# Use of E-Assessment to Support Assessment of Economic Learning during the Covid-19 Pandemic

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Article History		
accepted 31/01/2021	approved 28/01/2021	published 31/03/2021

#### Abstract

The closure of schools, not only disrupts teaching for students around the world but also affects assessments and causes many exams to be postponed or canceled. The purpose of this study was to determine the e-assessment media used and the barriers for teachers to carry out assessments of economic learning in secondary education units in Indonesia during the Covid-19 pandemic. This research uses descriptive analysis method. The results showed that 59.1% of teachers used google classroom as a medium for assessment and the rest used other applications in the learning assessment process. The obstacles faced include geographical conditions, device specifications, and the level of student activity. The use of this application is tailored to the needs and abilities of teachers and students in combining technology and student assessment needs.

Keywords: Assessment media, E-assessment media, learning assessment

### Abstrak

Penutupan sekolah, tidak hanya mengganggu pengajaran untuk siswa di seluruh dunia akan tetapi juga berpengaruh pada penilaian dan menyebabkan banyaknya ujian telah ditunda atau dibatalkan. Tujuan penelitian ini adalah untuk mengetahui media e-assessment yang digunakan dan hambatan guru dalam melaksanakan penilaian pembelajaran ekonomi di satuan pendidikan menengah di Indonesia pada masa pandemi covid-19. Penelitian ini menggunakan metode analisis deskriptif. Hasil penelitian menunjukkan 59,1 % guru memanfaatkan google classroom sebagai media penilaian dan sisanya menggunakan aplikasi lain dalam melakukan proses penilaian pembelajaran. Hambatan yang dihadapi diantaranya kondisi geografis, spesifikasi perangkat, dan tingkat keaktifan siswa. Pemanfaatan aplikasi ini disesuaikan dengan kebutuhan dan kemampuan guru dan siswa dalam mengkombinasikan teknologi dan kebutuhan penilaian siswa

Kata kunci: Media penilaian, Media E-asesmen, Penilaian pembelajaran

Social, Humanities, and Education Studies (SHEs): Conference Series p-ISSN 2620-9284 https://jurnal.uns.ac.id/shes p-ISSN 2620-9292



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### INTRODUCTION

The emergence of the Covid-19 virus has become a frightening dream around the world. This pandemic has caused a global education disruption that requires all parties to work together. The social phenomena resulting from social restrictions have caused rapid changes in the world of education and this pandemic has changed our perspective on education and the way we interpret education (Bozkurt & Sharma, 2020). A globally effective pandemic that is considered a disaster can be interpreted as the end of several things as well as a sign of new beginnings (El Maarouf, Belghazi & El Maarouf, 2020).

Never in history have all students suddenly shifted from face-to-face to remote instruction through the use of digital technology. Prior to the COVID-19 crisis, all learning assessment modalities were heavily dependent on the physical presence of students. In Indonesia, there are 60,228,568 students who have been affected by the temporary closure of schools due to this pandemic (UNESCO, 2020). Primary school / Madrasah Ibtidaiah / equivalent students mostly follow the home learning method. There are 28,587,688 students learning distance. Junior High School / Madrasah Tsanawiyah / equivalent followed with 13,086,424 students studying at home. Senior High School / Vocational High School / Madrasah Aliyah / equivalent was in the third place, namely 11,303,381 students studying at home during this pandemic (Kementrian Pendidikan dan Kebudayaan, 2020).

In the economics learning process, assessment is an important component that must be done by the teacher. Assessment is a major role in knowing how teachers teach economic material and what students get after studying the material, which allows information about student understanding, weaknesses, and strengths that exist in students (Barrio et al., 2015). This will certainly help teachers to improve the quality of student learning. Assessment serves to encourage learning and provide meaningful feedback to students (Alias et al., 2015), Heitink et al., 2016). Feedback as a form of follow-up assessment reflects students' actual learning more accurately (Faber & Visscher, 2018).

The closure of schools, not only disrupts teaching for students around the world but also affects assessments and causes many exams to be postponed or canceled. The important point in this cancellation is that the assessment which serves to provide information about the child's progress for the family and the teacher has been neglected. This loss of information delays recognition of high learning difficulties and can have dangerous long-term consequences for children. This requires an alternative approach to provide a critical feedback function of learning assessment. While any type of assessment of student learning is important, the need for formative assessment today is critical because learning needs to take place outside of the physical classroom. Teachers and parents who become teachers need to understand whether students are absorbing content that is sent to them in a different format from the usual activities.

The distance learning process results in a need to utilize technology into the student learning assessment process. The use of technology in the assessment system because technology offers benefits such as unlimited access, unlimited storage capacity, providing accurate information, owning and paying attention to data and providing a variety of output numbers that meet user needs (Setemen et al., 2017). An e-assessment may be a good way to meet this demand (Appiah & van Tonder, 2018).

Electronic Assessment which is also known as digital assessment, online assessment or computer-based assessment is the use of information technology in assessments such as educational assessments, health assessments, psychological

assessments and psychological assessments. Electronic assessment involves using any technological device to create, transmit, store and / or report grade scores and student feedback. Examples of devices that can be used to create and implement e-assessment assignments include laptops, desktop computers, smartphones, iPads, android tablets and others.

E-assessments can be delivered in two ways (Appiah & van Tonder, 2018). The first is web-based delivery, where students use the internet to access assessment assignments (online e-assessment). The second option is download submission, where the assessment assignment / test is downloaded to the student's computer at the assessment center, at a predetermined date and time and released when the student arrives for assessment (offline electronic assessment).

Based on the background of ditas, the purpose of this study is to (1) provide an overview of the use of e-assessment media in carrying out assessments of economic learning by teachers in secondary education units (SMA / SMK / MA) in Indonesia during the Covid-19 pandemic, (2) to find out the obstacles and barriers to secondary school teachers in Indonesia in carrying out assessments of economic learning during the Covid-19 pandemic.

# METHODS

This study uses a descriptive analysis method to provide an overview and explanation of the use of e-assessment media by teachers of economic subjects during the Covid-19 pandemic. The approach taken is quantitative and qualitative approaches. A quantitative approach is used to show the percentage of e-assessment media used online during the Covid-19 pandemic. Meanwhile, a qualitative approach is used to analyze the obstacles or constraints faced by teachers in using e-assessment media during the Covid-19 pandemic.

The study was conducted with a sample of 150 secondary school economics teachers in Indonesia. The instrument used was an open questionnaire and a closed questionnaire. An open questionnaire leads to opinions about the implementation of economic learning assessments during the Covid-19 pandemic and the obstacles faced when using e-assessment in the assessment. The closed questionnaire leads to the e-assessment media used and how much the media supports the learning assessment. The data analysis used is a quantitative descriptive analysis with percentages and a qualitative descriptive analysis that describes the implementation and barriers to the use of e-assessment media in assessing economic learning.

# **RESULTS DAN DISCUSSIONS**

Based on the research conducted, the implementation of an assessment of economic learning using e-assessment conducted by secondary school teachers in Indonesia online during the Covid-19 epidemic, obtained the following results:

1. Media used in the assessment of economic learning during the Covid-19 pandemic.



# Figure 1: Diagram of the use of e-assessment media by economics teachers during the Covid-19 pandemic.

Based on the diagram above, during the Covid-19 pandemic the media used by economics teachers in learning assessments made the most use of google classrooms, which was 59.1%. The second highest gain was 28.2% of teachers using other applications such as Google Forms, Quizziz, Quipper School, Zoom, Microsoft Team, Moodle, Schoology, Examview, Teacher Room and school e-learning websites in conducting assessments. The use of Whatshapp as a medium for student assessment, namely by sending photos and files of assignments that have been done through WhatsApp, obtained a value of 12.8%.

The results showed that most of the teachers used google classroom in conducting the assessment process of economic learning. Goole classroom is an application created by Google with the aim of helping teachers and students organize classes and communicate without having to be tied to class meetings (Sabran & Sabara, 2019). This application is considered the most suitable for online learning because it can be accessed by computers or devices. Another benefit that is felt by using google classroom is that the teacher can assign assignments and provide grades to students directly. Utilization of this application is expected to help teachers convey information precisely and accurately to students and be able to manage learning well (Soni et al., 2018).

Teachers in the application of using google classroom as a medium for assessing learning outcomes based on research results experience several obstacles, including students having difficulty applying it because they are not used to it. This is in line with research conducted by Wulandari et al., (2020) who said there were several obstacles faced during the implementation of the assessment, including the difficulty of students in applying Google Classroom. In addition to these obstacles, other perceived constraints are problems with the internet network and high quotas, so that teachers have difficulty collecting assignments on time and providing immediate feedback.

Apart from utilizing google classrooms, it is known that there are many other applications used by teachers to support assessment of learning outcomes during the Covid-19 pandemic, including google form, Quizziz, Quipper School, Zoom, Microsoft Team, Moodle, Schoology, Examview, Teacher Room and website. school e-learning. The use of this application is tailored to the needs and abilities of teachers and students in combining technology and student assessment needs. It is important to note that schools can customize their own electronic assessment platforms to meet their specific needs.

# 2. Difficulties and barriers to using e-assessment media during the assessment of economic learning during the Covid-19 pandemic

Difficulties in using e-assessment media as a medium for assessment are still felt by some teachers, including regional geographic conditions, unstable internet signals and expensive internet quotas, difficulties in monitoring students' honesty while working on assignments, cellphone specifications that are not supportive, the activeness of students, difficulties in making assessment instruments, the e-assessment media used is not able to measure attitude and skill assessment.

The difficulty in obtaining a signal is more due to the geographical condition of the Indonesian state, which is in the form of an archipelago. This geographical condition causes not all regions to have internet network facilities. Things like this are more commonly found in schools that come from remote areas.

High internet quota is the next cause. The majority of Indonesian people in the middle to lower class have little objections to the high cost of quotas. Plus at least government facilities that provide free wifi. This requires parents to provide additional fees for online learning, while the corona pandemic has caused a partial decrease in the income of most of the community.

The next obstacle that is felt is deeper into the personal condition of the students. Teachers without face to face cannot control student activeness in learning, especially when students make assessments. Teachers can only wait for students to collect assignments every day, without being able to play a direct role in encouraging children to be active in learning. This has another impact on the implementation of the assessment.

The impact of the difficulties and obstacles faced by teachers in conducting assessments during the Covid-19 pandemic caused many exams to be canceled or postponed. The important point is that this results in the loss of information on children's progress for families and teachers. The loss of this information is very meaningful for the sustainability of the student's future, because students lose the information that should be obtained to improve the targeted abilities and skills as a result of inappropriate treadment. Furthermore, the difficulties faced cause teachers to prefer to provide predictive value to students. Murphy & Wyness, (2020) indicates that the predicted values are often inaccurate. Evidence suggests that there is a systematic bias between blind and non-blind examinations, whereby the direction is biased towards students with good or poor performance backgrounds (Rangvid, 2015).

The hope of the problem currently being faced is the development of an assessment media that suits the needs of teachers and students during the Covid-19 pandemic. The developed media is expected to help teachers manage assessments and make it easier for students to carry out assessments. Cooperation between the school and parents of students is also expected in the success of student assessments. Parents who act as primary educators when learning is carried out at home, play an important role in the success of student assessments.

# CONCLUSION

The results showed that most of the teachers used google classroom in conducting the assessment process of economic learning. Apart from utilizing google classrooms, it is known that there are many other applications used by teachers to

support assessment of learning outcomes during the Covid-19 pandemic, including google form, Quizziz, Quipper School, Zoom, Microsoft Team, Moodle, Schoology, Examview, Teacher Room and website. school e-learning. The use of this application is tailored to the needs and abilities of teachers and students in combining technology and student assessment needs.

Some teachers still feel the difficulty in using e-assessment media as a medium for assessment, including regional geographical conditions, unstable internet signals and expensive internet quotas, difficulties in monitoring students' honesty while working on assignments, cellphone specifications that are not supportive, activeness students, difficulties in making assessment instruments, the e-assessment media used is not able to measure attitude assessment and skills assessment.

The development of assessment media that suits the needs of teachers and students during the Covid-19 pandemic is highly recommended. Media is expected to assist teachers in managing assessments and make it easier for students to carry out assessments. Cooperation between the school and parents of students is also expected to make student assessments successful. Parents who act as primary educators when learning is carried out at home, play an important role in the success of student assessment.

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