An Approach for Learning Management System

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Abstract:

The process of the learning management system (LMS) in the New Normal period was observed in this study.a qualitative research design with a descriptive pattern was used to take a look at two main themes: the advantages of using LMS applications in education were indicated by the suitability of the LMS With the needs of lectures in creating ,disturbing, and managing learning content anytime and anywhere.It is concluded from these findings that using LMS requires strong network support throughout the region. This paper aims to reduce the difficulty coming for the new faculties while studying a particular course and its main focus is to give study material by which they can easily give guidance to the students.Study material like videos of experienced faculties for the particular they were being appointed to.[1]

Innovation and technology brought by the 4th Industrial revolution(4IR) have become a reality to all teachers because of the need for a virtual classroom. It is contemplate that the LMS will be enhanced based on user feedback in order to realize its full potential as a tool for instructions and remote learning.The pandemic has made the role that technology-based instructions, such as the use of learning Management System(LMS),must play even more important.But now that face-to face classes are resumed,it can assist instruction and the provision of distance learning.[2]

Keywords: Learning management system, Teaching, Staff Development.

1. INTRODUCTION

LMS is the backbone for online learning and is managing the learning and is managing the learning processes,classrooms,tests,and assignments (Radif,2016).The role of LMS in educational environments has been studied by Jamal and Shanaah(2011) . Their research concluded that it facilitates learning activities as well as helps learners to learn from their peers.LMS utilize data and communication technology to develop creative approaches to learning .Further, numerous educational processes are supported such systems;which is a full-scale learning platform(Kats,2013).[3]

The eruption of the coronavirus brought a lot of confusion accompanied by anxiety and distress among the global population. The coronavirus,otherwise called COVID-19 declared as a pandemic ,unexpectedly created health, economic,social,and education crises(WHO, 2020a). It could be the reason why Omodan (2020) describes the COVID-19 infection as an emergency of the unknown and afterwards portends short-term and long-term suggestions on the world in general, including the education system. The sudden shutdown of many institutions and most businesses critically affected the economy and the smooth running

of teaching and learning in schools. The pandemic has so far created the biggest shock and radical change in education where 1.6 billion young people have their contact schooling suspended (UNESCO,2020).[4] Following the COVID-19 outbreak,the Indonesian government announced to temporarily substitute conventional face to face meeting to online activities at both the secondary and higher levels. This decision gave rise to an e-learning based platform, known learning management (LMS) to educational institutions like schools and universities manage their teaching and learning process. Mostly at university level,lecture materials online are made accessible to any students who need them,provided via the internet using the concept of LMS usage. The Teacher professional Education Program(PPG), as one which was affected by the situation , also shifted and applied LMS to carry out the training. To this day,particularly for in-service teacher development program ,both lectures and tutors and student did fully online using LMS facilities that have been developed by the Ministry of education and culture .The online virtual classes are also held using zoom ,WhatsApp Group , and Google Meets(Shanie & Fahrurrozi,2022).

The Teacher Professional Education Study Program(PPG) is an educational program designed to equip prospective teachers who have the ability and desire to become professional to teachers who have ability and desire to become professional teachers while also understanding teacher skills. It is regulated in UUD No 14 in 2005 related to teachers and Lecturer,and UUD No 12 in 2012.The main goal of this program is to produce qualified teachers in order to solve existing educational problems and to face the rapid globalization era(Haq et al.; 2019). Therefore the implementation of the efficacy in online classes during programs must be evaluated . Further,the assessment findings can be utilized to improve the quality of future PPG implementations.[5]

According to Darling -Hammond[6] ,Hyler,and Gardener,effective professional development can be defined as structured professional learning that results in changes in a teacher's knowledge and practice .Desimone argues that effective professional development possesses a strong content focus,features active learning ,is collaborative and aligned with relevant curricula and policies,and provides sufficient learning ,is collaborative and aligned with relevant curricula and policies,and provides sufficient learning time for participants . Pedagogical staff development at European higher education institutions presents many differences according to the systems, types of institutions ,and disciplines[7]. This can take many different forms and may be something else depending on the institution and its priorities but generally includes a mix of workshops ,seminars ,coaching,mentoring ,and other forms of support. It may be mandatory or optional. However ,the goal is always to provide instructors with the support they need to frequently improve their teaching skills and stay current with the latest trends and practices in higher education.

A growing interest in this field can be found across European higher education in situations as more aim to promote pedagogical training programs to enhance the quality of teaching and learning and address the challenges of students -centered learning[8].Reports from European organizations provide evidence of the importance of pedagogical staff development in higher education institutions . For example ,the European Association for Quality (ENQA) has developed a set of Standards and Guidelines for quality Assurance in the European Higher Education Area (ESG). The ESG highlights the importance of providing support for the professional development of academic staff, including training in new pedagogies and teaching methods . The European University Association (EUA) also published a report on the state of teaching and learning in the European higher education area[8].The report emphasizes the need for universities to prioritizes staff development,arguing that training and support for academic staff in their teaching and learning experiences . In general, these reports provide strong evidence of the importance of pedagogical

staff development in European higher education institutions and highlight the need to prioritize staff development for universities to categorize staff development, arguing that training and support Pedagogical staff, their teaching role is essential to ensuring that they can design and deliver high-quality teaching and learning experiences. Normally, these reports provide strong affirmation of the importance of pedagogical staff development in European higher education institutions and highlight the need for ongoing training and support for instructors to ensure high-quality teaching and learning experiences for students.

2. LITERATURE REVIEW

2.1 User experience (UX) and Usability-

In paper, [9] a user is defined as an independent (e.g university student) who uses an LMS (Moodle) during the process of their education and training via e-learning. We also grant the extent of their potential users of LMS, teachers and system administrators who are not in the range of this research. In addition, the UX refers to "all the aspects of how people use linked products- the way it feels in their hands, how well they understand how it works, how they notice it while they are using it and how the product is perceived, learned and used". In this paper, we broadly define UX of an LMS an inherently a fuzzy, multi-faceted, content-dependent and dynamic concept covering all the aspects how end-users experience, behave, perceive, feel and think about an LMS and how they reflect on the use, suspense of the use and use it in order to attain greedy or functional value of e-learning. The literature provides some models to study UX with somewhat of accuracy in capturing the convolution of the UX phenomenon.

2.2 New Normal In Education-

Education is a conscious effort to prepare students for guidance, teaching and training activities for their role in the future (Pacheco 2021). Toward the new normal means preparing oneself for the provision of education and emphasizing effective learning, motivating, and building morality. In the new span, higher education costs increase, and efforts are being made to modify online learning methods, develop learning curricula, decrease physical contact, avoid crowds, and adopt a healthy lifestyle (Doyle & Delaney, 2009). According to the literature, there are various paradigms of the new normal in education. On the one hand, a new spirit in education is instilled in the new normal, encouraging more innovative learning. On the other hand, the rejection of educational institutions owing to health and safety concerns is encouraged. The meaning of education in an administrative context, namely, the implementation of traditional schools, tends to be reduced by these two paradigms (Walunj,2020). In the new normal era, digital technology-based learning is being implemented by only a few educational institutions because they do not have sufficient support in terms of costs, facilities, and teacher competence.

The new normal in education changes the paradigm of parents, who initially entrusted most of the educational responsibilities of their children to educational institutions, especially teachers, who now accept them back. They realize that education in the new normal era is quite difficult to pass without support and shared responsibility .(Motala & Menon, 2002).[10]

2.3 LEARNING MANAGEMENT SYSTEM CATEGORIES-

The earliest manifestations of LMSs[11] were little more than a platform for the dissemination of learning materials online. These systems could broadly be categorized as belonging to one of two groups: proprietary and open source. In 1995, University of British Columbia developed One of the earliest proprietary systems, WebCT. Other proprietary LMSs are Desire2Learn which was invented in 1999,

Pearson's eCollege (2007), Edvance360, Jenzahar e-Racer (2009) and SharePoint LMS (Onacan and Erturk,2016).

Open-source systems by contrast, were developed collaboratively by software specialists with a view to making the source code reality available to organizations and individuals free of charge. They were initially popular with universities and colleges who could readily download the source code, alter it to their own circumstances, and build their own tailored Learning Management System solutions. A prominent example of an open-source system in operation globally today in Moodle, developed by Martin Dougiamas with the first version released in 2002 (Susana Juanjo, Eva and Ana, 2015). The acronym Moodle stands for " Modular Object-Oriented Learning Environment". Moodle is arguably the most popular open-source Learning Management System in use today.. Other open-source tools include Sakai which was invented in 2004, Canvas (2008), LoudCloud (2010), OLAT (1999) and Claroline (2001).

2.4 TEACHER PROFESSIONAL DEVELOPMENT-

The remarkable, positive correlations between teacher quality and student achievement, as most important within school element for explaining performance , and between in-service training and student outcomes, are consistently borne out of research.

The forms of support of teachers' professional development can consist in paid working time and substitutions (often discouraged for budget and organizational reasons), funding of CPD costs sustained by teachers, salary incentives, CPD as condition for salary progression and promotion, national policies and campaigns

An organized plan for support measures for new teachers in the first years of their careers- the most demanding and decisive stage of teachers' development- is foreseen in only a small team of EU countries, among which the UK, Luxembourg and Lithuania seem to have a wide range of support activities. Induction programmes are reported as mandatory in only ten states of the OECD study, with Canada (Quebec), Switzerland and some US states offering the longest support (two years).[12]

Over the past decade, online and blended learning have become an integral part of educational options at many institutions of higher education and many K-12 schools. Large-scale national surveys have shown the consistent growth of online education in the United States for a decade. In fall of 2014 there were 5.8 million distance education students with 2.85 million of those students taking all of their courses online.

This represents "more than one in four students (28%) Taking some of their courses at a distance" (Allen et al., 2015,p.12). That is a healthy number of students taking online courses in a time when distance education is growing.

The increase in student demand for education in online and blended modalities has created a need for instructors who can competently teach online. A national survey conducted in 2016 reported that 39% of higher education faculty have taught an online course, 43% have taught a blended course (Combining in-person and online teaching) with 81% of those faculty have converted an in-person course to a blended course and 37% of faculty indicated they have taken an online course for credit as a student (Jaschik & Lederman, 2016).

3. RESEARCH METHODOLOGY

The methodology adopted in this review, draws on the strengths of two main approaches to literature review: narrative and systematic. According to Rother (2007),a narrative reviews is a complex analysis of the literature of a chosen topic.Narrative reviews are wide in nature and do not describe in detail the methods employed to collect and analyze the literature selected for examination (Henry et al. 2018).By

contrast ,systematic reviews are characterized by explicit,transparent methods that can be reproduced by other researchers (Collins and Fauser 2005).The strengths of systematic reviews include the narrow focus of the research question,comprehensive search for evidence,and criterion-based selection of relevant evidence.The review adopts a narrative approach to address the research aims and supplies some of the rigor of systematic review methodologies to the selection and inclusion of the published articles referred to in this paper.Literature reviews drawing on the characteristic[13]

This study used a mixed-methods research design that included both quantitative and qualitative techniques,specifically an explanatory sequential design.There were two stages: the first collected quantitative data using a verified survey research tool,and the second gathered qualitative data using interviews and social media chat messages.

Table 1. Frequency Distribution Of User as to Sex in the Three Campuses

Ten students took part in the qualitative portion of the study and agreed to share their experiences,particularly the difficulties they faced when using the QSU e-ARAL.There were only ten students included in the qualitative part of the study to cs of systematic and narrative approaches have been widely used in analysis of a wide range of information technology-related studies such as social media(Best,Manktelow,and Taylor 2014; Robinson et al. 2016; Sarmiento et al. 2018),online learning (McCutcheon et al. 2015; Sinclair et al. 2016) and human engagement with computers (Boyle et al. 2012;Fleischer 2012).

ensure that the interviews conducted were in depth and were given sufficient time.This selection of participants was also done to limit conduct,because of the occurrence of the pandemic,with these individuals especially during face-to-face interviews.They were selected based on these criteria of inclusion:a bona fide student of the University;has used the LMS for the last two years for submission of requirements,taking quizzes or tests and participation in forums or discussions;has face difficulties along LMS utilization and will take part in the interview.

Course design

The traditional,face-to-face course is typical of most medium-sized lecture courses with one lecturer teaching the new faculty appointed. Weekly lectures take place and the instructor supplements the lecture with online materials such as power points slides and multiple-choice quizzes and linked references.While most course discussion occurs in class, online supplements are utilized in face-to-face courses and there are asynchronization discussions online.[15]

This study was designed as descriptive quantitative research.The approach is a method of data analysis that involves summarizing or explaining the data that has been obtained in its entirety without the intention of drawing broad generalizations (Sugiyono,2015). The descriptive analysis in the form of a survey technique was chosen because it is considered appropriate for determining the phenomena occurring.

The study was conducted by including 26 total respondents; consisting of English teachers who are currently in professional education program (PPG) batch 2 in 2022 in Bengkulu University. The random sampling was used to determine the sampling was used to determine the sampling was used to determine the sampling was used to determine the sample of the populations.

Criteria	Group	Total	Percentage
Age	21-25 26-30 31-35 36-40 >40	0 21 3 2 0	0 80.7% 11.5% 7.76% 0
Gender	Male Female	0 26	0% 100%
		N=26	

Table.1 Characteristics of the Respondent

The data of the total respondents were obtained using a questionnaire.There are 14 items of questionnaire divided in two sections, the perception on learning management and learning activities using LMS and one open question related to discovering the type of LMS used. The instruments are adopted from Prisudun & Budiyono (2021) which had been validated using expert judgment validation. Likert scale using four options are applied for questionnaire's answer to range the satisfactions' level,mentioned as:Very Good (VG),Good (G),Fair (F),and Not Good (NG).The data finding were counted using data frequency and mean score,and interpreted using interval value range from 1 to 4 score value,from the least to the most higher indication of satisfaction.[16]

4. CONCLUSION

The three key issues relevant to teaching as a profession: definitional aspects, opportunities to learn in university-based teacher education, and current challenges to the teaching profession and teacher education.

Addressed key definitional aspects using as a point of departure the examination of the status of the profession using Gardener & Shulman's empirically grounded framework. The current covid-19 pandemic, however, invites a re-evaluation of such a framework concerning what counts as professionalism. For instance, a more nuanced exploration of the opportunities that teachers have to learn to create more equitable and inclusive classrooms using innovative technologies including online learning has become an important priority for many communities and has revealed important gaps in teachers' preparation.

The cross-national examination of the opportunities to learn the knowledge considered needed to teach revealed important challenges for the profession as a whole and teacher education in particular. While some variability in university-based teaching is to be expected, it is concerning when such variability excludes important aspects of the knowledge that is considered required, and deprives future teachers of important pedagogical knowledge and the chance to be successful as they enter the profession. Within the constraints and possibilities of university-based teacher education, educators must develop a focused research agenda to explore how to create definitive knowledge that can be used in teacher education programmes to elevate the professional quality of future teachers including their opportunities to engage in research while preparing to become teachers and once in their classrooms.

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