Sarvary, M. A. (2021). Why Students Do Not Turn on Their Video Cameras During Online Classes and An Equitable and Inclusive Plan to Encourage Them to Do So. *Ecology and Evolution*, 11(8), 3565–3576.
- Das, U. (2022). Online Learning: Challenges and Solutions for Learners and Teachers. *Management and Labour Studies*, 1–4.
- Dong, C., Cao, S., & Li, H. (2020). Young Children's Online Learning during Coving-19 Pandemic: Chinese Parents' Beliefs and Attitudes. *Children and Youth Services Review*, 118(August), 105440.
- Erawati, N. W., & Winata, S. H. (2021). The Influence of Parents' Education Level on Learning Achievement of Sixth Grade Students of Bodhisatta Elementary School Tangerang. *Journal of Social Science and Digital Marketing*, 1(1), 1–15.
- Fahmalatif, F., Purwanto, A., Siswanto, E., & Ardiyanto, J. (2021). Exploring Barriers and Solutions of Online Learning During the Covid-19 Pandemic By Vocational School Teachers. *Journal of Industrial Engineering & Management Research*, 2(2), 53–63.

- Fauziyah, N. (2020). The Impact of Covid-19 on the Effectiveness of Islamic Education Online Learning. *Al-Mau'izhoh*, 2(2), 1–11.
- Firmansyah, R., Putri, D. M., Wicaksono, M. G. S., Putri, S. F., Widiyanto, A. A., & Palil, M. R. (2021). Educational Transformation: An Evaluation of Online Learning Due to COVID-19. *International Journal of Emerging Technologies in Learning*, 16(7), 61–76.
- Frigillano, S. (2021). Prevalent Academic Cheating Practices Among Pre-Service Teachers. *International Journal of English Language Studies*, 4(7), 05–14.
- Gaffar, M. R., & Surjani, S. (2021). Students' Perception towards the Barriers in Following On-line Learning During the Covid-19 Pandemic. *Al-Fikrah: Jurnal Manajemen Pendidikan*, 9(1), 1–11.
- Hariani, N. M. M. (2021). The Effectiveness of Science Learning Online for Elementary School Through WhatsApp Group Media during The Covid-19 Pandemic. *Widya Genitri : Jurnal Ilmiah Pendidikan, Agama Dan Kebudayaan Hindu*, 12(1), 1–13.
- Hartono, S. D. T., Mansyur, M. H., & Kosim, A. (2022). Islamic Religious Education Online Learning: Opportunities and Challenges in Elementary Schools. *Jurnal Pendidikan*, 10(1), 27–43.
- Haryadi, R., & Selviani, F. (2021). The Problems of Online Learning During The Covid-19 Pandemic. *Academy of Education Journal*, 12(2), 254–261.
- Hermida, A. P. A. (2020). College Students' Use and Acceptance of Emergency Online Learning due to Covid-19. *International Journal of Educational Research Open*, 1(August), 1–8.
- Hidayat, D. R., Rohaya, A., Nadine, F., & Ramadhan, H. (2020). Independent Learning of Students in Online Learning During The Covid-19 Pandemic. *Perspektif Ilmu Pendidikan*, 34(2), 147–154.
- Hidayati, S. N., & Fikri, A. A. (2021). Portrait of the Effectiveness of Online Biology Learning at Madrasah Aliyah Swasta at Eks Karesidenan Pati. *NEURON (Journal of Biological Education)*, 1(2), 91–104.
- Hong, D. T., & Quoc, H. H. (2021). Student Barriers To Prospects of Online Learning in Vietnam in the Context of Covid-19 Pandemic. *Turkish Online Journal of Distance Education*, 22(3), 1–16.
- Husamuddin, A. F., Sakti, A. W., & Verra, W. (2022). The Effectiveness of Sports and Health Learning through the Zoom Meeting Media for Junior High School Students During the Covid 19 Pandemic. *Indonesian Journal of Teaching in Science*, 2(1), 17–26.
- Irianto, A. (2004). *Statistik Konsep Dasar dan Aplikasinya*. Jakarta: Prenadamedia Group.
- Kamble, A., Gauba, R., Desai, S., & Golhar, D. (2022). Learning Learners' Perception of the Transition to Instructor-Led Online Learning Environments: Facilitators and Barriers During the COVID-19 Pandemic. *International Review of Research in Open and Distributed Learning Volume*, 22(1), 199–215.
- Khairinal, Syuhada, S., & Alawyah, W. W. (2021). Studying Economics for Class XI Ferdy High School. *JMPIS (Jurnal Manajemen Pendidikan Dan Ilmu Sosial)*, 2(1), 435–442.
- Kuswara, & Sumayana, Y. (2020). Appreciation of Folklore as an Effort to Strengthen Student Character in Facing the Industrial Revolution 4.0. *Jurnal Basicedu*, 5(1), 317–326.
- Laksana, D. N. L. (2021). Implementation of Online Learning in The Pandemic Covid-19: Student Perception in Areas with Minimum Internet Access. *Journal of Education Technology*, 4(4), 502–

509.

- Mamolo, L. A. (2022). Online Learning and Students' Mathematics Motivation, Self-Efficacy, and Anxiety in the "new Normal." *Education Research International*, 2022(January), 1–10.
- Milla, H., Yusuf, E., Suharmi, S., Zufiyardi, Z., Efendi, R., & Annisa, A. (2021). Analysis of the Implementation of Online Learning During Covid-19. *International Journal of Multicultural and Multireligious Understanding*, 8(4), 538.
- Muarifah, M., Subiyanto, S., & Mardiana, T. (2021). Implementation of Online Learning in Physical Education, Sports and Health Subjects During the Pandemic Period in SD Negeri Caturanom Kecamatan Parakan Kabupaten Temanggung. *Jurnal Riset Pendidikan Dasar (JRPD)*, 2(2), 107–115.
- Ningsih, W., Fitri, R. A., & Maulana, M. (2022). The Role of Parents in Accompanying Online Learning During the Covid-19 Pandemic at MI Al-Hidayah. *Jurnal Dirosah Islamiyah*, 4(3), 340–347.
- Nuraini, N., Rizqia Amalia, A., & Lyesmaya, D. (2021). Analysis of Student Perceptions in Implementing Online Learning in Elementary Schools. *Jurnal PGSD*, 7(1), 32–36.
- Nurdiyanti, N., Wajdi, M., Magfirah, N., & Fadhilah, N. (2021). University students' perception towards online learning in biology. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 7(3), 240–247.
- Oktafina, R., Elfitra, L., & Pujiastuti, I. (2021). Students' Perceptions of Online Learning for Indonesian Language Subjects Class VIII Students of State Junior High School 3 Bintan Academic Year 2020/2021. *Student Online Journal*, 2(1), 147–153.
- Patima, S., Rosyadi, K. I., & Sukarno. (2021). Use of Application Variations on Online Teaching in the Covid-19 Pandemic Era. *International Journal of Social Science and Human Research*, 04(01), 18–22.
- Patta, R., Kadir, A., & Oktaviani, A. (2022). The Relationship between Parents' Economic Level and Learning Achievement of Grade V Elementary School Students. *Jurnal Pendidikan & Pembelajaran Sekolah Dasar*, 2(2), 186–192.
- Pongkendek, J. J., Ahmar, D. S., Munandar, H., & Azzajjad, M. F. (2022). Student Perceptions of Online Learning During the Covid-19 Pandemic. *EduLine: Journal of Education and Learning Innovation*, 2(1), 1–16.
- Pujoandika, R., & Sobandi, A. (2021). Impact of Teacher Performance and Learning Motivation in Efforts to Improve Student Learning Outcomes. *Jurnal Pendidikan Manajemen Perkantoran*, 6(1), 47–56.
- Qureshi, M. I., Khan, N., Raza, H., Imran, A., & Ismail, F. (2021). Digital Technologies in Education 4.0. Does it Enhance the Effectiveness of Learning? *International Journal of Interactive Mobile Technologies*, 15(4), 31–47.
- Rahma, N. A., & Pujiastuti, H. (2021). The Effectiveness of Mathematics Online Learning During the Covid-19 Pandemic in Cilegon City. *JOHME: Journal of Holistic Mathematics Education*, 5(1), 1–12.
- Roslan, N. S., & Halim, A. S. (2021). Enablers and Barriers to Online Learning Among Medical Students During Covid-19 pandemic: An Explanatory Mixed-Method Study. *Sustainability (Switzerland)*, 13(11), 1–15.
- Sa'id, M. S. (2021). Lack of Motivation to Learn Mathematics During Online Learning at MAN 2

- Kebumen. *Jurnal Ilmiah Matematika Realistik*, 2(2), 7–11.
- Saifuddin, M. F. (2018). E-Learning in Student Perception. *Jurnal VARIDIKA*, 29(2), 102–109.
- Sakkir, G., Dollah, S., & Ahmad, J. (2021). E-Learning in COVID-19 Situation: Students' Perception. *EduLine: Journal of Education and Learning Innovation*, 1(1), 9–15.
- Saleh, M. N. I., Sari, R., & Alim, P. (2021). University Students' Perception on The Implementation of Online Learning During The Covid-19. *Nazhruna: Jurnal Pendidikan Islam*, 4(1), 1–17.
- Schiffman, L. G. ., & Kanuk, L. L. (2008). *Perilaku Konsumen, Cetakan Keempat, dialihbahasakan oleh Zoekifli Kasip*. Jakarta: PT. Macanan Jaya Cemerlang.
- Sembiring, A. B., & Oktavianti, R. (2021). Perceptions of High School Students During Online Learning During the Covid-19 Pandemic. *Koneksi*, 5(1), 120.
- Sihombing, A. A., & Fatra, M. (2021). Distance Learning During the Pandemic Era : Online Learning Experiences of State Madrasah Tsanawiyah Students During Covid-19 in Indonesia. *Analisa Journal of Social Science and Religion*, 06(01), 95–112.
- Silvana, T. S., Ekohariadi, Buditjahjanto, I. G. P., Rijanto, T., Munoto, & Nurlaela, L. (2021). Study of the implementation of online learning models in vocational schools. *Journal of Physics: Conference Series*, 1810(1), 1–8.
- Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: CV. Alfabeta.
- Supanti, S., & Hartutik, I. (2018). Improving Students' Learning Independence in Colloidal System Learning Using the Inquiry Method. *Jurnal Inovasi Pendidikan Kimia*, 12(1), 2031–2038.
- Syafa'ati, J. S. N., Sucipto, & Roysa, M. (2021). Analisis Prestasi Belajar Siswa Pada Pembelajaran Daring di Masa Pandemi COVID-19. *Jurnal Educatio*, 7(1), 122–127.
- Thamri, T., Chitra Hasan, D., Rina, N., Hariri Gani, M., Hariri Gani, M., & Maharani Miranda, A. (2022). Advantages and Disadvantages of Online Learning During the COVID-19 Pandemic: The Perceptions of Students at Bung Hatta University. *KnE Social Sciences*, 2022, 329–338.
- Valizadeh, M. (2022). Cheating in online learning programs: Learners' perceptions and solutions. *Turkish Online Journal of Distance Education*, 23(1), 195–209.
- Wulan, D. R., Rosita, C. D., & Nopriana, T. (2021). Psychological Condition of Middle School Students in Mathematics Learning during the Covid-19 Pandemic. *JNPM (Jurnal Nasional Pendidikan Matematika)*, 5(1), 51.
- Yu, Z., Gao, M., & Wang, L. (2021). The Effect of Educational Games on Learning Outcomes, Student Motivation, Engagement and Satisfaction. *Journal of Educational Computing Research*, 59(3), 522–546.
- Yuliani, S., Aliyyah, R. R., & Muhdiyati, I. (2022). The Role Of The Teacher as A Learning Facilitator Online in The Covid-19 Pandemic. *Jurnal Ilmiah Kependidikan*, 16(1), 117–123.
- Yuliansyah, A., & Ayu, M. (2021). The Implementation of Project-Based Assignment in Online Learning during Covid-19. *Journal of English Language Teaching and Learning (JELTL)*, 2(1), 32–38.
- Zabidi, A. (2019). Teacher Creativity in Using Technology as a Media for PAI Learning in Elementary Schools in Bawen District, Semarang Regency. *Jurnal Inspirasi*, 3(2), 2019.

Zboun, J. S., & Farrah, M. (2021). Students' Perspectives of Online Language Learning During Corona Pandemic: Benefits and Challenges. *Indonesian EFL Journal*, 7(1), 13–20.

Zuliyanti, P., Sukirwan, & Yuhan, Y. (2021). High School Students' Perceptions of Online Learning in Mathematics Subjects During the Covid-19 Pandemic. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 05(02), 1462–1475.

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