

Evaluation of Distance Learning Program Based on Learning Management System During New Normal Covid-19

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Abstract. Evaluation of the Learning Management System program covering aspects of Context; assess the basic needs of implementation and the actual conditions of the program. Input; analyze resources and strategic alternatives to achieve program objectives. Process; evaluate program implementation. Product; show program results. This research uses a descriptive qualitative approach with data collection techniques in the form of interviews, observation, and document study. The evaluation research population consisted of the Dean, Deputy Dean, Lecturer, IT team, Administration, Lecturers, and Students. The sample consisted of the dean, vice dean of academic affairs, 16 lecturers, and 215 active students. The results of this study indicate that the Context Evaluation of the program is relevant to the FKIP-UIKA academic community, requires good coordination among all stakeholders, and Input Evaluation of all stakeholders can run the program by optimally utilizing the available facilities and infrastructure. Product Evaluation: Student learning outcomes and program effectiveness, both as indicated by the results of program implementation and realization, are in the "Satisfactory" category, this is based on the percentage of IT, lecturer, and administrative skills by 27% and HR readiness of 28% of 30%, meaning components agree that this program facilitates effective, efficient and systematic online searches.

Keywords: Distance Learning · Learning Management System · New Normal Covid-19

1 Introduction

Education that is oriented towards the development of student potential will be very much needed in any learning process that is carried out actively, productively and can manage and utilize learning resources effectively, efficiently, and following educational goals, because the general goal of education today is to provide provisions so that students can compete (Joosten & Cusatis, 2020) [1]. In a technology-based era, unfortunately, our world of education is currently in the New Normal era caused by the Covid-19 Pandemic that has hit the world, especially the city of Bogor. December 31, 2019, in

Wuhan, China appeared the first case of pneumonia known as Corona Virus Disease or known as COVID-19 (Cleland et al., 2020) [2].

The World Health Organization (WHO) recommends temporarily suspending activities that have the potential to cause crowds including face-to-face learning programs at all levels of education, including higher education in all infected corners of the world, including Indonesia Various ways have been proposed by the Government of Indonesia to prevent the spread of covid-19 throccugh a Circular of the Ministry of Education and Culture (Kemendikbud) of the Directorate General of Higher Education No. 1 of 2020 concerning Prevention of the Spread of Corona Virus Disease (Covid-19) in Higher Education (Herliandry et al., 2020) [3]. Based on this circular, the Ministry of Education and Culture instructs all public and private educational institutions from various levels of education including higher education to divert learning from face-to-face to Distance Learning, aiming to break the chain of spreading Corona Virus Disease (Covid-19) (Wijoyo & Indrawan, 2020) [4].

Distance Learning is one of the solutions for the implementation of psychological distancing which aims to inhibit the growth and distribution of covid-19 in various fields, especially education, in this case, facilitated learning with the development of a Learning Management System (Prawiradilaga, 2016) [5]. LMS is software developed to facilitate online learning that integrates various course management features. Ibn Khaldun University Bogor adopted the development of features available in the LMS System for online learning during the new normal covid-19, which are as follows: (1) Management of user access rights, (2) Management of courses, (3) Management of teaching materials (resources).), (4) Activity management, (5) Value management, (6) Value display, (7) Management of visualization learning, so that it can be accessed with a web browser. LMS was built with PHP my admin using databases like MySQL (Anggriawan, 2009, p. 3) [6]. So, an Evaluation of the Distance Learning Program based on the Learning Management System in the New Normal Covid-19 period of Ibn Khaldun University Bogor was carried out using the CIPP-based evaluation approach with the following stages: context evaluation, input evaluation) (3). Process evaluation, (4). (product evaluation.

2 Method

This research is a program evaluation study with the CIPP approach model, the model developed by Stufflebeam et al. includes (Yusuf, 2017) [7] (1). Evaluation of the Context component will identify the needs that underlie the realization of the Program, including the real or objective conditions of the place and location of program implementation, the evaluation of this context component contains an analysis of program strengths and weaknesses that describes the program environment and program objectives. (2). The evaluation of the Input component contains the analysis of resources or personnel as a whole, where the human resources are directly related to program resources that aim to achieve program objectives, identify procedural designs and assess program capabilities. (3). Evaluation of the Process component contains the design and design of the LMS program. (4). Evaluation of product components contains outcomes and benefits both in the long and short term which will be taken into consideration in the

decision whether the LMS program is feasible to be continued, continued, or continued with some improvements in the program. Research location at FKIP-UIKA Bogor. The evaluation was carried out for 6 months, namely April to September 2020.

This study uses various techniques that aim to collect the required information such as; (1). Interviews that aim to collect and collect information orally and answer questions unilaterally and conducted online (zoom meeting) because in the new normal covid-19 period, according to health protocols. During the interview process, the researcher used an audiotape recording which aims to record all answers or responses based on the questions posed completely and thoroughly. (2). Observation aims to collect and collect data by systematically observing and recording phenomena that occur during program realization. (3) Document study that aims to test and estimate related curriculum, academic achievement, student worksheets, UTS and UAS results, emotional development, and student motivation. During the research, researchers also look for secondary data by obtaining data from research or individual studies either from books, journals, theses, and dissertations, while primary data is obtained by researchers from field data (Sugiyono, 2012) [8].

The research data were analyzed using descriptive qualitative methods which will be presented in the form of descriptive pro-stage figures. The data is presented in the form of tables and figures, then the calculation process will be carried out to get the average and pro-stage results as a basis for concluding with 3 important components, namely data reduction, data presentation, and drawing conclusions or verification. The data presentation is made in a descriptive form which will then be analyzed using the SWOT analysis model which includes components; Strength, Weakness, Opportunity, and Threat.

3 Results

3.1 Description of the Object of the Evaluation Profile

The Faculty of Teacher Training and Education, Ibn Khaldun University, Bogor is one of the higher education institutions located in the city of Bogor which has the following vision and mission: "To become a Professional and Islamic Faculty of Teacher Training and Education Based on Information Technology in 2025". Human Resources: Based on FKIP-UIKA data, Bogor has 3 study programs, namely (1). English Language Education. (2). Community Education, and (3). Educational Technology with a total of 45 lecturers with Masters and Doctoral degrees, 21 people in Administration, and 645 active students. Academic Facilities and Facilities FKIP-UIKA is equipped with complete facilities & infrastructure such as available projectors in each lecture room, wifi, and has 7 computer laboratories consisting of (1). Lab. Multimedia (2). Lab. Language (3). Lab. Computer (4). Simple media lab (5) PAUD lab (6). Microteaching lab (7). Broadcasting. FKIP - UIKA Bogor has 83 PCs and 7 laptops with graphics specifications with Core-i5 supported by an internet connection bandwidth of 6 MBPS and Speed of 100 MBPS and wifi on every floor and lecture room.

3.2 Data Description and Evaluation Findings

3.2.1 Description Context. Background of Program Implementation

The Covid-19 outbreak that broke out starting in July 2019 has forced all residents of the city and district of Bogor not to crowd, follow every health protocol and shift the learning model from face to face to online learning so that learning can still be carried out, however, there are many obstacles to online learning including limited online platform, inadequate online components and the geographical location of the city and regency of Bogor where the category of internet connection is moderate to strong. Furthermore, online learning must adjust various platforms according to the characteristics and instructional objectives, but for higher education online learning, a system that can facilitate aspects such as; administration, materials, assignments, assessments, evaluation and learning feedback so that online barriers that occur can be recorded and resolved properly.

Based on the background of the above problems, according to the instruction of the minister of education general of higher education, the Faculty of Teacher Training and Education, UIKA Bogor built a system using moodle called the Learning Management System as a BIG System Program which will be able to cover all online learning needs, because the online learning process will run well if there is communication, coordination, and an appropriate learning management system integrated with the ability to manage and utilize various learning resources from the faculty and students.

Academic environment: FKIP-UIKA consists of 2 categories, namely: (1). Internal consisting of program coordinators, IT TEAM, and administration who communicate and coordinate in managing and developing programs following the characteristics and learning objectives. (2). External which consists of lecturers and students as users or program users who carry out learning using a learning management system that has been facilitated by FKIP-UIKA Bogor.

3.2.2 Input Description

Faculty Leaders FKIP-UIKA is led by Dr. Nuraeni, M.Ed. as the Dean with S-3 English Education qualifications who have the appropriate characteristics and performance according to the Senate standardization of FKIP-UIKA Bogor. Lecturer at FKIP-UIKA consists of 3 study programs with 38 lecturers with qualifications based on functional positions as head lector: 3 lecturers, 10 lecturers, assistant expert: 23 lecturers, and teaching staff: 1 lecturer. Based on the S-3 education level; 10 lecturers and S-2: 27 lecturers according to their fields of science and scientific linearity. The IT team of the LMS program consists of 6 people with qualifications based on the S-2 education level: 4 people and SMA: 3 people with skills and abilities who have attended intensive training. The Program Coordinator, namely the Head of the FKIP-UIKA Administration, Mrs. Meliani, S.Pd. as for the administration consists of 7 people who are divided into 3 study programs FKIP-UIKA Bogor.

3.2.3 Process Description

Process component evaluation is designed, developed, and implemented in the program. This learning management system program is directly connected to the Moodle University of Ibn Khaldun Bogor and integrated into the SPADA system (Indonesian online learning system). The LMS can be accessed at the link: https://elearning.uika-bogor. ac.id/. Students log in using NPM and generate password: Uika 1234. LMS FKIP-UIKA consists of 7 faculties consisting of FKIP, FH, FEB, FAI, FTS, FIKES, and SPS with total users: 7,963. While the LMS portal consists of; (1) dashboard or home (2) course categories, namely the academic year (3). Login according to the faculty (4). Login according to the study program, for example, English Language Education (PBI) (5). Select the semester according to the class schedule (6). Choose courses according to the learning schedule. The features available in the LMS for online learning during the new normal covid-19 are as follows: (1) Management of user access rights, (2) Management of courses, (3) Management of teaching materials (resources), (4)) Activity management, (5) Value management, (6) Value display, (7) Management of e-learning visualization, so that it can be accessed with a web browser. This LMS was built with a development platform, namely PHP MY ADMIN with the use of databases such as MySQL. Although most systems are commercially developed and licensed for commercial software there are a few systems that are "open source".

3.2.4 Product Description

Evaluation of product components includes identification of outcomes or outcomes and benefits both planned in the short and long term to get a conclusion whether the learning management system program needs to be continued and developed, discontinued, or continued with revisions. The LMS program provides various materials in various formats according to learning materials, the tools in the program can be easily managed by the lecturer concerned because video-based tutorials and technical guidance books for lecturers and students are available on how to use the program according to the program objectives.

4 Conclusion

4.1 Context

The LMS program is considered relevant to the FKIP-UIKA academic environment. This can be demonstrated by the implementation of effective, efficient, and targeted learning in the new normal covid-19 period, where the LMS was able to facilitate maximum online learning with maintained health protocols. This is shown by the density of activities in the LMS following the respective courses and classes, this is the result of good communication and coordination between lecturers, TU, IT team, and students in the learning process in the network.

4.2 Input

Stakeholders already have the skills and abilities in managing and developing a learning management system, where these resources consist of IT teams, coordinators, administrators, lecturers who are able to fully operate the use of Moodle-based LMS, computers, gadgets, etc. This is evidenced by the value pro-percentage for the IT team capability category, lecturers and administrative staff of 28% and the readiness of human resources by 28% of the maximum value by being in the "Very Capable" category. -UIKA Bogor regarding LMS, the average level of human resource education is SMA and S-1 and understands the use of ICT media effectively and efficiently. Facilities and infrastructure: FKIP_UIKA Bogor has 7 computer laboratories consisting of (1). Lab. Multimedia (2). Lab. Language (3). Lab. Computer (4). Simple media lab (5) PAUD lab (6). Microteaching lab (7). Broadcasting. FKIP - UIKA Bogor has 83 PCs and 7 laptops with graphics specifications with Core-i5 supported by an internet connection Bandwidth of 6 MBPS and Speed of 100 MBPS and wifi on every floor and lecture room, meaning that the facilities and infrastructure are very supportive for the implementation and realization of the Distance program Learning based on Learning Management System.

4.3 Process

Lecturers can manage and utilize all learning resources to be integrated with the learning management system. This is evidenced by the results of the presentation filled by 16 lecturers with a score of 48.8 where the number is in the range of 32 from 40%, meaning that the lecturer can manage the LMS and agrees if this program is implemented and utilized optimally. Administration and IT team: based on the results of interviews, it shows that this program has been running and is still being implemented properly and optimally, it's just that there are still some obstacles between the geographic location of the students, which are difficult to signal and bad weather affecting internet connections.

4.4 Product

The results of the implementation and realization of the Learning Management System program are "satisfying", this is based on the percentage of the ability of the IT TEAM, lecturers, and administrative staff by 27% and HR readiness by 28% from 30%, meaning that these components agree that this program facilitates online pursuits in an effective, efficient and systemized manner.

References

- 1. Joosten T and Cusatis R 2020 Online Learning Readiness American Journal of Distance Education, 00(00), pp 1–14 https://doi.org/10.1080/08923647.2020.1726167
- Cleland J McKimm J Fuller R Taylor D Janczukowicz J and Gibbs T 2020 Adapting to the impact of COVID-19: Sharing stories sharing practice Medical Teacher 0(0), pp 1–4 https:// doi.org/10.1080/0142159X.2020.1757635
- Herliandry L D Nurhasanah Suban M E dan Heru K 2020 Pembelajaran Pada Masa Pandemi Covid-19 Jurnal Teknologi Pendidikan vol. 22(1) pp 65–70. https://doi.org/10.21009/jtp.v22i1. 15286

- Wijoyo H dan Indrawan I 2020 Model Pembelajaran Menyongsong New Era Normal Pada Lembaga Paud Di Riau Jurnal Sekolah Universitas Negeri Medan vol 4(3), pp 205–212. https://doi.org/10.24114/js.v4i3.18526
- 5. Prawiradilaga, D. S. (2016). Mozaik Teknologi Pendidikan: E-Learning. Kencana.
- 6. Anggriawan F S 2009 Pengembangan Learning Management System (LMS) sebagai media pembelajaran untuk sekolah menengah. Ellis, pp 1–10.
- 7. Yusuf, Muri 2017 Asesmen dan Evaluasi Pendidikan Pilar Penyedia Informasi dan Kegiatan Pengendalian Mutu Pendidikan Jakarta: PT Fajar Interpratama Mandiri p 123.
- 8. Sugiyono 2012 Metode Penelitian Kombinasi (Mixed Methode) Bandung: Alfabeta p 4

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