

## SUMMATIVE ASSESSMENT USING MOODLE LEARNING MANAGEMENT SYSTEM IN VOCATIONAL HIGH SCHOOL: TEACHER PERSPECTIVE

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**Abstract**: This study used a qualitative approach using descriptive methods. The research site was conducted at Cimahi City Center for Excellence Vocational High School (Center of Excellence) with teacher research participants in the curriculum and subject teachers involved as supervisors in implementing summative assessments. Data collection is conducted by conducting interviews and documentation studies on learning management systems owned by schools. The validity and reliability of the research results are checked using triangulation of data and information. As a result of the study, summative assessments using LMS Moodle were more effective over time, reduced paper usage was easy to use, and encouraged mastering technology competencies for teachers. The negative impact of using LMS Moodle on summative assessment is the student's chances of finding answers online. Anticipation can be achieved by adding a blocking feature to Moodle. LMS Moodle-based facilities and facilities support facilities are the main prerequisites for the smooth implementation of summative assessments.

Keywords: Moodle, summative assessment, teacher, vocational high school.

#### **INTRODUCTION**

The Covid-19 pandemic has significantly impacted various sectors, including education (Juanda et al., 2021; Kartimi et al., 2021). Learning in face-toface class is transformed into virtual ones with the help of technology or e-learning. The e-learning activity supports learning activities with electronic devices such as computers (Paramitha et al., 2022). One major means of electronic learning used during the pandemic was the Learning Management System (LMS). LMS is designed to fill multimedia needs by providing and transmitting content, and can track learning activities virtually and be used for administrative purposes, activity reports, documentation, online learning, virtual learning materials providers (Napitupulu & Simanjuntak, 2022: Paramitha et al., 2020). The Learning Management System strategy is based on Moodle. Moodle is used because it is easy to access users, easy accessibility, and time flexible; this increases the chances of good interactions in the form of quizzes and

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worksheets, and thus stimulates students' enthusiasm for learning (Putra et al., 2019; Sinaga et al., 2021). The presence of LMS Moodle is an effective tool that can be used during learning in the network.

LMS continues to be used in learning, including the use of learning in the current curriculum, Merdeka Berdeka. Several schools have used LMS Moodle as a medium to carry out hybrid learning and support after returning to face-to-face school. In schools that implement an independent learning curriculum, LMS Moodle can be used to facilitate assessment/evaluation devices. Asesmen themselves, quoted from the website guru.kemdikbud.go.id, assessment in the free learning curriculum can use formative assessment and summative uses. Teachers can use formative aspects to identify students' learning needs, obstacles, and obstacles encountered in the learning Meanwhile. summative process. assessments are used to see students' achievements within a certain period, for example, in a semester/term. This study will be discussed the use of Moodle-based LMS in the implementation of summative assessments. So that various problems regarding the use of devices in summative assessments from teachers' perspective can be detected.

#### METHOD

To describe and explore social problems occurring, (Creswell, 2015). This study used a qualitative research approach, with descriptive methods. The research site was conducted at one of the Cimahi City Vocational High Schools. The school selected as a research location is a vocational high school that has implemented an independent learning curriculum since 2020. The research participants consist of teachers who study the school curriculum and subject teachers who supervisors are in implementing the semester-end summative assessment because, as a committee, they have data on the arrangement and validation of those who conduct assessment supervision. Data collection was conducted by conducting interviews with research participants and documentation studies on learning management systems owned by schools. Then, the validity and reliability of the research results are checked using triangulation of data and information.

#### **RESULT AND DISCUSSION**

In this study, related to research ethics, the identity of the research participant's name is entitled not to include the full name.



Figure 1. Photo with curriculum staff

The teacher the overseeing curriculum, the research results revealed the selection of mood-based LMS as a means of online learning due to its many features, ease to use, guaranteed security, free of charge, and more flexibility to configure its learning. The use of moodle in this school has been ongoing for 3.5 years. In implementing the LMS Moodle summative assessment, the parties involved are the curriculum team, Information and Communication Technology (ICT) team, proctor/supervisor, teachers, and students.

#### Implementation of Summative Assessment with LMS Moodle

LMS moodle is also utilized in performing summative assessments at the end of the semester to realize more effective learning and apply paperless to school exams, easier to use, and efforts to improve the quality of teachers who do not stutter technology. In this case, LMS Moodle encourages the dynamic change of Indonesian education today; the use of technology can improve the learning experience, and provide flexible virtual space for students (Suet al., 2022; Yaelasari Yuni & Astuti, 2022). In the implementation of summative assessments, problems several are encountered, including server errors caused by excessive user access at the same time, problems that do not appear on the user's view, and difficulty logging in when students are about to access the page. This problem with Moodle's use, by (Su et al., 2022) similar research shows Moodle's weakness is that it requires a stable internet to access content and difficulties in using moodle due to lack of digital literacy and too dense information display. These obstacles, in schools where research has been conducted, include sharing sessions in student login access to conduct an evaluation on the mood page by providing a 15-30 minute time delay, performing a refresh process during errorprone mood access, configuring the mood display It became five problems per page, optimization of processor quality, and a recheck of problematic student accounts by the proctor.

The implementation of summative assessments with LMS Moodle involves several stages. Firstly, the proctor creates a

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quiz template according to the subject schedule for the summative test. Secondly, the proctor records the students' emails and the teacher creates accounts for teachers and students, informing them of the accounts. Thirdly, the teacher creates problems in the exam view application, saves them with the ext blackboard, and uploads them to the LMS bank. The teacher then adds the problem to the provided quiz template to digitize it.

A few days before the exam, students are asked to log in with the account given to ensure there are no problems with the student account. The proctor checks the availability of problems that teachers have uploaded at each quiz. When the test is about to take place, the proctor registers students who do not take the exam, hides and unhides the quiz as scheduled, and helps to solve any problems that occur during the exam.

After the test is completed, the proctor downloads the test results, stores them in a Google drive, and informs the subject teacher of the test result link. These steps ensure a smooth and organized process for implementing summative assessments with LMS Moodle. If described in the chart, the stages in implementing LMS Moodle-based summative assessment are seen in Figure 2.

# Cumulative assessment impact on LMS mood

Implementing summative assessment with Moodle-based LMS differs from the conventional summative assessment. The impact of having a summative assessment with LMS Moodle is that it makes it easy for teachers to check the exam results. The problem that students have worked on, the results can be immediately downloaded and analyzed, so teachers no longer need to use paper and check the students' answers one by one, seen from this point of view; of course, Moodle-based LMS summative assessment is more efficient.

According to (Paramitha et al., 2022; Santosa, 2022; Sinaga et al., 2021), technological development does provide opportunities for more meaningful, effective, and efficient learning. Moodle makes learning more accessible with its viewable appearance, easy to learn, and can minimize budget use in semester exams, from the output, online exams can be timeefficient in the process of grades, and more effectively not having to check every student's answer sheet (Shidiq et al., 2021).

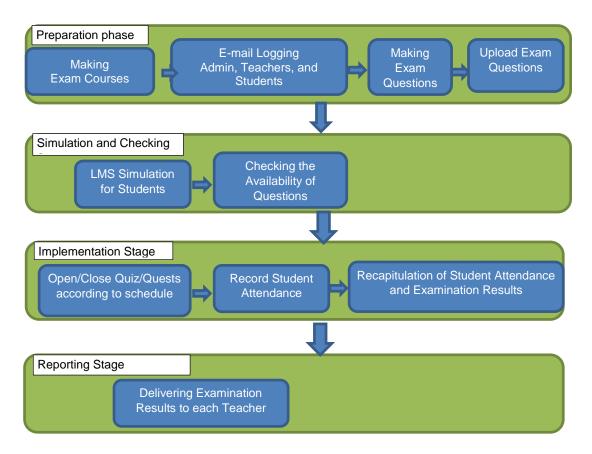


Figure 2. Stage of summative assessment implementation with LMS moodle

The summative assessment problem based on LMS Moodle is a matter of multiple choices, which are then input in a specific program and then changed in a format tailored to the page on Moodle. This was done independently by each support teacher so that teachers would not want to control technology. allows This teachers upgrade to technology mastery, especially since Moodle is straightforward to learn & Simanjuntak, (Napitupulu 2022; Sinaga et al., 2021). Moodle LMS has been used for a long time, especially when studying from home (BDR) during the pandemic, encouraged by schools that instinctively provide training (Shidiq et al., 2021). Regarding capabilities in technology, who revealed that the use of LMS in summative assessments has an impact on improving the IT skills of teachers and students, making it easier for teachers to evaluate and obtain evaluation results and reducing paper use.

In addition to the positive impact, some gaps must be corrected using LMS Moodle in summative assessments. There was a lack of monitoring when participants worked on problems. Using tools to access exam question pages can increase students' chances of finding answers through google. The impact of LMS Moodle in the implementation of summative assessments is indeed lacking in supervision so that students can search for google information so that the value is not pure (Sinaga et al., 2021). In the future, there needs to be an additional google block feature on the Moodle page so that students' grades can be guaranteed honesty and reduce the chance of cheating as the fundamental essence of the assessment process (Hsiung, 2018; Rutkowski, 2015).

#### CONCLUSION

The implementation of summative assessments using LMS Moodle requires support from various elements. The independent curriculum implemented by the SMK Center for Excellence supports technology so that LMS Moodle can be one of the media for summative assessments. In its implementation, LMS Moodle needed stable internet access to the page because accessing the page would be faster than using local access; problems encountered at the time of the implementation include server errors, problems that do not appear on the user's view, and difficulty logging in when students are running will access the page. The effects of using Moodle LMS in implementing summative assessments for teachers include reducing paper use, efficiency and time-effectiveness in examining test results, and improving mastering technology competencies in learning. On the other hand, LMS Moodle provides students with opportunities to cheat. The google block feature needs to be added to LMS Moodle so that students can be more honest in working on exam questions.

#### REFERENCES

- Creswell, J. (2015). *RISET PENDIDIKAN : Perencanaan, Pelaksanaan, dan Evaluasi Riset Kualitatif & Kuantitatif* (5th ed.). Pustaka Pelajar.
- Hsiung, W. Y. (2018). The use of e-resources and innovative technology in transforming traditional teaching in chemistry and its impact on learning chemistry. *International ogies*, 12(7), 86–96. https://doi.org/10.3991/ijim.v12i7.9666
- Juanda, A., Shidiq, A. S., & Nasrudin, D. (2021). Teacher Learning Management: Investigating Biology Teachers' TPACK To Conduct Learning During the Covid-19 Outbreak. Jurnal Pendidikan IPA Indonesia, 10(1), 48–59. https://doi.org/10.15294/jpii.v10i1.26499

- Kartimi, Gloria, R. Y., & Anugrah, I. R. (2021). Chemistry online distance learning during the covid-19 outbreak: Do tpack and teachers' attitude matter? *Jurnal Pendidikan IPA Indonesia*, 10(2), 228–240. https://doi.org/10.15294/jpii.v10i2.28468
- Napitupulu, J. Y., & Simanjuntak, M. P. (2022). Design Based-Learning of Learning Management System (LMS) With Moodle to Improve Independence and Science Learning Outcomes of Junior High School Students. *Journal of Environmental and Science Education*, 2(2), 71–77. https://doi.org/10.15294/jese.v2i2.58477
- Paramitha, A. I. I., Aristyana Dewi, E. G., & Dewi, N. L. A. (2022). Usability Testing Learning Management System (Lms) Berbasis Moodle Di Sma Negeri 1 Sukawati. *Jurnal Informatika Teknologi Dan Sains*, 4(3), 291–295. https://doi.org/10.51401/jinteks.v4i3.1939
- Putra, R. L., Maulana, A., & Iriani, T. (2019). Evaluasi Program Pelaksanaan Ujian Online Dengan Menggunakan Learning Management System Moodle Berbasis Android Di Smk Negeri 1 Jakarta. Jurnal PenSil, 8(1), 47–54. https://doi.org/10.21009/jpensil.v8i1.8483
- Rutkowski, J. (2015). Moodle-Based Computer-Assisted Assessment in Flipped Classroom. In *Smart Education and Smart e-Learning, Smart Innovation, Systems and Technologies* (pp. 37–46). https://doi.org/10.1007/978-3-319-19875-0
- Santosa. (2022). Fenomena Kurikulum Merdeka Belajar Dalam Pemanfaatan Digitalisasi Di Era 5.0. 1(2), 85–94.
- Shidiq, A. S., Permanasari, A., Hernani, H., & Hendayana, S. (2021). Chemistry teacher responses to learning in the COVID-19 outbreak: Challenges and opportunities to create innovative lab-work activities. *Journal of Physics: Conference Series*, 1806(1), 012195. https://doi.org/10.1088/1742-6596/1806/1/012195
- Sinaga, L., Saragih, L., Sitorus, V. B., & Panjaitan, L. N. (2021). Pemanfaatan Learning Management System dengan Moodle dalam Menunjang Pembelajaran Daring Interaktif. *Prosiding Seminar Nasional IKIP Budi Utomo*, 244–252. http://202.57.31.74/index.php/prosiding/article/download/1442/928/
- Su, Z., Wang, Y., & Di, W. (2022). Learning Management System in Higher Education of Postgraduate Taught Students through Optimised Module Design. *Journal of PGR Pedagogic Practice*, 86–92.
- Yaelasari, M., & Yuni Astuti, V. (2022). Implementasi Kurikulum Merdeka Pada Cara Belajar Siswa Untuk Semua Mata Pelajaran (Studi Kasus Pembelajaran Tatap Muka di SMK INFOKOM Bogor). Jurnal Pendidikan Indonesia, 3(7), 584–591. https://doi.org/10.36418/japendi.v3i7.1041

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