



Synchronous Learning Model: Innovative Learning Using Saudi Electronic University-Based Learning Management System

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ENGLISH ABSTRACT

This research aims to explore the implementation of the Synchronous Learning Model (SLM) using a Saudi Electronic University (SEU)-based Learning Management System (LMS), the users' perceptions, as well as its advantages and disadvantages. A mixed method with a Convergent Parallel model was chosen as the research method, using observation, interviews, and questionnaires distributed to 36 students. Afterward, through the interactive analysis of Miles and Huberman's triangulation, it was discovered that the implementation of SLM with SEU-based LMS in Jambi University was successful, though some challenges, including system weaknesses during evaluation and constraints on internet connectivity, were identified. Therefore, it is recommended that SEU provides improvements to the LMS and the internet access could be improved throughout all regions in Indonesia to facilitate effective and efficient technology utilization in the learning process.

Keywords: Synchronous Learning Model, Online Learning, Learning Management System, Saudi Electronic University

INDONESIAN ABSTRACT

Penelitian ini bertujuan untuk mengeksplorasi implementasi Synchronous Learning Model (SLM) dengan Saudi Electronic University (SEU) berbasis Learning Management System (LMS), persepsi pengguna, dan kelebihan serta kekurangannya. Metode campuran dengan model Paralel Konvergen dipilih sebagai metode penelitian, dengan menggunakan observasi, wawancara, dan kuesioner yang disebarakan kepada 36 siswa. Setelah itu, melalui analisis interaktif triangulasi Miles dan Huberman, ditemukan bahwa implementasi SLM dengan LMS berbasis SEU di Universitas Jambi telah berhasil, meskipun ada beberapa tantangan, termasuk kelemahan sistem selama evaluasi dan keterbatasan konektivitas internet, yang diidentifikasi. Oleh karena itu, disarankan agar SEU memberikan perbaikan pada LMS dan diharapkan akses internet dapat diperluas ke seluruh wilayah di Indonesia untuk memfasilitasi pemanfaatan teknologi yang efektif dan efisien dalam proses pembelajaran.

Kata Kunci: *Synchronous Learning Model, Pembelajaran Daring, Sistem Manajemen Pembelajaran, Saudi Electronic University*

Introduction

Online learning programs utilizing digital platforms in the era of Society 5.0, including Arabic language learning, are a must (Intiana et al., 2023; Syagif, 2022). The National Strategy for Digital Transformation has also considered digital education as a priority sector, where digital education is closely related to the sustainability development goals and objectives of Vision 2030 and the program to achieve the vision (Saerang et al., 2023). The education community including educators and learners is required to be able to adapt to this development. Online learning allows the distance learning process accessible to anyone and anywhere (Rachmawati et al., 2022). In addition, digital learning systems can also be designed with international learning systems.

Synchronous Learning Model (SLM) has a central role in modern learning as it enables real time interaction between instructors and learners through digital platforms (Jakobsen et al., 2023). Such real-time interaction is very useful in significantly improving learners' competence (Mahsun et al., 2021), presenting immediate responses that help correct errors quickly (Solihin, 2022), and can increase motivation (Hamidah et al., 2020; Pierpaolo & Antonia, 2023) as well as participation in group discussions (Christanty & Cendana, 2021). Empirical studies show that this model has successfully improved learners' understanding and language skills (Dantes & Handayani, 2021;

Mufidah et al., 2019). Thus, SLM can be used to create an effective and productive learning environment in Arabic language learning (Ghazali, 2022).

Learning in the era of society 5.0 is required to be actualized through digital systems such as the Learning Management System (Arifin et al., 2023). Furthermore, the implementation of the Learning Management System (LMS) allows better management of the learning process and interaction between educators and students (Fauzi et al., 2020). These findings can be used as a solution to the obstacles faced by educators (Arifin et al., 2023), including lecturers of Jambi University study programs. Because some lecturers are constrained in finding appropriate teaching materials. This hypothesis is by the result of Wiragunawan's research (2022) which confirms that LMS is the most widely used system in learning management.

This opinion is because learning activities through LMS could be carried out through face-to-face learning and online learning (Siboro et al., 2022; Verawati et al., 2023). LMS is also able to improve the quality and quantity of learning (Prasetyo et al., 2021) and has a positive impact on increasing student motivation (Veluvali & Suriseti, 2022). In fact, according to Fauzi & Anindiati's research (2021) LSM can also improve student ethics during the learning process.

Facing the challenges of technological development and the industrial revolution, as well as to improve the quality of learning, Jambi University collaborated with Saudi Electronic University (SEU) by facilitating Arabic language learning through LMS. This model offers Arabic learning materials from basic to advanced levels. The materials are categorized according to their level and displayed in the form of text, audio, and video (Mardiana & Faqih, 2019). The SEU-based LMS also makes it easy for students to practice language skills through standardized Arabic tests or Test of Arabic as Foreign Language (TOAFL) that have been designed with the European system (Saudi Electronic University, 2023). Thus, the LMS is very helpful for the teachers to prepare the teaching material.

Based on the explanation above, this research was aimed at answering these three research problems, they are: First, how is the implementation of SLM with SEU-based LMS in the Arabic language education study programs at Jambi University? Second, how are the perceptions of students towards the use of SEU-based LMS? The last, what are the supporting and inhibiting factors in implementing SLM with SEU-

based LMS? These three questions are analyzed through Miles & Huberman's interactive analysis.

This study is focused on three main topics of discussion. First, the implementation of the Synchronous Learning Model through SEU-based LMS. Second, the formation of a new learning culture for students of the Arabic language education study program at Jambi University. Third, increasing student participation in learning using the LMS. Through these three aspects, it is hoped that the process and quality of learning in the Arabic language education study program at Jambi University can be significantly improved.

Methods

This research was conducted using the Mix-Method method with a Convergent parallel model. Mixed method is the combination or integration of qualitative and quantitative research and data in a scientific research (Creswell, 2014, p. 43). According to Creswell, qualitative data tends to be open-ended with no predetermined responses, whereas quantitative data usually includes closed-ended responses as found in questionnaires or psychological tools. (Creswell, 2014, p. 43). Furthermore, convergent parallel is one of the models in mixed methods that aims to collect research data from various sources, both qualitative and quantitative to then show how one and the other support each other to produce harmonized conclusions (Brown & Coombe, 2015, p. 80). In line with that, Creswell (2014) also explains that the parallel convergence model is a form of mixed method where researchers combine qualitative and quantitative data to provide a comprehensive analysis of the subject under study.

Qualitative data in this study were collected through observations and interviews, while quantitative data was collected through questionnaires. Interviews were conducted with 4 lecturers and 5 students of the Arabic language education study program at Jambi University to explore information related to the implementation of SLM with SEU-based LMS. Through interview and observation, data about the supporting and inhibiting factors in the application of this model was also gathered. While the questionnaire in this study was distributed to 36 students to obtain information about the learning process.

To be able to describe the research findings in-depth, the data was analyzed using interactive-analysis techniques. Qualitative data analysis activities are carried out consistently and interactively then all data are explored to obtain a comprehensive understanding. The interactive analysis used in this research is the Miles and Huberman qualitative data analysis which is carried out in three stages, namely: data reduction, data presentation, and conclusion drawing/verification (figure 1).

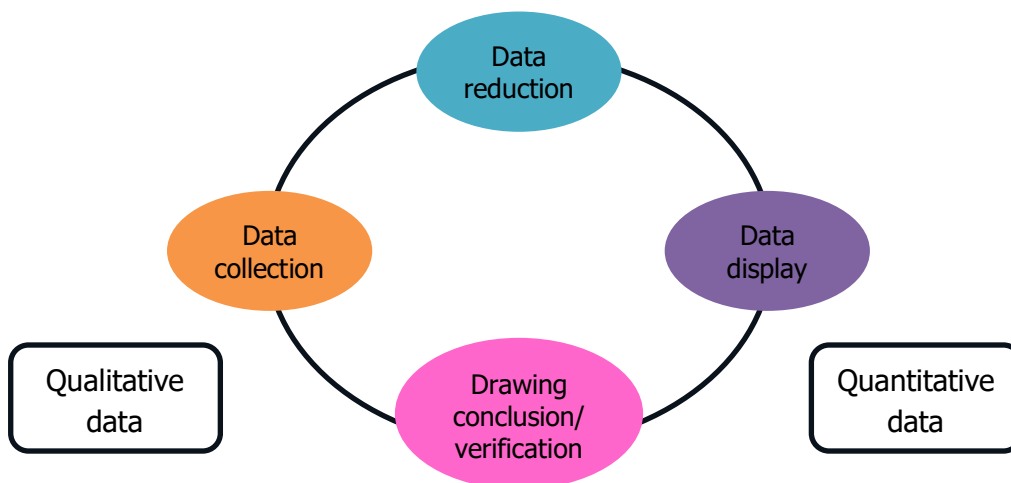


Figure 1. Miles and Huberman’s data analysis

Implementation of SLM through SEU-based LMS

The Synchronous Learning Model with SEU-based LMS in Arabic language learning was implemented by three main learning processes, namely planning, implementation, and evaluation process. These three stages were confirmed to students through interviews and questionnaires. The results of the instrument are presented in Table 1.

Table 1. Questionnaire result about the implementation of SLM with SEU-based LMS

Response	Statement									
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Very Good	18	17	19	19	21	18	21	19	21	14
Good	12	16	13	11	10	15	10	11	11	12
Fair	5	2	3	5	4	2	4	5	3	9
Poor	1	1	1	1	1	1	1	1	1	1
Very Poor	0	0	0	0	0	0	0	0	0	0
N (Sample)	36	36	36	36	36	36	36	36	36	36

From table 1, it is known that the majority of respondents stated that the implementation of SLM with SEU-based LMS in Arabic language learning at Jambi University was carried out very well on each indicator asked in the questionnaire. Most students stated that this implementation was very good. Followed by those who were good, and fair, and only one student stated that it was poor. The percentage of respondents' answers from each statement submitted in the questionnaire is presented in Figure 2.

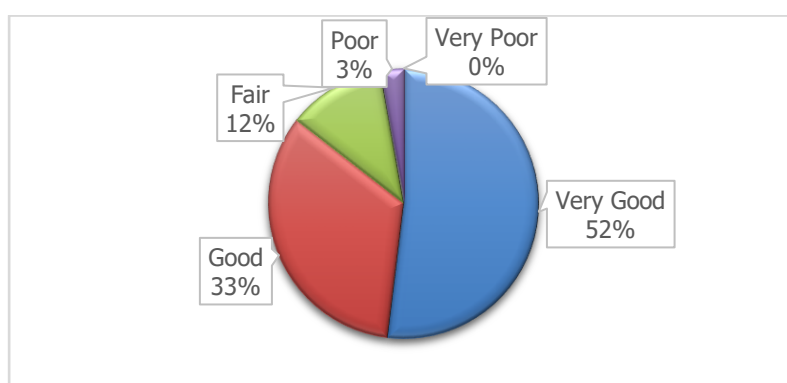


Figure 2. Percentage of SML implementation through SEU-based LMS

To ensure interactive analysis, in addition to questionnaires, interview data from students were also collected regarding all the processes of learning. Here was the explanation:

Planning

A teaching and learning process certainly has goals and objectives to be achieved, so it is necessary to have a good plan before the class, including preparing for the learning media. Educators need to carefully consider the suitability of the media with the characteristics of the lesson topic. Media implementation must be carried out with good planning such as preparing the media or tools to be used, determining the appropriate type of media, considering the students' ability to use the media, and adjusting the use of the media at the right time, place, and situation. It is intended that students can follow the learning well using the desired media, namely Saudi Electronic University (SEU).

Based on the results of an interview, Student A revealed that:

"As an Arabic language learner, I think that Innovative Learning with a Saudi Electronic University (SEU) based Learning Management System (LMS) can provide various benefits. SEU is a well-known university with online programs, and the LMS is an important tool in distance learning, as it provides various

learning resources, such as videos, texts, and interactives, which can help you understand Arabic better, so it is good to use to enhance learning." (Student A, personal communication, August 13, 2022).

Implementation

The implementation of Synchronous Learning Model SEU-based LMS in Arabic language learning at the Jambi University Arabic Language Education Study Program is a process of interaction between students and teachers who use all media sources in accordance with previously prepared plans to achieve learning objectives. Based on the results of the interviews, the following information was obtained:

"First, the materials and evaluation questions are packaged with a neat web interface. Second, the materials have been arranged according to the level of difficulty, and third, because of the large variety of materials and questions, it is very helpful for users to hone their skills." (Student B, personal communication, August 13, 2022)

This is in line with the results of the researcher's interview with another student named, Student C said:

"Yes, after the first day of using it, I felt excited to use the application to add 4 language skills, namely reading, listening, writing, and speaking." (Student C, personal communication, August 13, 2022)

From the interview data above, researchers can conclude that the implementation of learning in the implementation of the use of Saudi Electronic University (SEU) in Arabic language learning at the Jambi University Arabic Language Education Study Program is very well implemented.

Evaluation

Evaluation of teaching and learning activities needs to be held in order to determine the achievement of learning objectives by students. From the data that researchers obtained through interviews with Student A, she said:

"In my opinion, the only drawback is that the correction is still manual while the questions are randomized." (Student A, personal communication, August 13, 2022)

Likewise, the opinion of student B, she stated that:

"When the internet network and devices used are inadequate, the use of SEU media is hampered and the class is not conducive." (Student B, personal communication, August 13, 2022)

In contrast to Student B, another student (student C) stated:

"SEU has advantages in the form of not using much quota, easy to use applications, can be used for two-way learning, can be used to provide evaluations, can be used for presentations, can be used to present material, can be used continuously without fear of losing the material, and can be accessed at any time." (Student C, personal communication, August 13, 2022)

Students' Perception of Synchronous Learning Model with SEU-based LMS

The feedback from participants is important to be used to develop learning better. In this regard, interviews and questionnaires were distributed to students to find out how their perceptions of using SLM with SEU-based LMS in Arabic language learning at Jambi University. The results of the questionnaires and interviews are presented in table 2:

Table 2. Students' perception of SLM with SEU-based LMS

Response	Statement									
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Strongly Agree	2	2	0	1	0	2	1	5	1	0
Agree	28	31	6	13	4	29	30	18	7	27
Sometimes	6	3	17	11	4	3	5	9	21	6
Disagree	0	0	13	11	28	2	0	4	7	3
Strongly Disagree	0	0	0	0	0	0	0	0	0	0
N (Sample)	36	36	36	36	36	36	36	36	36	36

After mapping, it was found that the majority of Jambi University Arabic language education study program students agreed that SLM with SEU-based LMS supported the implementation of Arabic language lectures. In addition, from several questionnaire statements that have been responded to by students, it is also known that SEU can increase their interest in learning Arabic.

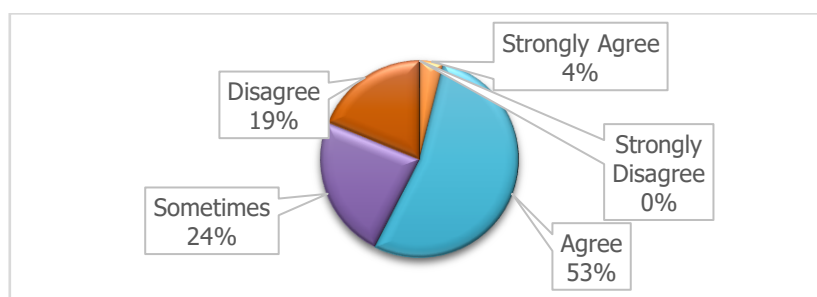


Figure 3. Students' perception of SLM with SEU-based LMS

Advantages and Disadvantages of SEU in Arabic Language Learning

As a digital platform, SEU certainly has advantages and disadvantages in its utilization. The identification of factors that can support or hinder the SLM learning process using LMS-based SEU is important to analyze. This aims to provide suggestions for further development. Just like the implementation and perception described earlier, aspects of supporting and inhibiting factors were also identified through interviews and questionnaires.

Table 3. Advantages and disadvantages of SEU-based LMS in Arabic Language Learning

Response	Statement									
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Strongly Agree	19	18	24	17	15	14	16	18	18	15
Agree	17	18	12	18	21	22	20	18	18	21
Sometimes	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	1	0	0	0	0	0	0
Strongly Disagree	0	0	0	0	0	0	0	0	0	0
N (Sample)	36	36	36	36	36	36	36	36	36	36

While the implementation of a learning platform like SEU-based LMS could enhance students' engagement and garner positive feedback, it's important to acknowledge that it also comes with both benefits and drawbacks, as delineated in Table 3. Such variation is customary, as no single learning model can cater perfectly to the diverse needs of all students. Rather, there exist models that are more or less suitable for specific contexts. The subsequent section presents the findings from a questionnaire assessing the obstacles and challenges encountered in utilizing SEU for Arabic language learning:

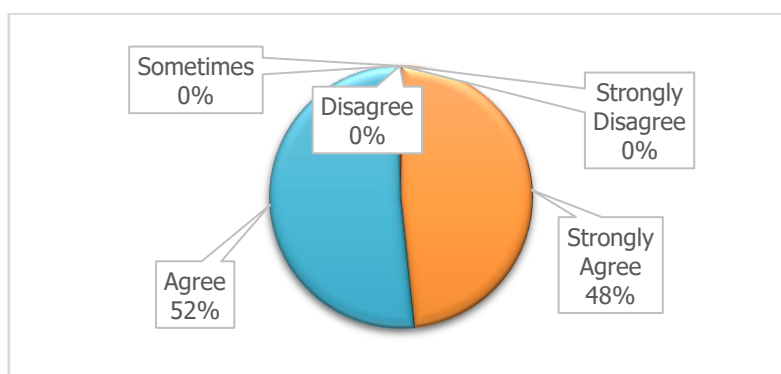


Figure 4. Advantages and disadvantages of SEU-based LMS in Arabic Language Learning

The results of the questionnaire were also reinforced by students' responses during in-depth interviews about what the obstacles and challenges they faced during

the implementation of the media. Some stated that they faced obstacles when looking at the results of filling in their answers.

"However, there are shortcomings in the way of assessment that must be corrected manually, while in the application the questions are displayed randomly, so it can make it difficult to correct.." (Student A, personal communication, August 13, 2022)

"In my opinion, the only drawback is that the correction is still manual while the questions are randomized." (Student D, personal communication, August 13, 2022)

In addition to the results of the exercise, there were also some obstacles in answering questions in the SEU application. Students must write their answers first on paper to be matched with the review of answers on the system. Technology-based applications that are integrated with learning should maximize the assessment that becomes the basis for further evaluation of E-learning such as SEU. Some students also mentioned that SEU users cannot be implemented in some areas with insufficient access to the internet. This limitation was obtained through interviews with students who stated as follows:

"There may be obstacles when somewhere does not have an internet connection or the internet connection is limited, so this system cannot be used" must have a stable network, and the scores sometimes error so the correction must be done manually." (Student F, personal communication, July 20, 2023)

"Perhaps network constraints can hinder access to audio or video in the questions. So that it can hamper the processing of questions." (Student G, personal communication, July 20, 2023)

"The disadvantages (obstacles) faced in using the SEU-based LMS in supporting Synchronous Arabic language learning are that it cannot be used for people living in rural areas where there may be no signal." (Student H, personal communication, June 19, 2023)

The Synchronous Learning Model with SEU-based LMS has been implemented well in Arabic language learning at Jambi University. This is also reinforced by the results of student interviews and questionnaires as research samples. In line with that, implementing SLM with SEU-based LMS can increase motivation in learning Arabic. This is because the materials and evaluations provided on the SEU-based LMS have been presented professionally. Based on the interview results, the most supporting aspect is the material and evaluation questions that are arranged very well as well as paying

attention to the ideal level of gradation. This fact is in line with Asmuzi et al., (2022) research which states that the level of gradation and presentation are some crucial aspects that can increase learning effectiveness. On another occasion, the implementation of SEU-based LMS can be used to improve the four main skills in language. This is important because foreign language learning, including Arabic, should be directed to master four language skills simultaneously.

In the context of Arabic language learning, several digital platforms can be utilized such as Arabic Online which provides learners with the opportunity to take exercises based on the TOAFL standardized Arabic test (Asmuzi et al., 2022). In this regard, SEU seeks to align the program's strategic initiatives related to digital transformation in Higher Education. To achieve this goal, SEU established 5 themes, 5 strategic objectives, and 19 goals derived from its unique competitive advantage through 37 qualitative development initiatives as follows (Saudi Electronic University, 2023):

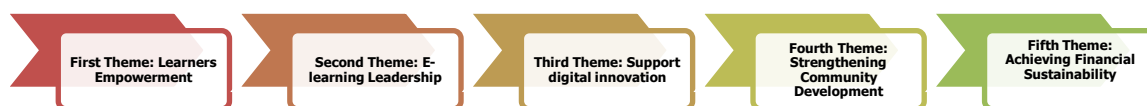


Figure 5. SEU Strategy Design

However, instructional materials development project such as the SEU and its strategic pillars and initiatives should focus on the needs of educators and learners (Dwijayanthi, 2022; Mulyani & Sholeh, 2023) to intensify innovative learning models and the use of flexible learning options and technology-based learning solutions. Providing access to e-learning and blended learning tools, as well as technology and innovation is one of the main instruments to achieve the objectives of the human capacity development program (Hartanto, 2016).

Based on the research findings, it was found that the utilization of SEU encountered obstacles in several ways, such as: learning effectiveness, assessment and evaluation efficiency, application use and support constraints and internet facilities used. The availability of internet facilities is one of the main obstacles in implementing this system. This is in line with the findings from Herliza et al., (2023) which revealed that external factors such as internet network availability is often found as the main

problem in online learning. Mustafa et al., (2023) Mustafa also highlighted that network buffering, which leads to unclear audio and paused videos, presents a significant obstacle, particularly in regions with limited internet infrastructure.

Effectiveness and Efficiency of Assessment System in SEU Learning

Arabic language learning at Jambi University is directed at mastering digital literacy and learning transformation. Therefore, the SEU-based LMS implementation is oriented toward developing an applicable Arabic language learning system and easily accessible to students. However, universities are also faced with the challenge of anticipating and minimizing various obstacles so that the learning process and results can be maximally improved.

SEU-based LMS is a website-based online Arabic language learning that provides many language features and exercises according to the learners' ability level. These features can be selected based on the needs of *mubtadi'în* (beginner), *mutawassithîn* (intermediate), and even *mutaqaddimîn* (advanced) learners. This is in line with the research findings Sulthoniyah (2022) which affirmed that the online learning system can be applied in learning Arabic that meet the students' needs.

Like other learning media, SEU learning based on Saudi Electronic University can be used through smartphones or other electronic devices such as laptops which is connected to the internet network. This system can also facilitate students in developing Arabic language skills such as writing (*kitâbah*), reading (*qirâ`ah*), listening (*istimâ`*), and speaking (*kalâm*). Not only that, this system can also be used to develop mastery of vocabulary (*mufradât*), mastery of Arabic grammar rules, *tarkîb* learning, and mastery of phonology (intonation of pronunciation like native speakers). Overall, SEU learning is divided into 16 levels where each level consists of 6 discussion topics packaged in four chapters.

Another feature of this learning platform is the self-study sessions that can be accessed by every learner from all over the world. The available features include learning vocabulary, composing words into sentences, composing sentences into narratives, reading the available texts, writing Arabic, and listening to audio and video learning Arabic delivered directly by native speakers. In addition, through the guidance feature, learners have the opportunity to interact directly with native speakers (*an-nâtiq*

al-ashlí or native speakers) to develop intercultural skills which are also one of the indicators of 21st-century skills.

Conclusion

The implementation of SLM with SEU-based LMS in Arabic language learning at Jambi University has been carried out very well. As users of this platform, students also responded very well. Based on the research findings, it is known that SUE-based LMS can increase students' interest and motivation in learning Arabic. However, using SLM with SEU-based LMS has obstacles for learning evaluation because the system is still manual. Other areas for improvement in the form of an adequate internet network could hinder learning effectiveness. On the other hand, SEU-based LMS has advantages that facilitate the Arabic learning process, including the utilization of limited quotas, easy-to-use applications, can be used for two-way learning, giving tests/exams, delivering presentations, presenting material, can be used continuously without fear of losing the material, and can be accessed anytime and anywhere.

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