Evaluation of the Use of E-learning in Indonesian Language Learning at Stikes Syedza Saintika Padang

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Abstract

Based on the results of observations made at Stikes Syedza Saintika Padang, it was known that the implementation of e-learning is not smooth both in terms of personal, infrastructure, and implementation of the learning process used. The research objective was to determine the extent to which e-learning was applied on terms of context, input, process and product. The type of research used is descriptive evaluative with a quantitative-qualitative approach. The evaluation model used was the CIPP (Context, Input, Process and Product) evaluation model. The research was conducted at Stikes Syedza Saintika Padang with 10 lecturer and 68 students as research respondents using purposive sampling. The results showed that the score obtained by the lecturer was in the medium category and reached a percentage of 71.2%, with details: (1) 65.5% context aspects, (2) 81.3% input aspects, (3) 66.3% process aspects, (4) 72.0% product aspects. While the scores obtained by students were included in the medium category and reached a percentage of 75.93%, with details: (1) 69.60% context aspects, (2) 79, 70% input aspects, (3) 79, 50% process aspects, (4) 74.90% of product aspects. The suggestions given by researchers, in using e-learning should be optimized from all personnel involved in the application of e-learning.

Keywords: *Evaluation, E-learning, CIPP Evaluation Model*

Introduction

According to Crow in (Evans, 2015) education is not only seen as a means for preparation for the life to come, but also for the present life experienced by individuals in their development towards maturity. One of the efforts that can be done to advance education is to innovate learning. Utilization of information and communication technology devices is one way to make appropriate and effective learning innovations. This needs to be done because it is in this learning activity that the transfer of various competencies takes place. So that it will also increase the learning achievement of each student.

Learning either face-to-face, e-learning, or a combination of both, is a process that involves 3 interrelated activities, namely: (1) presentation activities, namely exposure or presentation of learning materials, (2) interaction activities, namely activities reciprocal communication between learners and facilitators as well as between learners, and (3) evaluation activities that function as a measure of progress and success in learning (Wibawanto, 2012). Based on the survey that has been conducted, in implementing teaching and learning activities at Stikes Syedza Saintika Padang, lecturers apply the lecture, discussion, independent task, presentation and observation methods. The method used is strengthened by the use of e-learning. However, not all lecturers make good use of e-learning.

In terms of interest, students are very enthusiastic about the implementation of e-learning, but as with lecturers, many of the students do not use e-learning to improve student learning outcomes, students only use e-learning to take exams or assignments. tasks that must be done in e-learning. So

far, there has never been an evaluation of e-learning at Stikes Syedza Saintika Padang. The research that has been done previously is the evaluation of e-learning at the Bandung Institute of Technology (ITB), Indonesia. The results showed that students had a high level of e-learning readiness. Mental workload is significantly higher in e-learning than in face-to-face learning. No significant difference in sleepiness was found between e-learning and face-to-face learning. The relationship between e-learning readiness and mental workload is not significant (Widyanti and Syalom, 2020).

According to (Stufflebeam & Shinkfield,) in (Aziz, 2018) The CIPP Model (Context, Input, Process, and Product) can be used for both types of evaluation, summative and formative. The most important thing about this model is that it provides the holistic view of every element by evaluating context, input, process and output from each and every angle. With the help of this model, evaluation can be done systematically, fulfilling the general needs of evaluation. The important element which makes this model different from other models is that it focuses on the context for the evaluation of teaching learning and development process

Education is various types of components in the student environment that can stimulate students to learn. Meanwhile, Briggs argued that learning media is a means to provide stimulation for those who learn so that the learning process occurs. Soekartawi (2008) states that e-learning or electronic learning is now increasingly recognized as a way to overcome educational problems, both in developed countries and in developing countries. Many people use different terms with e-learning, but in principle e-learning is learning that uses electronic services as a tool.

In line with the above opinion according to Syahmaidi (2015:89) E-learning is a media tool for learning aids, especially as a medium for student learning outside of school. Evaluation according to Worthen & Sanders (Alkin et al., 2008) is "the determination of worth thing. It includes obtain information for use in judging the worth of a program, product, procedure, or objective or potential utility of alternative approaches designed to attain specified objectives".

Methods

This research used descriptive method. Descriptive method is a screening process to see a situation or event. Therefore, this system only collects basic information. The type of assessment used in this study was the CIPP model (location, deployment, process, product) for e-Learning activities, (Nazir, 2005) This research was conducted at Stikes Syedza Saintika for students taking Indonesian language courses in semester 1 by using e-learning system.. The research was conducted from November 2021 to January 2022. The subject of this research was the evaluation of e-learning-based learning at Stikes Syedza Saintika Padang, semester 1 students taking Indonesian courses. Sources of data/respondents in this study were 10 lecturers and 68 level 1 students who took Indonesian language courses. In this study, data collection was carried out using questionnaires or questionnaires, documentation, interviews, and observation techniques. This study used readability validity. Readability is related to the ease of a text to be read. A text is said to be low readability if it is difficult to understand. Klare (1974) states that the legibility of a text refers to three things: topography, interest in the values contained in writing and writing style.

Result and Discussion

The description of the data in this study aims to present data that has been taken by researchers, namely the implementation of e-learning carried out by lecturers and the understanding of e-learning possessed by students from each aspect contained in the CIPP evaluation method, namely the context aspect, the input aspect, process aspects, and product aspects. The average value or mean and standard deviation can be seen in the data below.

1. Description of Lecturer Data
a) Evaluation of Lecturers from the Aspect of Context
Based on e-learning management activities on lecturer accounts, it is known that the highest score in the context aspect is 16 while the lowest value is 10. The average value is 13.1 with a standard deviation of 1.97.
This situation can be seen in table 1 below.

Table 1. Lecturer score range from context aspect

No.	Interval	Category	Frecuency	Percentage
1	15 < X	Tall	2	20%
2	11 < X ≤ 15	Currently	7	70%
3	X ≤ 11	Low	1	10%
Amount			10	100%

The average lecturer score of 13.1 is in the medium category, with a percentage of $13.1/20 \times 100\% = 65.5\%$.

b) Lecturer Evaluation from the Input Aspect
        The results of the descriptive analysis of lecturers in the management of e-learning based on input, the highest score is 29 and the lowest is 19. The average value (mean) is 24.4 with a standard deviation (SDi) of 2.68

No.	interval	Category	Frequency	Percentage
1	27<X	Tall	1	10 %
2	22 <X≤ 27	Currently	7	70 %
3	X≤ 22	Low	2	20 %
Amount			10	100 %

Thus, the mean from the input aspect obtained by the lecturer is 24.4 and is included in the high category with a percentage of $24.4/30 \times 100\% =$ **81.3%.**

c) Evaluation of Lecturers from the Process Aspect
From the results of descriptive analysis, the management of e-learning carried out by lecturers from the process aspect is known that the highest score obtained is 22, the lowest score is 18, while the average (mean) is 19.9 and the standard deviation (SDi) is 1.3. The results of the analysis are shown in the table below.

Table 3. Lecturer scores range from the process aspect

No.	interval	Category	Frequency	Percentage
1	21<X	Tall	2	20 %
2	19<X≤21	Currently	4	40 %
3	X≤19	Low	4	40 %
Amount			10	100 %

        Thus, the mean from the process aspect obtained by the lecturer is 19.9 and is included in the medium category with a percentage of $19.9/30 \times 100\% =$ **66.3%.**

d) Lecturer Evaluation from Product Aspect
        The results of the description of the management of e-learning carried out by lecturers on the product aspect show that the highest score is 26, the lowest score is 18, while the average (mean) is 12 and the standard deviation (SDi) is 2.42. The results of the analysis are shown in the table below.

Table 4. Lecturer score range from product aspect

No.	interval	Category	Frequency	Percentage
1	24<X	Tall	2	20%
2	19<X≤24	Currently	6	60 %
3	X≤19	Low	2	25 %
Amount			10	100 %

Thus, the mean of the product aspect obtained by the lecturer is 21.5 and is included in the medium category with a percentage of 21.5/30x100% = **72%.**

2. Student Data Description
a) Student Evaluation from the Context Aspect
From the results of descriptive analysis, students' understanding of e-learning from the context aspect is known that the highest score obtained is 18, the lowest score is 9, while the mean (mean) is 13.9 and the standard deviation (SDi) is 2.2. . The results of the analysis are shown in the table below.
Table 5. The range of student scores from the context . aspect
Example of Table:

No.	interval	Category	Frequency	Percentage
1	$16 < X$	Tall	10	14,7 %
2	$12 < X \leq 16$	Currently	42	61,8 %
3	$X \leq 12$	Low	16	23,5 %
Amount			68	100 %

Thus, the mean from the context aspect obtained by students is 13.9 and is included in the high category with a percentage of $13.9/30 \times 100\% = 69.5\%$.

b) Student Evaluation from the Input Aspect
From the results of descriptive analysis, the understanding of e-learning possessed by students from the input aspect is known that the highest score obtained is 29, the lowest score is 17, while the average (mean) is 23.9 and the standard deviation (SDi) is 2.78. . The results of the analysis are shown in the table below.

Table 6. The range of student scores from the input aspect

No.	Interval	Category	Frecuency	Percentage
1	$27 < X$	Tall	5	7,35%
2	$21 < X \leq 27$	Currently	49	72,06%
3	$X \leq 21$	Low	14	20,59%
Amount			68	100%

Thus, the mean from the input aspect obtained by the lecturer is 23.9 and is included in the medium category with a percentage of $23.9 \times 100\% = $ **79.7%.**

c) Student Evaluation from the Process Aspect
From the results of descriptive analysis, students' understanding of e-learning from the process aspect is known that the highest score obtained is 30, the lowest score is 15, while the average (mean) is 23.8 and the standard deviation (SDi) is 3.2 . The results of the analysis are shown in the table below.

Table 7. The range of student scores from the process aspect

No.	Interval	Category	Frecuency	Percentage
1	$27 < X$	Tall	11	16,18%
2	$21 < X \leq 27$	Currently	43	63,24%
3	$X \leq 21$	Low	14	20,59%
Amount			68	100%

Thus, the mean from the process aspect obtained by students is 23.8 and is included in the high category with a percentage of $23.8/30 \times 100\% = $ **79.3%.**

d) Student Evaluation from the Product Aspect

From the results of descriptive analysis, students' understanding of e-learning from the product aspect is known that the highest score obtained is 29, the lowest score is 16, while the average (mean) is 22.5 and the standard deviation (SDi) is 3.08. The results of the analysis are shown in the table below.

Table 8. The range of student scores from the aspect of product

No.	Interval	Category	Frecuency	Percentage
1	$26<X$	Tall	7	10,29%
2	$19<X\leq 26$	Currently	52	76,47%
3	$X \leq 19$	Low	9	13,24%
Amount			68	100%

Thus, the mean of the product aspect obtained by the lecturer is 22.5 and is included in the medium category with a percentage of $22.5/30\times 100\% = 75\%$.

From the results of the description of the data above, it can be seen that each aspect and the percentage obtained by both lecturers and students are as follows:

Table 9. Recapitulation of each aspect along with the categories and percentages obtained by lecturers and students based on the evaluation of the CIPP model.

Object	Aspect	Category	Percentage
Lecturer	Context	Currently	65,5 %
	Input	Tall	81,3 %
	Process	Currently	66,3%
	Product	Currently	72,0 %
	Rata-rata		71,2%
Student	Context	Currently	69,6 %
	Input	Currently	79,7%
	Process	Currently	79,5 %
	Product	Currently	74,9 %
	Average		75,93%

For the calculation score of the total percentage of lecturers, the categorization can be known from:
Highest ideal score : 22x5=110
Lowest ideal score : 22x1=22
The ideal mean (Mi) is : (110+22)=66
The ideal standard deviation (SDi) is: 1/6 (110-22)=14.7

Table 10. Range of scores and percentages for lecturers

No.	Interval	Category	Interval in Percentage
1	$77,2<X$	Tall	$81,29\% < X$
2	$66<X\leq 77,2$	Currently	$51\%<x\leq81\%$
3	$X \leq 66$	Low	$x\leq51\%$

The transfer of the interval into percent is obtained by: $7.12/\times100 = 71.2\%$. The average percentage obtained by lecturers is 71.2%, so it is included in the medium category.
For the calculation score of the total percent of students, the categorization can be seen from:
Highest ideal score : 22x5=110
Lowest ideal score : 22x1=22
The ideal mean (Mi) is : (110+22)= 66

The ideal standard deviation (SDi) is: 1/6 (110-22) =14.7

No.	Interval	Category	Interval in Percentage
1	81<X	Tall	81%<x
2	52 < X≤ 81	Currently	52%<x≤81%
3	X ≤ 52	Low	81%<x

The average percentage The transfer of the interval into percent is obtained by means of 7.593×100 = 75.93%. The average percentage obtained by students is 75.93%, so it is included in the medium category.

B. Discussion

1. Discussion of Each Aspect Obtained by the Lecturer
a) Context Aspect
From the context aspect, it can be seen that the average score (mean) obtained by the lecturer is 13.1 of the maximum score of 16, and the percentage is 65.5%. This score indicates that the context aspect, namely the aspect that is prepared in planning and making teaching materials for e-learning-based learning materials owned by lecturers is included in the medium category. It would be better if educators further improve the mastery of the material, especially if it is associated with the use of e-learning.

b) Input Aspect
From the input aspect, it can be seen that the average score (mean) obtained by the lecturer is 24.4 of the maximum score of 29 and gets a percentage of 81.3%. This score shows the input aspect, namely the competence aspect of supporting the implementation of e-learning-based learning and understanding of e-learning is good. The value obtained for the input aspect is included in the high category, but it would be better if this indicator was improved by both the educators and the school. Improvements that must be made by lecturers include trying to improve mastery of e-learning and the ability to use the internet. Mastery of computer equipment in supporting learning activities is quite good, however, what must be done by lecturers is to practice using e-learning features so that the use of e-learning can be utilized optimally.

c) Aspect of Process
From the process aspect, it can be seen that the average score (mean) obtained by the lecturer is 19.9 from the maximum score of 22, and the percentage obtained is 66.3%. This score shows that the process aspect owned by the lecturer is included in the medium category, which means that the score obtained by the lecturer is for the aspect of the lecturer's expertise about e-learning and preparing students for an ICT-based culture that is quite good but needs to be improved. This is due to the ability of lecturers to prepare students with an e-learning-based culture that is still not optimal, while the ability of lecturers to organize e-learning-based learning as the main basis for preparing students with an ICT-based culture is very important. If the ability of the lecturer is not maximized, the lecturer will rarely carry out assignments or deliver material to students by utilizing ICT. Vice versa if the ability of lecturers is high, the lecturers will more often carry out assignments or deliver material to students by utilizing ICT so that to improve the process aspect, the lecturer's ability must first be improved in the competence of supporting the implementation of e-learning-based learning.

d) Product Aspect

From the product aspect, it can be seen that the average score (mean) obtained by the lecturer is 21.5 from the maximum score of 26, and the percentage obtained is 72n%. This score shows that the product aspect owned by the lecturer is included in the moderate category, which means that the score obtained by the lecturer for the aspect of the lecturer's competence on e-learning and its effect on students is quite good but has not worked optimally. The score results for lecturers from the product aspect are related to the previous three aspects, namely the context, input, process aspects so that to improve the product aspect, it can be done by increasing the quality of the context, input, and process aspects. So to improve the results of the product aspect, it is necessary to improve each of these aspects so that the product aspect can be carried out better.

2. Discussion of Each Aspect Obtained by Students
a) Context Aspect

From the context aspect, students get an average score (mean) of 13.9 from the maximum score of 18, and get a percentage of 69.5%. This score indicates that the context aspect obtained by students is included in the medium category, which means that the score obtained by students from the aspect of the learning environment in getting used to using electronic devices, both cellphones and computers, is included in the middle category. This includes support from families to provide ICT facilities according to their children's requests so that at this time students are very easy to get ICT facilities. In addition, along with the development of technology, students can easily access the internet while in the school environment by using technological devices provided by the school.

b) Input Aspect

From the input aspect, it obtained a score of 23.9 from a maximum score of 29, and obtained a percentage of 79.7%, so that the input aspect is included in the medium category, which means that students' competence in using ICT in learning and aspects of knowledge about e-learning are quite good. In order for e-learning-based learning to run better, students should further increase their knowledge and use of e-learning to be more proficient in using e-learning. In addition, lecturers have a big influence in increasing aspects of knowledge about e-learning, if lecturers routinely give assignments or materials to students through e-learning, students will automatically be more proficient in using the features found in e-learning.

c) Aspect of process

From the process aspect, students get an average score (mean) of 23.8 from a maximum score of 30, and get a percentage of 79.3%, so that the process aspect is included in the medium category, which means that students have an understanding of computer use and usage. e-learning features are quite good. This is due to global developments that require students to be more active in seeking or getting the latest information.

The learning that is currently being implemented requires students to be more active in obtaining information related to the material to be studied so that most students seek this information using the help of ICT equipment and the internet. However, when students are required to use school e-learning, students' abilities are included in the poor category. This is because students do not get enough information in using the features found in school e-learning. Therefore, the school should provide training for students such as training on the use of ICT in a good and healthy manner, as well as training on using e-learning sites so that students can use school e-learning better.

d) Product aspect

From the product aspect, students get an average value (mean) of 22.4 from a maximum score of 29, and get a percentage of 75%, so that the product aspect is included in the medium category, which means that students' mastery of material and students' willingness to learn is quite good. . This is of course related to the previous aspect, namely context, input and process. To improve product aspects related to student material mastery and willingness to learn, of course the context aspect, the input and process must be improved first so that the product aspect of student e-learning-based learning becomes better. This finding is in line with research conducted by Thurab-Nkhosi, Dianne (2019), in general, teachers show a high interest in online learning. But besides that, there are still some aspects of learning that still need to be developed. This must be done to improve the quality of education through online learning that has been done so far.

Conclusion

Based on the results of research and discussions that have been carried out, the following conclusions are obtained: 1) Overall the management and understanding of lecturers on e-learning is included in the medium category and reaches a percentage of 71.20%. The context aspect is in the medium category, the input aspect is in the high category, the process aspect is in the medium category, and the product aspect is in the medium category. This shows that the process and product aspects have not run optimally, therefore improvements and improvements are needed so that e-learning-based learning carried out by lecturers can run better. 2) Overall understanding of e-learning owned by students is included in the medium category and reaches a percentage of 75.93%. The context aspect is in the medium category, the input aspect is in the medium category, the process aspect is in the medium category and the product aspect is also in the medium category. This shows that each aspect has not run optimally, therefore it is necessary to improve each of these aspects so that e-learning-based learning can run better. Based on the data above, it can be concluded that the percentage of use of e-learning at Stikes Syedza Saintika Padang is in the middle value range.

Acknowledgments

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