

TESTING EDLINK'S ABILITY TO MANAGE BLENDED LEARNING

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Article Info

Article history:

Received Mei 01, 2024

Revised Jun 15, 2024

Accepted Jun 04, 2024

Keywords:

Edlink

LMS

Online Learning

ABSTRACT

The main purpose of this research is to find out the advantages and disadvantages of the sevima edlink application through application in lectures using mixed methods. The advantages and disadvantages obtained are expected to be input for the university for the development of a better campus LMS. A good LMS will support the implementation of good MBKM through distance learning programs. In addition to finding out the advantages and disadvantages of Edlink, another important point is to involve students including lecturers involved to actively participate in using learning technology. This is one of the important points of this research. The methods used were case study, in-depth interview and participative observation. The research instruments were questionnaires and interview guidelines. The results of this study indicate that edlink is very feasible to use as a campus LMS although there are some features that must be improved.

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How to Cite:

Nasrum, A., Mashuri, S., & Subawo, M. (2024). TESTING EDLINK'S ABILITY TO MANAGE BLENDED LEARNING. *JME: Journal of Mathematics Education*, 9(1), 151-159.

1. INTRODUCTION

The covid-19 pandemic has brought a very significant good impact on the development of distance learning in Indonesia. The school or campus community is forced to use technology for the continuity of the learning process. Distance learning is one of the best alternatives to continue implementing the planned learning process. From this condition, both individuals and institutions must be able to use or even create digital products that can support the creation of a distance learning process. This turns out to be in line with the industry 4.0 era which also encourages universities to continue to innovate and transform in the world of better education.

On the other hand, the Merdeka Belajar Kampus Merdeka (MBKM) curriculum that has been implemented in higher education really needs a distance learning platform in the form of a *Learning Management System* (LMS). In the MBKM curriculum, students are given the freedom to choose the courses they want, both outside the study program within their own university and at other universities. The implementation can be done *online* or offline. If it is carried out *online*, the destination campus must have LMS facilities, otherwise if it is carried out *offline*, the home campus must have an LMS that is used to support the learning process of courses that are not programmed at the destination campus. In essence, this LMS is really needed to support the MBKM policy.

Before the implementation of MBKM, even long before the outbreak of the pandemic, several distance learning platforms were widely known such as *Schoology* and *Moodle*. But after the outbreak of the pandemic, online learning platforms have also mushroomed and increased so rapidly. Widely known learning platforms include Google Classroom, Edmodo, Schoology, Microsoft Teams, Moodle, and so on. To support the implementation of synchronous and asynchronous distance learning, all of these platforms can be used. Google classroom (Nasrum & Subawo, 2022), Edmodo and schoology (Mashuri & Nasrum, 2020) tend to be used privately while Microsoft Teams and moodle are commonly used as Institutional LMSs. (Nasrum & Subawo, 2021).. LMS applications are very useful in the learning process in the covid period because the transfer of knowledge and communication between lecturers and students continues to run well. (Fitriani, 2020).

The Ministry of Education, Culture, Research and Technology continues to provide support to higher education institutions to always develop online learning processes. This year, campus online learning assistance was launched for institutes that are pioneering and developing online learning to support the implementation of MBKM. Unfortunately, this program only applies to universities that have previously had a campus LMS and have been implemented for at least 2 semesters. This of course cannot be followed by some universities that do not have their own LMS such as Universitas Sembilanbelas November Kolaka (USN Kolaka).

Alhamdulillah, this year (2023) at the beginning of the even semester, USN Kolaka changed the campus siakad to siakad from SEVIMA. In this siakad there is an Edlink facility that can function as a campus LMS. Apart from being in the form of a browser, Edlink is also available in the form of an application that can be downloaded in the playstore on an android smartphone.

Several previous studies have mentioned that the edlink application makes it easier for lecturers to manage learning, be it the delivery of material, assignments and assessments. (Meilindha, 2017). Various features that must be owned by an LMS are also available in edlink such as class features, teaching materials, discussion forums, assignments, assessments, quizzes and private messages. (Rosanti et al., 2020). The advantage of sevima edlink is that it is integrated with the campus siakad so that all activities starting from KRSan, student consultation, academic data such as KHS can be monitored from this application. The attendance used is also recorded in siakad, making it easier to assess student attendance. In addition, edlink has proven suitable for realizing the MBKM policy. (Marlina, 2020).

A wide variety of methods can be used in the use of online platforms as assistive media. For example, the use of a realistic approach to improve problem solving skills (Khotimah & Maghfiroh, 2022). (Khotimah & Maghfiroh, 2022) or the assignment method in improving discipline and learning achievement (Mahayuki, Sudiarta, & Putra, 2020). (Mahayuki, Sudiarta, & Putra, 2020).. In addition to functioning as a medium, online learning applications can also be used to measure a student's learning independence through activity log features such as those in moodle. (Pratiwi, 2022). The edlink application can also be used to measure the learning independence of a student. (Hartinawanti, SELVI, & Alannasir,

2021).. In several studies for certain regions that apply sevima edlink, it has been shown that the response of students to the use of this application is very positive. (Sahlan, Donuata, & Fitriani, 2022).

None of these studies have specifically highlighted the assessment used in edlink. In the VoS Viewer mapping (see fig. 1) there is also no direct link between edlink and assessment. In addition, the advantages and disadvantages of the edlink application compared to other platforms have also not been specifically studied. This point is the main highlight that will be studied in this research.

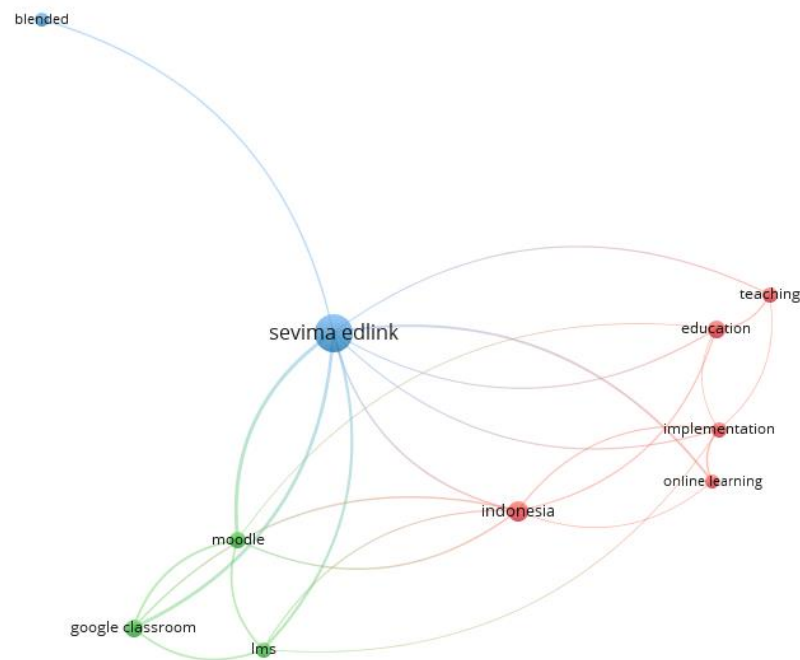


Figure 1. Network visualization of google scholar database 2017-2023 with keyword "Sevima Edlink".

In this study we will try to test Edlink's ability to manage the blended learning process. The most important point in this research is to find out the advantages and disadvantages of sevima edlink through the implementation of blended learning. The strengths and weaknesses are reviewed from various features provided such as material upload features, class creation and invitation features, assessment question features, communication and notification features and other features that are considered important. The disadvantages and advantages obtained are input for universities to consider whether to continue using the facility or create a better open source LMS facility. The second is an input for sevima developers to try to cover or complete any deficiencies found.

This research is important because lecturers are required to actively utilize digital technology in developing learning. Digitalization does not mean having to create a technology product but how to synergize and utilize existing technology products to achieve the desired goals.

2. METHOD

This research is a case study research in the application of LMS with the aim to analyze more deeply about the advantages and disadvantages of the LMS media. This research will be conducted at Universitas Sembilanbelas November Kolaka in the mathematics education department. For this reason, one class of fourth semester students in the 2023/2024 academic

year was taken as the research subject who programmed the statistics course. This course is taught using Edlink assistive media. The technique used in the learning process is blended learning. Teaching materials in the form of pdf files along with material explanation videos are given 1 week before the meeting begins. When face-to-face learning takes place, the method used is discussion and question and answer related to material that has not been understood. Accompanied by giving and collecting assignments in the edlink application. The communication feature in the application is also used to provide information related to the next lecture.

To carry out this research, several preparations are needed, including the preparation of teaching materials in the form of teaching diktats/modules for each meeting. In addition, teaching materials in the form of video material explanations must also be provided. In addition to teaching materials, assessments are also needed in the form of formative and summative assessments. No less important is to ensure that all students have a device and can access the edlink application.

In every process of using the edlink feature, every obstacle found was recorded and documented. The process of recording and documenting was obtained through participatory observation and in-depth interviews. Data on obstacles to material distribution, communication, assessment and evaluation. Information related to various obstacles experienced by students in using the application was also collected through questionnaires. All data obtained were then analyzed descriptively.

3. RESULTS AND DISCUSSION

3.1. Results

The results of this study will be presented based on the main features of the LMS, namely administration features, teaching material delivery features, communication features, testing features and assessment features.

3.1.1 Administration Features

The administrative features in Edlink such as registration and attendance are undoubtedly integrated directly with Siakad. The form of attendance can be seen in Figure 1.

The screenshot displays the 'Presensi' (Attendance) page in the Edlink application. At the top, it shows the session title 'Statistik Matematika I (A)' and a green button 'Presensi Melalui barcode'. Below this, session details are listed: 'Sesi ke' 5, 'Topik Sesi' 'Peluang dan Peubah acak', 'Hari & Tanggal' 'Senin 17 April 2023', and 'Waktu' '08:00 - 10:00'. A section for '14 Anggota' (Members) includes a checkbox 'Tandai Hadir Semua'. Two members are visible: 'Muhammad Al Fatah' (ID 180320211) and 'ABDUL RAJAB BENDE' (ID 190320068). Each member has four circular buttons labeled 'H' (Hadir/Present), 'I' (Istirahat/Absent), 'A' (Alpa/Late), and 'S' (Sakit/Sick).

Figure 2. Edlink Time Attendance Features

3.1.2 Teaching Material Delivery Features

The places and quotas for storage of teaching materials provided by EdLink are in three parts: personal storage, college storage and google drive storage. All of these forms of storage media can be used. The form of storage can be seen in Figure 2.

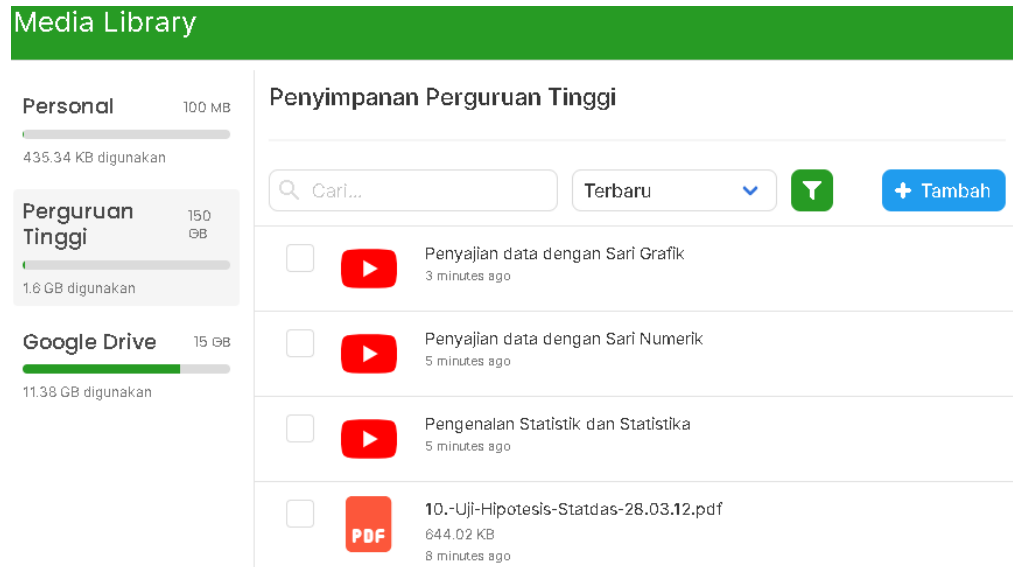


Figure 3. Teaching Material Storage Feature in Edlink

3.1.3 Communication Features

Sevima Edlink provides communication features both individually and in groups. With the android version of Edlink, the use of this communication feature has become even better.

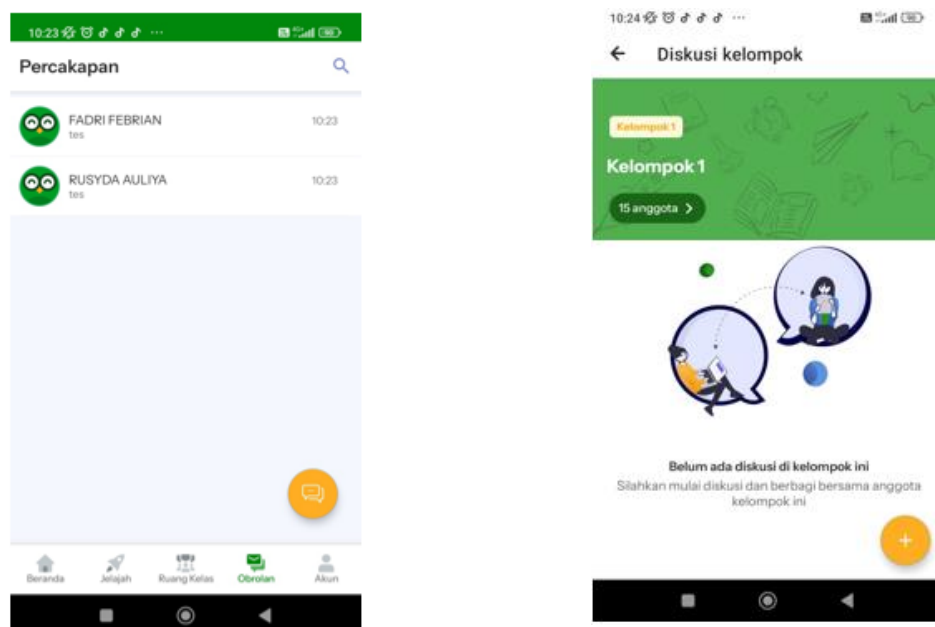


Figure 4. Communication Features on Edlink

3.1.4 Quiz Feature

There is a quiz feature in sevima Edlink but it is limited to multiple-choice quizzes. There are no other question types other than multiple choice. As with most quiz makers, the questions can be randomized, but there is no answer randomization facility. The newest feature is the "Proctoring" supervisor facility, which is used to monitor the movements of the test takers in case of cheating.

The image shows a settings interface for a quiz. It includes the following elements:

- Durasi Pengerjaan**: A text input field containing '30' and a button labeled 'Menit'.
- Quiz dapat diulang?**: A toggle switch currently set to 'Tidak' (Off).
- Batas Waktu**: A toggle switch currently set to 'Tidak' (Off).
- Proctoring**: A green toggle switch currently set to 'Ya' (On). It has a 'Baru' (New) label and a help icon. Below it, text reads 'Durasi pengerjaan minimal 10 menit'.
- Tampilkan laporan kepada peserta setelah quiz selesai?**: A green toggle switch currently set to 'Ditampilkan' (On).
- Acak Pertanyaan**: A green toggle switch currently set to 'Ya' (On). It has a 'Baru' (New) label. Below it, text reads 'Pertanyaan akan diacak setiap kali peserta memuat halaman quiz'.

Figure 5. Quiz Settings on Edlink

3.1.5 Assessment Features

There is no facility for final assessment on Edlink. The only assessment provided in Edlink is the Student Engagement Score. This feature assesses student attendance, feedback on teaching materials in the form of comments and scores obtained and student involvement in the form of student interaction with the teaching materials provided. This engagement is in the form of viewing, downloading or watching, all of which are automatically scored by the system.

As for the obstacles experienced by students in using the application collected through questionnaires, the results can be seen in the table

Table 1. Results of questionnaire assessment of constraints to using Edlink

No.	Indicator	Average Assessment
1	Technical Aspects	4,12
2	Functional Aspects	4,12
3	User Aspect	4,24
4	Content Aspect	4,53
		4,25

3.2. Discussion

Sevima Edlink is integrated with the Academic Information System (SIKAD) of the USN Kolaka campus so that registration by students on Edlink is not necessary. At the beginning of each new semester, students select courses to be programmed through the KRS system in SIKAD. Automatically, certain course classes formed in SIKAD will also be recorded in Sevima Edlink so that Edlink can be directly used for the lecture process after the class has been formed. Regarding the recording of attendance or attendance assessment in the lecture process can be obtained automatically from the absence feature in EdLink.

Furthermore, the features for preparing teaching materials are quite complete. A year ago, to be precise in the even semester of 2022/2024, the Sevima EdLink application was applied to Statistics classes. However, due to the very limited storage quota from the University, only providing 5 GB of storage, its use was not continued. In addition, the ability to distribute teaching materials is also very limited. Files that can be shared are only 1 file for each upload. Other external content such as from YouTube cannot be shared because it does not provide a share link facility.

Currently, the University storage quota has increased to 150 GB so that lecturers can freely upload teaching materials in the form of documents and videos. YouTube video link sharing can also be done so it is very easy to distribute material to students.

Sevima Edlink is not only desktop-based but also has an android version. The existence of the android version adds to the advantages of this application because every update of information from lecturers will be detected by students through notification messages on each cellphone. In addition to providing storage of teaching materials, Edlink also provides chat or messaging facilities. There are private chat facilities or group chat facilities. Every message sent through the application will also provide notification to the recipient. The private chat facility is not inferior to the WhatsApp application. But group chats are a little more complicated than WhatsApp group chats. But that doesn't mean it can't be used, everything can be used properly.

Furthermore, the quiz facility provided by Edlink is still very limited. It only provides multiple choice questions. Nevertheless, this type of question is quite helpful for measuring students' understanding at the concept recall level. One thing that is new in using the quiz application in EdLink is the availability of the Proctoring facility. This facility is a surveillance facility to assist lecturers in monitoring students during exams. If there is any suspicious action, it will be recorded through this facility. This application uses a cell phone camera as a surveillance tool. But once again, the proctoring capability is still very limited. The images reported are a maximum of two images and they are randomly selected. So sometimes more images reported cannot provide any information.

Furthermore, EdLink does not yet have a grade processing facility to obtain a final grade. However, the Student Engagement Score and Report features in EdLink are good enough to be used as a basis for assessing student activities, assessing quizzes and assessing assignments.

Furthermore, based on Table 1, the use of edlink in learning does not show any obstacles because the average score obtained is above 4. This indicates that users find it easy to use the application based on the four indicators measured.

4. CONCLUSION

The five features that are the main features of an LMS have been fulfilled by Sevima Edlink. These five features function very well although there are still features such as quiz features that are still very limited. The value processing feature also cannot be controlled by

the lecturer. But in general, for the use of online lectures, blended and asynchronous learning processes, it is very feasible to use. Edlink is highly recommended as an LMS for campus. The proctoring facility should be improved to a better level.

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