



The Urgency of Using Digital-Based Student Learning Activity Instruments to Measure Student Engagement in Distance Learning

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ABSTRACT

Distance learning in its implementation there still has many obstacles. One of the obstacles in distance learning is that it is difficult for teachers to assess student involvement in learning. Based on these problems, teachers need to be assisted so that an assessment of student involvement in distance learning can be carried out. One of the efforts that can be done is to develop a digital-based learning activity observation instrument. In this study, it will be studied why the use of digital-based instruments is important to development. This research uses a literature study method. The data source comes from the relevant previous research results. Based on the results of the literature study, information was obtained that the use of digital-based instruments has many benefits. The benefits of using digital-based instruments include: it can speed up the assessment process, the implementation of the assessment is more flexible, and transparency of the assessment can be realized. Another benefit of digital-based instruments is that it makes it easier for teachers to collaborate with parents in conducting assessments. With digital-based instruments, it can create a partnership model between teachers and parents in improving the quality of education.

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1. INTRODUCTION

The logical consequence of the order in the new post-pandemic era in the field of learning is to conduct online learning. The health, safety, and security of civilization stakeholders must be a top priority in setting policies, programs, and cultural activities, including in the field of education (Saryono, 2020). The strategy for developing the new order of culture must be developed in an innovative, creative, critical, and constructive way. One of the efforts to realize this learning model is the mastery of digital literacy. Armed with mastery of these digital competencies, teachers find it easier to design distance learning models (Velez, 2012). In addition to the use of learning models in this era what must be considered is the implementation of the evaluation. This needs to be done considering

that the teacher's job is not only to teach but also to evaluate learning outcomes. One aspect that must be measured in learning activities is student involvement in learning. Student involvement in learning can be observed using an instrument of observation of student learning activities. The problem is whether the teacher can observe student learning activities properly when using distance learning, considering the situation of face-to-face learning with distance learning is very different.

Several previous studies show that teachers carry out learning evaluations in distance learning. Based on the results of the study (Widodo et al., 2022) it was found that teachers experience many difficulties in assessing student learning activities in distance learning. In this study, it was stated that the causes of teacher difficulties include the absence of special instruments that teachers can use to measure student learning activities in distance learning and the absence of collaboration between teachers and parents in assessing student learning activities. Research (Ariesca et al., 2021) also shows that teachers in distance learning also experience obstacles. Student learning activities cannot be properly observed by the teacher because they are constrained by the distance from the students. The results of the study (Husna et al., 2021) also show that as evaluators teachers experience difficulties in distance learning. As an evaluator, the teacher's role is to collect information about the success of the learning that has been carried out which functions to determine the success of students in absorbing the material and determine the success of the teacher in carrying out the learning process. The results of the study (Utami & Cahyono, 2020) also found almost the same facts that teachers experience difficulties in assessing the abilities and development of student achievement. Based on some of the research that has been described, it can be concluded that in distance learning it turns out that there are still many difficulties experienced by teachers in evaluating student learning activities. The source of the problem is that there are no instruments that can be used by teachers in distance learning. Starting from these problems it is necessary to research to find solutions to the problems experienced by teachers. One of the efforts that can be made to overcome the teacher problems that have been described is to create special instruments to measure student learning activities. However, the instruments developed must be relevant to current conditions. Instruments that are relevant to distance learning are digital-based.

Digitization in learning activities is a new alternative and should not be rejected to make it easier for teachers to provide learning services to students. The rapid development of information technology must be utilized properly by teachers to create a better learning system (Putrawangsa & Hasanah, 2018). One of the advances that must be utilized is the advancement of the internet which allows teachers and students to communicate interactively even though the distance between the two is constrained (Dede & Hall, 2010). Therefore, teachers are required to master digital literacy. Digital literacy is a person's knowledge and skills in using digital-based media, communication tools, and networks to be used wisely, appropriately, and appropriately, and following rules, both laws and other existing rules (Somantri & Sari, 2021). Moreover, in the era of the 21st century, digital competence is one of the main competencies that everyone must have (van Laar et al., 2017). People who do not understand digital literacy will be oppressed and left behind by the times. According to (Saryono, 2020) we are currently witnessing a fundamental and all-powerful change called the era of disruption. This era requires everyone to be able to adapt both to new habits in the pandemic era, as well as new orders and habits of life. Suddenly everything needs digital literacy to take part in the digital world, especially in the field of learning. Digital literacy in this era is one of the important abilities that everyone must have (Combes, 2016). Based on this background, it is necessary to examine the urgency of using digitization in the development of student learning activity instruments.

2. RESEARCH METHOD

The type of research used in this research is library research. Library research is research that is carried out using literature (library), either in the form of books, notes, or reports on the results of previous research (Zed, 2008). In library research, researchers limit their activities to library collection materials without the need for field research. According to (Sari & Asmendri, 2002) library research is a research activity carried out by collecting information and data with the help of various materials in the library such as reference books, similar previous research results, articles, notes, and various journals related to the problem that you want to solve. Activities are carried out systematically to collect, process, and conclude data using certain methods/techniques to find answers to the problems faced. According to (Zed, 2008) four research steps must be carried out in library research, namely: Preparing equipment, compiling a working bibliography, managing time, and reading and making research notes. According to (Kuhlthau, 2022) there are four main stages in library research, namely: First, record all findings regarding the "research problem" in each research discussion obtained in the literature and sources, and or the latest findings regarding the "research problem". Second, Integrate all the findings, either theory or new findings. Third, analyzing all the findings from various readings, related to the shortcomings of each source, and the strengths or the relationship between each of the discourses discussed in it. Fourth, Criticizing, and providing critical ideas on the results of research on previous discourses by presenting new findings in collaborating different thoughts on research problems.

3. RESULTS AND DISCUSSIONS

3.1 The importance of measuring student learning activities in learning

Student learning activities are one part of the learning process that has an important role in the success of student learning. In the learning process, student learning activities are the main aspects that must be realized. Each student must receive appropriate services to develop their active learning for the sake of successful learning in the classroom. According to (Permendiknas, 2007) every learning process should be able to stimulate students to participate actively and provide sufficient space for the initiative, creativity, and independence of the talents, interests, and physical and psychological development of students. The activeness and involvement of students in learning based on the ministerial regulation have a very important position. The active role of students in learning is a must, therefore the learning process must be oriented to student activity. This is following the opinion (of Rahayu et al., 2019) which states that ideally the provision of information, orders, and questions from the teacher is a maximum of 30%, and the rest students carry out independent learning activities. Students are expected to be more active in digging for information, taking the initiative in learning, asking questions, and actively participating in learning activities.

The activeness of students during the teaching and learning process is one indicator of the desire or motivation of students to learn. Students are said to have activeness if behavioral characteristics are found such as: often asking the teacher or other students, being willing to do the assignments given by the teacher, able to answer questions, happy to be given learning assignments, and so on (Cho et al., 2022). The characteristics of active learning include being process-oriented, students are actively involved in learning, exploring subject matter information, always inviting students to think critically, and providing quick feedback in the learning process (Xie et al., 2022). Student learning activities in the classroom emphasized the interaction between teachers and students as well as interactions between students. The teacher's task in this case is to facilitate students to create a learning atmosphere that supports active learning (Lugosi & Uribe, 2022). In general, an active learning process has several benefits,

including interactions that arise during the learning process will lead to positive interdependence where the consolidation of the knowledge learned can only be obtained together through active exploration in learning, each individual must be actively involved in the learning process and teachers must be able to get an assessment for each student so that there is individual accountability, this active learning process to run effectively requires a high level of cooperation so that it will foster social skills (Yin & Du, 2022). These benefits can be achieved because student activity-oriented learning does not only focus on physical activity but also involves non-physical activities such as mental, intellectual, and emotional.

Active student learning cannot be understood properly if an assessment is not carried out. Therefore the teacher must conduct an assessment of student learning activities in learning. This aims to determine whether the level of student learning activities is following the learning objectives or not. Assessment of learning activities is also used to determine whether students can learn well (Pishtari & Rodríguez-Triana, 2022). This relates to the teacher's job to pay attention to how students learn, not just teach. By knowing student learning activities well, the teacher can make efforts to improve learning if student learning activities are not following predetermined learning objectives (Naibert & Barbera, 2022). Student learning activities can be used by the teacher as evaluation material in the implementation of learning. This is because learning activities are related to student responses or involvement both physically, mentally, emotionally, and intellectually in each learning process, which includes involvement before learning, involvement during the learning process, and involvement in evaluation after the learning process. All of the aspects mentioned above must be assessed so that the teacher gets complete information about the readiness and seriousness of students in participating in learning (Hidayah & Syahrani, 2022). Assessment can be done by identifying student activity in learning according to student learning activity instruments. Identification can be done by looking at indicators of student learning activities while participating in the learning process in class, namely complex thinking skills, processing information, communicating effectively, working together, collaborating, and having effective reasoning.

3.2 The use of digital-based student learning activity instruments in distance learning

To measure student learning activities, an instrument is needed. In general, the instrument is in the form of a sheet of paper containing indicators of learning activities equipped with a measurement scale. The use of instruments in the form of sheets of paper in distance learning is less effective. The implication is that student learning activities cannot be measured properly. This is following research (Widodo et al., 2022) which states that the instruments owned by teachers are only suitable for assessing learning activities in the classroom, while teachers do not yet have special instruments that can be used to assess student learning activities in distance learning. Other research also shows that in distance learning there are still many obstacles faced by teachers, one of which is related to evaluation (Mastan et al., 2022). Based on these circumstances, it is necessary to innovate in the manufacture of assessment instruments for student learning activities. One form of innovation that can be done is by developing digital-based assessment instruments. The use of digital-based instruments can be a solution to the limitations of manual assessment instruments. The shift from manual instruments to digital instruments today can be said to be a must (Anyidoho et al., 2022). Advances in information technology must be put to good use in the field of learning. The world of education should not be left behind by advances in technology. Moreover, in distance learning that is separated by distance, the use of digital-based technology in conducting assessments must be developed (Gamage et al., 2022).

Many applications can be utilized as a digital-based evaluation tools. One of the applications that people are familiar with is Google Forms. The Google form is very practical to use as a data collection tool (Ritonga et al., 2021). This application can be designed in such a way as an instrument for assessing student learning activities (Pjoko et al., 2022). By using Google Forms teachers can involve parents directly in assessing student activity. The teacher's limitations in directly observing student learning activities can be helped by the presence of parents as observers. The use of digital-based instruments has indirectly involved parents in the learning process. With the involvement of parents in learning, it is hoped that the quality of learning will increase. This is one of the benefits of using digital-based instruments, which can facilitate parental involvement in learning. In addition, the use of digital-based instruments also has various advantages compared to manual instruments (Usman et al., 2022). Digital-based instruments are more practical to use, faster in data collection, and faster in the analysis of evaluation results, and the volume of information in the digital world is very large. The amount of capacity in the digital world is a strength in itself that can be used to accommodate a lot of information. Besides that, the use of website-based software has many other advantages, one of which is that data can be accessed openly by community members. This open access has its advantages, namely transparency in assessments can be maintained. With the transparency of this assessment, parents can see directly how their children's activities are described while studying. Armed with this assessment, teachers, and parents can collaborate to design learning improvements so that the learning objectives that have been designed can be achieved (Asrin et al., 2021).

4. CONCLUSION

The use of digital-based instruments to assess student learning activities in distance learning has many benefits. The benefits of using digital-based instruments include facilitating the process of assessing learning activities, using more practical and flexible instruments, faster data collection, easier analysis of assessment results, transparency in the assessment process, and being able to maximize the role of parents in the evaluation. Digital-based instruments can be a solution to the limitations of manual instruments that still use paper sheets. This research can contribute to the development of knowledge, especially concerning the development of student learning activity instruments. This research implies that it can open researchers' insights to develop digital-based learning activity instruments. This research is basic so it requires further research. The limitation of this research lies in the methodology used, namely library research. Therefore it is hoped that future researchers will research the development of digital-based student learning activity instruments so that the resulting instruments can be used by teachers at school.

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