

The Use of Siakadcloud Lms in the Implementation of Learning Organization at Universitas Setia Budhi Rangkasbitung

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Abstract: The online learning process during the Covid-19 pandemic had a culture shock effect for students and lecturers. For this reason, the campus facilitates lectures for lecturers and students using the Siakadcloud Learning Management System (LMS) with a learning organization system. Therefore, the aim of this research is to determine the use of Siakadcloud LMS in implementing learning organizations. The research method used is a descriptive quantitative method with the instrument used in the form of a questionnaire with a grading Likert scale of 5 (strongly agree), 4 (agree), 3 (disagree), 2 (disagree), 1 (strongly disagree). The data collection technique is by distributing questionnaires via Google Form to the entire sample. The data analysis technique used is the descriptive analysis method, which is then confirmed in the data interpretation category table. The research results show that the use of Siakadcloud LMS in implementing learning organizations at Setia Budhi University Rangkasbitung has proven to be effective by achieving percentage results above 81% in each dimension of learning organization theory. The 7 dimensions of learning organization theory applied to the Siakadcloud LMS are continuous learning with results of 86.08%, inquiry and dialogue with results of 86.08%, team learning with results of 86.95%, embedded systems with results of 84.34%, empowerment with results of 82.60%, system connection with results of 85.21%, and strategic leadership with results of 82.60%.

Keywords: Learning Management System, Learning Organization, Using.

INTRODUCTION

Observing the statement of the Minister of National Education's decision Number 3 of 2020 concerning National Education Standards with the theme Merdeka Belajar - Kampus Merdeka, the learning process in study programs at tertiary institutions according to the period and learning load must rely on applicable rules in the form of face-to-face learning. (Marlina, 2020). However, starting in March 2020 there was a Covid-19 Pandemic which had a huge impact on the learning process in preventing transmission of the virus, thus changing the face-to-face learning system to online learning. Because it is urgent and without preparation, there are many obstacles faced during the online learning process. Such as poorly prepared learning plans, *signals*, internet access and *soft skills* in using technology between students and lecturers that are lacking so that there is a *culture shock* in learning.

Ideally, after the implementation of lectures both face-to-face and online, students are expected to be able to theoretically know, study and apply fundamental concepts as a system designed to share information sources for learning. The competence of knowing and the ability to construct that has been owned by students can be reflected in the performance of students in undergoing the lecture process, which has been successfully observed and the final semester grades obtained so far. However, these expectations do not seem to have been achieved optimally. This is evident from the various

problems found and identified, namely: 1) the ability of lecturers to carry out learning in the classroom is quite adequate but is still oriented towards face-to-face learning and the use of homemade teaching materials needs to be improved. The reference books used to date are still general in nature and pay little attention to the characteristics of students; 2) student learning achievement in the last four years has not been optimal, and after tracing it turns out that the root of the problem is caused by students' understanding of concepts and ability to solve problems is still low because abstract and quite complex material is taught online. In fact, to apply what has been learned practically requires a strong understanding of concepts and high analytical skills in solving existing problems. So far, the main cause of student failure is due to learning difficulties as a result of students' weak conceptual abilities in analyzing online lecture material, sharing resources with their friends, and communicating to access information together.

Efforts have been made to improve learning outcomes and overcome student learning difficulties in lectures, such as applying *blended learning* models, adding online practicum time, and increasing assignments. These efforts are quite successful but seem less than optimal, because there are still many students experiencing learning problems precisely because of their weak understanding of concepts and low analytical skills. In this regard, learning outcomes not only

depend on the learning experience in the classroom, but also depend on what students already have, namely culture and environment.

Continuous and fundamental changes are included in the lecture process during the covid-19 pandemic. In an effort to face the challenges of change in all aspects of the living environment, every organization in the form of Setia Budhi University Rangkasbitung, needs to adapt to these changes in order to survive and develop. Changes to adapt to the environment require changes in thinking and action patterns. As a higher education organization, Setia Budhi University will be realized if the members of the organization such as lecturers, students and teaching staff can process and utilize it well through competent individuals.

Setia Budhi University Rangkasbitung strives to continue to provide the best to facilitate student and lecturer learning so that learning problems can be resolved. One of the efforts in facilitating students and lecturers in carrying out learning in the network during the Covid-19 Pandemic is in the form of the Siakad Cloud *Learning Management System (LMS)* service. Thus, of course, lecturers and students need to make a thorough adaptation to the lecture system that is changing rapidly from face-to-face lectures to *online lectures*. So far, the socialization of LMS Siakad Cloud has been carried out by Setia Budhi University Rangkasbitung to lecturers and students to achieve learning objectives effectively and efficiently during lectures.

The utilization of Siakadcloud LMS also gave a significant change in the organization of Setia Budhi University Rangkasbitung. In the context of sustainable campus development, it can no longer rely on the availability of existing learning facilities at that time. Lecturers, teachers, teaching staff needed in this era of change are those who are *well educated, well trained, and well informed*. Organizational change to adapt to environmental changes is the principle of learning organizations. Therefore, the purpose in writing this article is to find out the utilization of Siakadcloud LMS in the application of learning organizations at Setia Budhi University Rangkasbitung.

Every organization can be seen as an organism that always interacts with its environment. The environment is constantly changing, either due to natural changes, or changes that occur due to human actions and actions. The change raises a number of new problems that have not existed

before. Facing these changes and new problems, every organization, if it wants to survive and develop, must continue to adapt by using new methods or approaches. In order to survive in the face of change, it is necessary to learn to be able to adapt to these changes. Because each organization has different conditions and capabilities, the changes made need to be adjusted to these conditions and capabilities.

A learning organization is one that is able to adapt, learn and innovate continuously. This background includes an understanding of the characteristics of learning organizations, such as a culture of learning, adaptability, and the importance of collaboration and continuous improvement. The ever-evolving technology and communication have influenced the way learning organizations operate (Gallos, 2021). Another concept regarding learning organizations was put forward by Khaerudin that a learning organization is an organization that facilitates and fosters the commitment of all its members to continuously develop themselves through activities. (Khaerudin, 2018). The concept of learning organizations is widespread thanks to Peter Senge's writing "*The Fifth Discipline*" in 1990. Senge did not explicitly define what a learning organization is, but emphasized the five components that come together and form a learning organization. Senge explains in Miarso, although each of these components develops separately, each will support the success of the others. (Miarso, 2018).

A learning organization is an organization that is always trying, creating, searching, with an open system, and transferring knowledge and modifying its behavior based on new knowledge and insights carried out continuously by several people who are actively involved in it by carrying out 5 organizational disciplines, namely having a system way of thinking, self-mastery, having a shared vision, having a mental model, and being able to do team learning. So that it can build schools as learning organizations (Japar, et al., 2023). Each of them is a vital element to build a truly learning organization, that is, an organization that continuously improves its ability to realize its aspirations. The five components, referred to by Senge as disciplines, are sets of theories and techniques that need to be learned and mastered to be applied in the field, namely systems thinking, personal mastery, mental patterns, shared vision, and team learning. There are seven dimensions of learning organizations at the individual, team/group, and organizational levels that are

interrelated. At the individual level, there are two dimensions, namely *continuous learning and inquiry and dialogue*. At the team/group level, it is reflected in *team learning*. At the organizational level, there are four dimensions: *embedded system, empowerment, system connection, and strategic leadership*.

The positive impacts of learning organizations are 1) improving leadership capabilities, 2) gradually reducing change to transformation, and 3) increasing experience and knowledge. Then there will be aspects of *diversity of expertise and knowledge, inclusion*, which is embedded in employees, and *equity and mutual respect* between individuals in the organization. The limitations in applying the principles of learning organizations in an organization can cause opposition from the leaders of educational institutions. The reluctance of organizational leaders who are happy to be in the comfort zone, namely leaders who are happy to be followed by their orders and must follow them, can hinder a climate of equality. As for the members, unlearning may occur, namely the situation of members who no longer intend or are eager to acquire new knowledge or are reluctant to learn.

METHODOLOGY

This type of research is quantitative research with descriptive methods. Where the results of this study are describing what the variables studied are. The research place is the Physical and Health Education study program, FETT, Setia Budhi University Rangkasbitung. The population in this study were students and lecturers in the Physical and Health Education study program, FETT, Setia Budhi University Rangkasbitung with a total of 180 people. The sampling technique used was purposive sampling with the criteria of students and lecturers who had used Siakadcloud LMS for the learning process, namely 7th semester students totaling 18 people and lecturers teaching 7th semester courses with a total of 5 people.

The instrument used is a questionnaire with a Likert scale gradation of 5 (strongly agree), 4 (agree), 3 (less agree), 2 (disagree), 1 (strongly disagree). Data collection techniques by distributing questionnaires via google form to the entire sample. The data analysis technique used with the help of SPSS with descriptive analysis methods, which then the results of the analysis are confirmed in the table of data interpretation categories achieved.

Table 1: Assessment Score Interpretation Categories

No.	Score range (%)	Criteria
1	0-20	Low
2	21-40	Less
3	41-60	Simply
4	61-80	Good/high
5	81-100	Very good / very high

Table 2: Research instrument grids

Dimensions	Indicator	Lecturer	Student
<i>Continous Learning</i>	Students/lecturers can	Lecturers can use an	Students are able to use
	use the LMS which is	LMS that is designed to	the LMS that is
	designed to be a	be a learning unit so	designed into a learning
	learning unit so as to	that it can achieve	unit so that it can
	achieve effective learning objectives.	effective learning objectives.	achieve effective learning objectives
<i>Inquiry and dialogue</i>	Students/lecturers can	Lecturers can ask	Students can ask
	ask questions, give feedback and provide feedback in improving the LMS for learning convenience.	questions, give feedback and provide feedback in improving the LMS for learning convenience.	questions, give feedback and provide feedback in improving the LMS for learning convenience.
<i>Team learning</i>	Students/lecturers can	Lecturers can describe the learning	Students are able to
	describe the learning	conditions designed in the LMS by	describe the learning

	conditions designed in the LMS by using teams/groups to access different ways of thinking.	using teams/groups to access different ways of thinking.	conditions designed in the LMS using teams/groups to access different ways of thinking.
<i>Embedded system</i>	Students/lecturers can describe the LMS system conditions needed to create, maintain, and integrate	Lecturers can describe the conditions of the LMS system needed to create, maintain, and integrate learning sharing with work.	Students are able to describe the LMS system conditions needed to create, maintain, and integrate
	learning sharing with work.		learning sharing with work.
<i>Empowerment</i>	Students/lecturers can share their experiences (shared vision) in using the LMS to other students/lecturers who have not maximized using the LMS in order to be motivated to use the LMS.	Lecturers can share their experiences (shared vision) in using the LMS with other students/lecturers who have not maximized using the LMS in order to be motivated to use the LMS.	Students can share their experiences (shared vision) in using the LMS with other students / lecturers who have not maximized using the LMS so that they are motivated to use the LMS.
<i>System connection</i>	Students/lecturers can connect the use of LMS as a support in the lecture process so that it has a positive impact on achieving learning objectives.	Lecturers can connect the use of LMS as a support in the lecture process so that it has a positive impact on achieving learning objectives.	Students can connect the use of LMS as a support in the lecture process so that it has a positive impact on achieving learning objectives.
<i>Strategic leadership</i>	Students/lecturers can demonstrate an attitude that the LMS is implemented on campus based on leadership decisions that think strategically about how to use learning to create change and take the organization in a new direction.	Lecturers can demonstrate the attitude that the LMS is implemented on campus based on leadership decisions that think strategically about how to use learning to create change and take the organization in a new direction.	Students can demonstrate an attitude that the LMS is implemented on campus based on leadership decisions that think strategically about how to use learning to create change and take the organization in a new direction.

RESULTS

The variable in this study is a single variable, namely the use of Siakadcloud LMS which

includes 5 indicators of learning organization. The following data table shows the results of descriptive analysis.

Table 3: Research results

No.	Dimensions	Score (%)	Category
1	Continous Learning	86.08%	Very good / Very high
2	Inquiry and dialogue	86.08%	Very good / Very high
3	Team learning	86.95%	Very good / Very high
4	Embedded system	84.34%	Very good / Very high
5	<i>Empowerment</i>	82.60%	Very good / Very high
6	<i>System connection</i>	85.21%	Very good / Very high
7	<i>Strategic leadership</i>	82.60%	Very good / Very high

DISCUSSION

Based on the results in the table above, it is known that the continuous learning dimension is in the very good / very high category with a percentage of 86.08%. of the total respondents studied, the average answer agreed with being able to use the Siakadcloud LMS which is designed to be a learning unit so that it can achieve effective learning objectives. Lecturers and students can achieve effective and efficient learning objectives with the Siakadcloud LMS both face-to-face and online learning. This is in line with research conducted by Singgih and Ismail (Subiyantoro & Ismail, 2017) that LMS is widely used to support the implementation of *blended learning* in higher education. The results vary, but most of the research results show that LMS is very effective in learning.

The inquiry and dialogue dimension is in the very good / very high category with a percentage of 86.06%. Of the total respondents studied, the average answer agreed with the statement that students / lecturers can ask questions, provide feedback and provide feedback in improving LMS for learning comfort. Both lecturers and students can learn continuously through the content in the Siakadcloud LMS synchronously and asynchronously so that the utilization of this Siakadcloud LMS can be continued in the lecture process in the future. This is in line with research conducted by Naryana (Narayana, 2016) that synchronous and asynchronous learning methods in online learning get results that are not much different from face-to-face learning. Other research results conducted by Ridiningsih, *et al.*, (Rindaningsih, *et al.*, 2021) (Rindaningsih, *et al.*, 2021) showed that the synchronous and asynchronous framework with a flipped learning environment approach that was applied proved to be valid and feasible to be applied to learning during the pandemic. The findings in this study

are synchronous and asynchronous frameworks that are easy for teachers to understand and will continue to develop their learning applications.

Furthermore, the third dimension, namely team learning, is in the very good / very high category with a percentage of 86.95%. The results of the respondents' answers show that in the *team learning* dimension, students and lecturers can describe the learning conditions designed in the LMS by using teams/groups to access different ways of thinking. There is a discussion feature in Siakadcloud LMS that facilitates students to share ways of thinking and opinions on problems or topics presented by lecturers. In addition, other features facilitate students and lecturers to interact and discuss in groups and have proven effective in the group learning process. This is in line with research conducted by Cerezo, *et al.*, that the LMS used in higher education is more related to learning achievement and more suitable for team learning based on student characteristics. These results have implications for the design of interventions to improve student learning on the LMS. (Cerezo, *et al.*, 2016).

In another dimension, namely *embedded system*, it is in the very good / very high category with a percentage of 84.34%. The results of the respondents' answers show that student lecturers can describe the conditions of the LMS system needed to create, maintain, and integrate learning *sharing* with work. Discussion features, attendance, and document access on Siakadcloud LMS make it easy for students to discuss and *share* knowledge both with fellow students and with lecturers. In line with this, lecturers can also easily complete work in teaching, attending and assessing students. In addition, at the end of the lecture students can also assess the performance of lecturers who teach during one semester of learning. In line with research conducted by

Fillion, *et al.*, (Fillion, Gérard, Vivi, 2015) that in learning organizations there is a critical view as integrated in Senge's five core disciplines to help actualize the theory and practice of learning organizations, as well as to better manage individuals and organizations and organizational behavior.

Based on table 3 on the empowerment dimension, it is suggested that the data results are in the very good / very high category with a percentage of 82.60%. In other words, lecturers and students responded very well to the statement that students and lecturers can share experiences (shared vision) in using the LMS with other students / lecturers who have not maximized using the LMS so that they are motivated to use the LMS. Setia Budhi University held a socialization of the use of Siakadcloud LMS to lecturers and students and held a *sharing session* at the end of the semester to provide evaluation and motivation for students and lecturers who have not maximally used Siakadcloud LMS. This activity is expected to provide an opportunity for lecturers and students to share experiences so that those who have not maximally used LMS Siakadcloud can be maximally motivated. This *sharing session* activity is in accordance with the theory of learning organizations in the *empowerment* dimension because an organization must implement a learning organization where the people in it have a very strong motivation to learn so as to gain maximum knowledge and skills. (Azme & Kassim, 2019).

In the dimensions of *system connection* and *strategic leadership*, each is in the very good / very high category with a percentage of 85.21% and 82.60%. *system connection* and *strategic leadership* in the use of Siakadcloud LMS make a very significant contribution to the learning organization at Setia Budhi University Rangkasbitung. This can be seen from the competence of students who can connect the use of LMS as a support in the lecture process so that it has a positive impact in achieving learning objectives. In line with this, the LMS is proven to be able to manage learning resources with several processes, namely the development process, increasing motivation, and student attitudes in the learning process so as to achieve learning objectives. (Listiawan, 2016). In addition, the LMS also provides opportunities for students to learn without time and place restrictions, and is also useful for honing independence in learning. (Harri Hidayat, Hartono, 2020).

CONCLUSION

Based on the results of the study, it can be concluded that the utilization of LMS Siakadcloud in the application of learning organization at Setia Budhi University Rangkasbitung proved to be effective with the achievement of percentage results above 81% in each dimension of learning organization theory. The implementation of the utilization of LMS Siakadcloud should pay attention to facilities and infrastructure as well as supporting support from the campus. In addition, further research is needed on a larger scale to see the effectiveness of using LMS Siakadcloud.

REFERENCES

1. Azme, N. N. & Kassim, N. A. "Employee Empowerment, Learning Culture and Technology in a Research-based Organization." *International Journal for Infonomics*, 12.2 (2019): 1878-1883.
2. Cerezo, R., Sánchez-Santillán, M., Paule-Ruiz, M. P. & Núñez, J. C. "Students' LMS interaction patterns and their relationship with achievement: A case study in higher education." *Computers and Education*, 96, (2016): 42-54.
3. Fillion, G., Koffi, V. and Ekionea, J.P.B. "Peter Senge's learning organization: A critical view and the addition of some new concepts to actualize theory and practice." *Journal of Organizational Culture, Communications and Conflict* 19.3 (2015).
4. Gallos, J.V. and Bolman, L.G. "Reframing Academic Leadership." *John Wiley & Sons* (2021).
5. <https://books.google.com/books?hl=en&lr=%5C&id=xugWEAAAQBAJ%5C&oi=fnd%5C&pg=PR13%5C&dq=leadership%5C&ots=9Knm3eMYz7%5C&sig=8fQUiKZ95xvyDqn-goWT9ksrYb8>
6. Hidayat, H. and Hartono, H. Development of Learning Management System (LMS) for PHP Programming Language. *Scientific Journal of Core IT: Community Research Information Technology*, 5.1(2020): 20-29.
7. Japar, M., Hermanto, H., Djunaidi, D. & Sukardjo, M. "Building Schools as Learning Organizations." *Basicedu Journal*, 7.1 (2023): 698-708.
8. Khaerudin, K. "Building Unj as an Excellent Learning Organization." *Teknodik Journal*, (2018): 119-130.
9. Listiawan, T. "Development of Learning Management System (Lms) in Stkip Pgr

- Tulungagung Mathematics Education Study Program." *JUPI (Scientific Journal of Research and Learning Informatics)*, 1.01 (2016): 14-22.
10. Marlina, E. "Development of Blended Learning Model Assisted by Sevima Edlink Application." *Padagogik Journal*, 3.2(2020): 104-110.
11. Miarso, Y. "Sowing the Seeds of Educational Technology (Second Edition)." *Kencana* (2018).
12. Narayana, I. W. G. "Analysis of the results of using synchronous and asynchronous learning methods." *National Seminar on Information Technology and Multimedia*, 4.1 (2016): 139-144.
13. <https://ojs.amikom.ac.id/index.php/semnasteknomedia/article/view/1255>
14. Rindaningsih, I., Findawati, Y., Hastuti, W. D. & Fahyuni, E. F. "Synchronous and Asynchronous with Flipped Learning Environment in Primary School. *PrimaryEdu - Journal of Primary Education*, 5.1(2021): 33.
15. Subiyantoro, S. & Ismail. "The Impact of Learning Management System (LMS) on Student's Academic Performance." *Education & Learning*, 2.4 (2017): 307-314.
16. <https://ojs.iptpisurakarta.org/index.php/Edudikara/article/download/63/44/>

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