Utilizing Learning Management System in Online Writing Instruction in Higher Education: Indonesian Faculty Member Perspectives

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This study aimed to investigate the faculty members' perspectives in viewing the characteristics, the obstacles and the expectations, and the consideration in selecting and implementing the LMS in OWI. The qualitative method with the descriptive design was used. The participants were 17 faculty members from universities in Indonesia. The collected data were by an open-ended questionnaire and a semi-structured interview. The result showed that selected LMSs were GC, Md, MT, Ed, and Sc. Subsequently, the LMS's characteristics are based on features and functions such as providing learning skill tools, communication tools, and productivity tools. Furthermore, the obstacles were internet connection, limited interaction, lack of online tracing, restriction control, and plagiarism checking. Meanwhile, the expectation provided feedback, detailed scoring, voice or video conference tools, online sketching, and plagiarism checkers. The selection consideration covered reliability, simplicity, and mandatory institution. The implementation involved facilitating the distribution of the materials, writing activities, achieving outcomes, the feedback, collaboration activities, discretion of the student choice in the task/assignment submission, and the scoring.

Keywords: LMS, Online Writing Instruction, higher education

INTRODUCTION

Teaching writing is portentous instruction since it is a productive and visual skill. Writing is an essential feature of learning a language because it provides an excellent means of foxing vocabulary, spelling, and sentence patterns (Patel & Jain, 2017). Writing is a tool for communication and an instrument for

intellectual growth and development field (Nunan, 2015). To master the art of writing, students need concentration, instruction, practice, and patience as the teacher helps the students develop explicit knowledge of phases of the writing process (Arora, 2012). The variety and diversity characterize the teaching of writing English in schools, colleges, and higher education, and those should still be centered on ways to foster students' capacity for critical engagement with texts and the appreciation of nuance and complexity in readers in a variety of contexts, including their historical contexts. (Hewings et al., 2016; Sumantri et al., 2022). Even though the writing is an important skill to teach, it is challenging the online writing instruction (OWI) from the faculty member's lens, especially at the higher education level.

Salisbury Field (2018) mentioned that writing instructors are often frustrated, hesitant, and more likely to reject LMS tools than struggle to implement them without guidance on how to do so and the time to do so effectively. She added that implementation preparation shows instructors how to teach online and why. At the same time, Hutchinson (2019) argued that LMSs don't always allow instructors to teach writing in a way that aligns with writing pedagogies and theories. In another aspect, Harris & Greer (2016), many writing instructors do not have the time or institutional support necessary to design and create their course websites. On the other hand, Duin & Tham (2020) declared that the appropriate features in LMS could increase engagement in learning and provide greater focus on collective achievement instead of individual accomplishments. To sum up, the OWI through LMS needs investigation, which involves discovering its tool characteristics and implementation since it is still debatable to writing enhancement.

Rasheed et al. (2020) categorized the teachers' challenges in teaching online such as technological literacy and competency, online video, technological operation, and teacher's belief. Saine and West (2017) explored how virtual interactions between content area teachers contributed to the self-efficacy beliefs of teaching writing. They found there were nine experience issues as follows (a) giving feedback, (b) working with students, (c) becoming a tech-savvy teacher, (d) gaining insight into student writing, (e) recalling previous experiences, (f) gaining knowledge of online resources for teaching writing, (g) appreciating teacher support, (h) becoming conscious of their own emotions, and (i) gaining confidence to respond to students. Although writing program administrators, the course leads. Teacher trainers express increasing certainty about the content it is necessary to convey; they are not nearly as confident about the best ways to share it: in a workshop or a course, in person or online, in large groups, or in one-on-one (Grover et al., 2017; Rachmadtullah et al., 2020). Therefore, investigating the discussion about the distance learning, issues, strategies, integration technologies, and praxis of online writing instruction requires more depth exploration.

There are so many options for utilizing the technology tools to help the teacher support OWI. Meanwhile, integrating technology, particularly in producing writing artifacts, entails the teacher's careful consideration to select the appropriate one based on the instruction needs. Besides, the teacher needs to prepare for evolving digital literacy practices, access the digital medium, navigate its challenges, and participate in the OWI contexts (Collins et al., 2019; Vina Iasha et al., 2020). In addition, the essential aspects of optioning the tools of the technology-enhanced environment in foreign language writing are generating learner autonomy, collaborative work, problem-solving capacities, discovery-learning techniques, critical and reflective thinking skills, creativity, and intercultural competence have all been positively impacted (Pérez Cañado, 2018). Besides, Cotos (2018) demonstrated that automatic writing evaluation should complement more pertinent activities such as prewriting, writing practice, peer review, revision, and teacher comments. However, the availability of supporting technology aids on OWI does not always cover all aspects that make teachers conscientious about determining the most preferable in delivering the materials and implementing the teaching process to build engagement with their students.

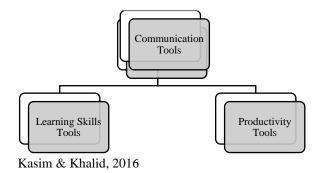
One of the technology aids in the OWI context is Learning Management System (LMS). Utilizing LMS helps the teacher transfer OWI materials and execute the teaching process (Duin & Tham, 2020; Salisbury, 2018; Sumilat et al., 2022; Topacio, 2018). Although implementing OWI by providing LMS has been discussed in some studies, the preference for selecting and optimizing its features to support OWI goals and objectives is still infrequent. Accordingly, this article attempts to answer the following research questions:

- 1. How do faculty members view the characteristics of a Learning Management System in Online Writing Instruction?
- 2. What are the obstacles and expectations to a Learning Management System in Online Writing Instruction?
- 3. Why do faculty members prefer to select a Learning Management System for their Online Writing Instruction?
- 4. How do faculty members utilize a Learning Management System in Online Writing Instruction optimum?

Implementation of innovation in the education field is happening today, such as applying technology-based on Internet, website, blog, platform, social media, artificial intelligence, augmented reality, virtual reality, and learning management systems (LMS). Educational innovation aims to improve classroom practice to enhance student achievement (Darasawang & Reinders, 2015; Zulela et al., 2022). Integrating technology in teaching is recommended by (a) integrating technology training with other aspects of teacher education rather than developing stand-alone models, (b) focusing on transferable skills which nevertheless anchored in a specific context, as well as (c) prioritizing pedagogical rather than technological objectives, and (d) fostering collaboration among teachers (Setiawan et al., 2017; Whyte, 2015). In comparison, Shrestha (2014) clarified the merging of technologies in the EFL context to evoke independent learners, learner-centered activity, self-direction, learner readiness, and orientation.

The concept of an LMS is and the full scope continues to expand, driven by the ubiquitous access to the Internet and continued exploration of social networks, media, and games as spaces for learning and collaboration. Starting as a virtual learning space with a more top-down flow of information, the LMS now includes synchronous and asynchronous collaboration, file sharing, content creation by students and teachers, social networks, and social media. (Reshad, 2018). LMS terms are known, such as "learning management system" (LMS) and "course management system" (CMS) interchangeably, while the designation "Virtual Learning Environment" (VLE) is most prevalent in Europe and Asia (V Iasha et al., 2019; Kats, 2010). LMS must facilitate the learners with personalization to identify their learning boundaries based on their preferences and personal needs and help them collaborate based on information, thoughts, and knowledge entities (Rani et al., 2016). At the same time, Kasim & Khalid (2016) classified LMS into three types of tools (see Figure 1.) such as learning skills tools, communication tools, and productivity tools. An example of a learning module is creating activities and learning tools for students (e.g., quizzes, presentation tools, and assignments). Communication tools enable interaction between lecturers-students and students-students (e.g., announcements and discussion). Productivity tools in LMS include document management systems (e.g., uploading and downloading documents), storing students' records (e.g., marks from quizzes, assignments, and exams), calendars, surveys, and others.

FIGURE 1 TYPES OF LMS TOOLS



Several previous studies have deployed the benefits of utilizing LMS in the EFL area. Tawalbeh (2017) found that applying LMS in the EFL context has a positive attitude regarding its impact on learning, which

can be the starting point to help them be familiarized more with the Blackboard learning management system's features and functionalities through professional development. Meanwhile, Jeong (2017) revealed that the LMS Moodle incorporated flipped instruction in the EFL context, accomodating the students' communication, interaction, and sociocultural competence. On the other hand, most universities (around 90%) in Saudi Arabia use Blackboard LMS for teaching and learning activities. Still, there's no feature or tool available in any LMS to assist students or teachers in performing laboratory experiments in a distance learning field (Aldiab et al., 2019; Supena et al., 2020). Pavlenko (2020) recommended LMS Vector that displays a cognitive tag map to identify gaps in a student's knowledge and improve his learning trajectory. In the same line, Bezverhny et al. (2020) attempted LMS Vector as a multifunctional educational product that uses modern educational process approaches. It combines all the experience of classical teaching techniques and uses the latest developments in chatbots to make learning as practical and comfortable as possible.

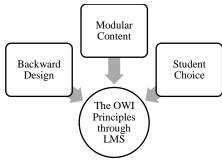
Additionally, personalization of use by teachers, high training costs, a lack of adequate formal student training, and tool complexity may prompt the need for teachers to talk and demo LMSs in the class (Robinson et al., 2019). Nonetheless, LMSs should be easy to use and provide transparency in the classroom that both students and teachers have an understated difficulty learning and using LMSs. Therefore, individual teachers can select the approaches that best fit their classroom practices by applying the various tools and features within the LMS.

At the same time, utilizing LMS is an inextricable and inarguable part of the OWI (Hutchison, 2019). Duin & Tham (Duin & Tham, 2020) deployed Canvas LMS as a medium for exchanging ideas and collaborative learning in OWI. The instructors may gain insight into student participation through students' contributions and group dynamics (e.g., group communication and material sharing). Al-Naibi et al.(2018) reported that Edmodo LMS played a remarkable impact on developing students' writing skills, such as a strong foundation for them to hone their writing abilities, create well-structured sentences, and conduct descriptive analysis, and emphasize better writing. Meanwhile, Laflen & Smith (2017) suggested in the OWI issues of feedback in LMS as follows 1) teachers should be wary of using the grade functions and consider not posting grades separate from feedback files, 2) teachers should make sure that technical problems aren't hindering students' access to feedback, 3) teachers should encourage or require students to actively engage feedback, and 4) teachers should carefully consider the timing of feedback. Laflen (2019) added that the timing of instructor feedback significantly impacts students' behavior as they access feedback and suggests that instructors prioritize feedback on preliminary drafts to encourage students to apply and transfer feedback. Topacio (Topacio, 2018) declared that students who received online-based lessons through University LMS improved their grammar, organization, tone, and style scores. Except for building content skills because of student's anxieties such as writing stress, learning style differences, cultural background, lack of learner autonomy skills, and overreliance on internet materials.

Henceforth, Harris & Greer (Harris & Greer, 2016) reassured that an online writing course should focus on writing instead of technology orientation or teaching students how to use learning and other technologies. Therefore, they promoted three principles on applying OWI through LMS: backward design, modular content, and student choice to course design that can help instructors design more thoughtful, participatory classes centered on student learning and instructor presence (see Figure 2). Backward design is one stage in a course design process, and the instructors advocate it as a starting point for any instructor seeking to design student-centered spaces into a writing course. In the backward design, the instructors correspond focusing on learner outcomes (e.g., focus on content or focus on learner action) and prompting in terms of observable and assessable (e.g., understand the function of logic, define logic, or its role in argument). Modular content is creating instructional content that is multimodal and accessible to a broader range of students. Multimodal content makes learning more accessible and engaging for different types of learners. Multimodal instruction supports chunked content by providing students with multiple entry points into each unit or module (e.g., designing course units around a weekly structure, each weekly (instructor screencast) explains the concepts and assignments for the week). Student choice refers to configurations that allow students to use various tools for completing assignments creates learning situations where students can use their own physical time and space differently. Three concrete ways to provide students

choice in both space and time in an online class is 1) have students choose from among different assignments, 2) have students choose between mediums of communication with peers and the instructor, or 3) allow multiple pathways to navigate content in online course design.

FIGURE 2
THE OWI PRINCIPLES THROUGH LMS



Harris & Geer, 2016

Given the complexity of OWI, the teacher better justify sufficient criteria from the available features of the LMS that can meet the student's needs and facilitate them during the instruction. Hence, this article aims to present faculty members' perspectives on utilizing LMS in OWI at a higher level in the Indonesian context.

METHODS

The applied study was qualitative to collect descriptive and visual-numerical data to gain insights into the phenomena of interest (L.R.Gay et al., 2012). The data collection was by giving an open-response questionnaire that consists of four main questions to the participants related to applying LMS in OWI. In qualitative research, the approach relies on general interviews or observations to not restrict participants' views. It collects the data with a few open-ended questions about its design (Creswell., 2012). To use an open response questionnaire because the items may explore an issue deeply by not restricting the respondents to a set of answers but asking them to express their ideas more fully (Heigham & Croker, 2009). The cited open-ended questionnaire was from (Kasim & Khalid, 2016) based on three types of LMS tools: learning, communication, and productivity. Also related to OWI, an adopted online interview was from (Harris & Greer, 2016) that involved backward design, modular content, and student choice in investigating the reasons for choosing LMS and implementing the OWI through LMS. The data analysis was in the thematic analysis led by the previous studies (Harris & Greer, 2016; Kasim & Khalid, 2016). The processes of data collection were online. It used Google Form, and its link was as follows (https://forms.gle/KuvPBAuF9y16oAZs9). Afterward, the semi-structured interview investigated deeper information related to the obtained questionnaires using WhatsApp messages. However, only six faculty members were ready for the interview. In addition, the consultation, communication, or verification toward the participants used WhatsApp messages. The participants were 17 writing lecturers with five males and 12 females above 25 years old who teach in different universities in Indonesia, consisting of 16 universities with three state universities and 13 private universities. To keep the ethics in this study, participants' and universities' names are pseudonyms as ethics play an essential role in how a discipline considers its field of knowledge, legitimate research areas within its domain, how to apply the research, and how its practitioners and researchers should behave (Hult et al., 2017). Besides, the LMS labels applied are attached to this study explanation. Table 1 shows the demographic of the participants and their LMS selection in OWI.

TABLE 1
THE PARTICIPANTS' DEMOGRAPHIC AND LMS APPLIED IN O

Gend	ler	Age		Univer	sity	LMS	
M/F	(%)	Range	(%)	Status	(%)	Brand	(%)
Male	29	25-30 YO	18	State	29	Google Classroom	47
Female	71	31-35 YO	35	Private	71	Moodle	23
		Above 36 YO	47			Microsoft Team	18
						Edmodo	6
						Schoology	6

FINDINGS AND DISCUSSIONS

The Characteristics of LMS

The study examined how faculty members view LMS in OWI. Table 2 presents the deployment of the participants to the characteristics of LMS regarding mediating in OWI. The most LMS preference is Google Classroom (47%), and the next one is Moodle LMS (university e-learning) (23%), then Microsoft Team (18%), and afterward Edmodo (6%), and Schoology (6%) (see Table 1). GC is the most familiar education media surrounding faculty members since it offers almost complete features supporting OWI.

However, each of the participants describing Google Classroom LMS is dissimilar. For instance, "PJ" pointed out that GC has almost all the list items except writing space, personal message, file storage, tool adaptation, and contextual learning. On the other hand, "UN" exposed the unavailable of the time restriction feature in the GC. Meanwhile, "SK" considered the unexisting of online student tracking. At a different point, "NB" and "MT" only delineated open-source, accessibility, and writing revision. "DP" checklist that GC needs addition on particular technical feature in supporting OWI. With a distinct view, "IA" depicted online student monitoring, storing, interacting, and learning context as prominent features too in GC.

On the contrary, "TI" doubted that GC improves students' motivation for learning writing. This indication aligns with Amin & Sundari (2020) finding that GC brings good potential as a language learning tool. Still, it is doubted for a sustainable course since it might need extended additional platforms or applications to create a more communicative and interactive session. Nevertheless, Albashtawi & Al Bataineh (2020) revealed that the writing instructors declared positive attitudes toward GC regarding its ease of use, usefulness, and accessibility. In the same line, Cahyono et al.(2019) suggested dwelling GC with autonomy learning to improve writing performance since they found it effective in their study. Even though the characteristics of GC description connected to OWI present almost exclusive features in the list items, the writing instructors should primarily comprehend all the features or tools that GC offers. Therefore, they can maximize the functions to achieve the writing outcomes and minimal technical issues during the OWI.

Secondly, Moodle is characterized in varied ways by the participants. "MM" described Md less in requiring storing and time restriction. Meanwhile, "SR" deployed that Md needs to provide in integrating with other systems and mediate in contextual learning. At the different lens, "UA" reckoned that synchronous and asynchronous interaction in Md is necessary. Concurrently, "UA" hesitated that Md may improve motivation and writing achievement.

FACULTY MEMBERS' PERCEPTION OF CHARACTERISTICS OF LMS IN OWI TABLE 2

							I	LMS/Participants	artici	ants							
Choractaristics	ЭĐ	ЭĐ	MT	ЭĐ	ЭĐ	ЭĐ	Md	\mathbf{MT}	Ed	ЭĐ	Md	Sc	ЭS	MT	Md	Md	CC
CHAI ACICI ISUCS	PJ	N	BN	\mathbf{SK}	NB NB	MT	MM	\mathbf{ST}	KE	DP	SR	KA	IA	В	UA	Z	II
Open Source	>	>		>	>	>	>		>	>	>		>		>	>	>
Commercial			>					>				>		>			
Able to integrate with other systems	>	>	>	>			>		>			>	>	>	>	>	>
Accessible	>	^	>		>		>	>			>	>	>	>	>		>
User-friendly	>	^		>			>	>	>	>	>	>	>	>	>		>
Synchronous and asynchronous interaction		^	>	>							>		>				
Able to see who is online	>		>				>		>					>		>	>
Personal space for draft writing		^	^					1		^	^	^			^	^	
Able to send and receive personal messages		>	>				>	>		>	>	>		>		>	
to other users		•	•				•	•		•	•	•		•		•	
Lecturers and students able to adapt and manage the courses in the software		/	>				/	<i>></i>	/	/			>	/	>	>	
Each user has a file storing utility and the shared storage with other users	<i>></i>	<i>></i>	>	>								>	>		>	>	
The entire content and course structure can be stored and backed up in the software	<i>></i>	<i>></i>	>								>	>		/		>	>
The administrator can restrict user access or give multiple roles to multiple users	>		>	>											>	>	
Provides contextual learning, able to																	
identify talent, improve the efficiency and		>	>	>			>			>				>		>	
Utilizing on lecturer's feedback	>	>	>	>			>	>		>	>	>	>	>	>	>	>
Utilizing student's writing revision	>	>	>	>		>	>	>	>	>	>	>	>	>	>	>	
Improving student's motivation for learning		>	>	>			>	/		>	>	>	^	>		>	
writing		,	,	,			,	,		,	,	,	,	,		,	,
Improving student writing achievement		>	>	>			>	>		>	>	>	>	>		>	>

*GC: Google Classroom; * MT: Microsoft Team; *Md: Moodle; *Ed: Edmodo; *Sc: Schoology

On the other hand, "NJ" cis oncerned with integrating, accessibility, and user friendly. However, empirical studies have revealed that Moodle delivered positive attitudes for OWI instructors. As Zaiarna (2020), Md provides all required conditions to achieve set aims and objectives in OWI, including administrative, training, and communicative tools. In the same line, El-Maghraby (2021) found that Md positively affected writing performance; otherwise, its application needed more on optimizing in the feedback process and guidance of each the functions of the tools in Md. Nevertheless, Fernando (2020), concerned Md in facilitating quizzes come short of accommodating some of the essential features of formative writing assessment. They are peer review or feedback and the dialogic nature of student-tutor interaction, while the development of Md quizzes may require time and effort. Consequently, navigating and understanding every single feature of Md before implementing on the OWI is crucial to overcome the lack during the instruction, including the technical and content issues.

Thirdly, the description of Microsoft Teams is almost comprehensive to available features in the list items. For example, "BN" illustrated that almost all list items exclude user-friendly. In the same line with Rojabi (2020), he found online learning via MT was categorized as something new for the Indonesian students' context and reluctant to establish online communication by MT toward the lecturer because it was pretty arduous. At a distinct point, "ST" figured that MT was less on software integration, synchronous and asynchronous interaction, online presence monitoring, filing storage, and contextual learning. Meanwhile, "BJ" considered MT on providing personal space for draft writing and filing storage. As Paul & Vanijja (2020) confirmed, it is equally important to evaluate the sustainability of learning platforms like MT. It will help provide insights into the extent to which these new tools can help achieve their intended and potential benefits. In other words, MT offers many facilities in supporting OWI. Yet, it needs a deep exploration to understand all its features since it is a new education tool as a teaching aid.

Fourthly, the depiction in selecting Edmodo as LMS in OWI was with more minor criteria. They were open-source, integrated with other systems, user-friendly, able to see who is online, easy to adapt and manage the courses in the software, and utilizing students' writing revision. At the same time, Yuliastri et al. (2018) revealed that Ed positively affected writing performance. Using Ed LMS played a remarkable impact on developing students' writing skills and students' interaction on creating a solid foundation for them to hone their abilities to write and form well-structured sentences (Al-Naibi et al., 2018). In a similar finding, Nurhayati (2019) reported that Ed offered some advantages such as being time-effective & efficient, unoblivious, simplifying learning material, interactive, communicative, expressive, reducing cheating tasks, recognizing class management, and creating a reading habit. Even though Ed also facilitated students' engagement cognitively during classroom sessions, there were some issues with the use of Ed, and such were bandwidth, confusion in using Ed, incompatibility of smartphone applications, and students' lack of responsibilities for learning (Purnawarman et al., 2016).

Lastly, the depiction of Schoology LMS was almost entirely on the list of items except for open-source, synchronous, and asynchronous interaction, presence of online monitoring, access restriction control, and contextual learning. As Carhill-Poza (2017) confirmed, Sc helped the teacher distribute the materials outside the class to bolster students' independent learning. In the same line, Masyhudianti et al. (2018) demonstrated that Sc effectively stimulated creativity in the scope of writing skills. Meanwhile, Zainnuri & Cahyaningrum (2017) found that Sc encouraged students to participate in activities in the form of discussion to ask students to give peer review, feedback, comment, suggestion, and opinion on their friends' work.

In deliberating the LMS characteristics obtained from various perspectives on the faculty members' lens, a particular space is necessary for a comprehensive understanding of each feature or function tool before applying in OWI. Moreover, integrating LMS in OWI required an in-depth evaluation that meets the students' needs, especially to achieve the writing outcomes. Kasim & Khalid (Kasim & Khalid, 2016) suggested choosing LMS to integrate into the course, at least covering learning tools, communication tools, and productivity tools. In addition, Zaiarna (Zaiarna, 2020) recommended considering LMS selection to achieve the objectives in OWI by including the components of administrative, training, and communicative tools. Besides, practicing or experimenting with the LMS features tools are also prominent for OWI

instructors and students to prevent the lack of technical content, interaction, and assessing issues while in the teaching process.

Obstacles and Expectation

The following finding discusses the obstacles and expectations of the faculty members' perspectives on the selected LMS in OWI, as shown in table 3.

TABLE 3
FACULTY MEMBERS' PERCEPTION OF OBSTACLES AND EXPECTATIONS OF LMS IN OW

LMS	Obstacles	Expectations
GC	Limited interaction	Provide interactive feedback features
	Lack of pair/group work activities	Provide scoring rubric
	Unavailable plagiarism checker	Provide the OWI stages (planning, drafting,
	Lack of engagement	writing, revising, final writing, and publishing)
	Internet connection	features
	Lack of online presence monitoring	Provide video conference feature
	Elusive of submission restriction control	Provide online presence monitoring
		Provide activity log/tracing
		Provide submission restriction control
MT	Lack of understanding of the LMS tool and	Provide video conference feature to share and
	functions from the students	collaborate related to the writing activities
	Internet connection	
Md	Unavailable plagiarism checker	Provide voice recorder and player to support
	Internet connection	feedback activities
		Provide plagiarism checker feature
Ed	Internet connection	Provide testing and assessment feature
Sc	Lack of extra direct explanation	Provide open-source access

Mainly participants described that frequently the obstacle in all selected LMS is the internet connection since internal instructors unfix it; otherwise, it relates to the cooperation with networking provider. However, the other obstacles are the interaction between instructors and students, particularly explanation, activities, building engagement, online presence monitoring, restriction control, and plagiarism checker. Meanwhile, the primary aim of the LMS supports learning content management, student schedules, attendance monitoring, and grading (Abazi-Bexheti et al., 2018). The illustration of expectations in Table 3 describes the participants' aspirations of the additional tools to support the LMS. In the fact that some of the LMSs don't provide the expectations. For instance, the anticipation of GC is on the attendance monitoring or restriction control, yet in the fact that it is unavailable while in Md, those features are available.

Consideration of LMS Selection in OWI

To achieve OWI results, faculty members select various LMS followed by specific considerations. This section discusses the concern that the data obtained came from online interviews with the question "What are your considerations in choosing (LMS brand) as an LMS in online writing instruction (OWI)?" and table 4 shows excerpts of the question.

TABLE 4
EXCERPT 1 THE CONSIDERATIONS OF CHOOSING THE LM

LMS	Excerpt		
GC	UN:" Choose GC because it is the most reliable and has exclusive features among other LMS.		
	Moreover, the university LMS is still not reliable. GC has exclusive features and is suitable		
	for learning to write as well as connecting with other Google applications." (24/08/21, 18:10)		
Md	UA: "University (Moodle) LMS is simple even though the layout is mundane, and no		
	"special" feature is offered to make it stand out, it is still convenient." (25/08/21, 10:20)		
	NJ: "University (Moodle) LMS is simpler and neater in the sense that I just upload the		
	teaching material files without having to manually create a forum (for example, if I use GC, I		
	have to design the contents of the class myself) while with LMS I just upload files in the		
	determining section that is already there. Then, all the material is exposed. Assignments,		
	exams and class interactions are neatly organized. Both attendance and interaction are		
	recorded neatly and securely." (25/08/21, 11:16)		
MT	BN:" MT is the compulsory platform for teaching the course." (25/08/21, 07:58)		
Ed	KE: "Easy to use and resettled the feedback between lecturers and students in teaching and		
	learning writing." (26/08/21, 14:26)		
Sc	KA: "When I taught writing, it was the first time I taught online, and Schoology was the		
	easiest platform I knew instead of Google Classroom and Moodle." (26/08/21, 23:10)		

The consideration of selecting GC is because of the reliability and fit to the OWI students. It may integrate with other Google applications since the institution's LMS lacks adequate support. The reason confirms Sukmawati and Nensia (2019) finding that GC is easy for teachers to carry out learning activities. The intended learning is in and outside the classroom because students can learn wherever and whenever by accessing GC online. At the same time, concerning selecting Moodle because of related to the institution facilities and the readiness of Md when the writing instructors use it. It can be valuable from the well-organized LMS features such as material distribution, interaction, scoring or grading, and attendance monitoring. In the same line with El-Maghraby (El-Maghraby, 2021) obtained the resulting study that integrating Md into writing course established engagement and productivity for both instructors and learners compared to the conventional face-to-face approach, also helped extend the students learning opportunities beyond the classroom. Therefore, it is highly recommended not only for writing but also for other skills.

Meanwhile, obtained data of the MT excerpt, the selection is because of the institutional policy that allows all faculty members to apply MT in their teaching process. In addition, the reasons may come from that MT application is accessible in downloading whether through a desktop or mobile applications, portable, able to connect to other social media, accommodating chat rooms, collaborative discussion, content sharing, and video conferencing (Rojabi, 2020). In addition, Schoology was chosen by the participant considering the light ways when utilizing this LMS for the instructor and student. In line with Yulastri et al. (Yulastri et al., 2018) confirmed that Ed provides posting assignments, quizzes, all materials related to the subjects, tasks, and feedback. From a similar perspective, Al-Naibi et al. (Al-Naibi et al., 2018) reported that Ed provided students with a very safe and friendly environment where they interacted with each other, brainstormed ideas and commented on various writings, offers extra time to practice using English outside the classroom, easy to use, and friendly interface.

On the other hand, Purnawarman et al. (Purnawarman et al., 2016) disconfirmed by finding Ed that has issues on bandwidth, confusion on the usage of the features, and incompatibility of smartphone applications. Nevertheless, the participant consideration for selecting the Schoology LMS was because of its simplicity compared to other LMSs. According to Zainnuri & Cahayaningrum (Zainnuri & Cahyaningrum, 2017), Sc enhanced the college students' writing proficiency by engaging in peer review, feedback, comment, suggestion, and opinion. In the same line, Schoology can be used as a medium to enhance students'

motivation, creativity, and critical thinking in writing. Low creativity students have insufficient reason and have tiny ideas that make them have difficulty writing (Masyhudianti et al., 2018).

Consecutively, in considering the most appropriate LMS in OWI, the faculty members were concerned with the functions and features easily used by them and their students. Kasim & Khalid (Kasim & Khalid, 2016) underlined that the main criterion in LMS copes providing learning tools, communication tools, and productivity tools. Even though a participant stated, it was because of institutional policy. The participants also divined whether delivering the materials and the OWI teaching process were accommodated or not. Their considerations involved in the backward design that the faculty members should do a profound observation before running the LMS in their OWI course (Harris & Greer, 2016). Hence, the preparatory activities on utilizing LMS before the OWI, such as a comprehensive preparation specialized for composition instruction, including their features and specific implications of the features relevant to composition instruction, are essential (Hutchison, 2019).

The Implementation of LMS in OWI

In conducting OWI via selected LMS, the faculty members also described the way of its implementation. Firstly, coming up with the question, "How is the LMS that you use facilitating the distribution of the writing materials content that you present sequentially?" The excerpt finding revealed that all the LMSs provide the materials' features. In addition, all LMS accommodate the attaching resource links or external files. Therefore, all the LMSs support the criteria for supplying the learning tools in OWI(Kasim & Khalid, 2016). The excerpt is available in Table 5. Excerpt 2. (enclosed in the Appendices). One of the excerpts stated by the participant as follows:

BN: "The MT is a part of Office 365, which supports the users with MS Office applications. MT allows me to use word processors, PowerPoint, calls, chat, assignments, calendar, video meetings, forms, and notebook alongside add-in applications other than Office 365, for example, YouTube, stickers, Adobe. So, yes, I must say that MT offers the features I need to deliver the writing materials." (25/08/21, 07:58)

Principally, LMS accommodates in the OWI by facilitating learning skill tools is crucial. Hutchinson (Hutchison, 2019), when we want to use an LMS for online writing courses, should assess how well its tools help meet the course objectives. In the same line, Salisbury (Salisbury, 2018) declared that the OWI instructors must understand how to operate, compose a well-balanced, and include critical reflection of the LMS on their teaching practices, whether face-to-face or online. On the other hand, if the LMS tools are inadequate or confusing, then taking Harris & Greer (Harris & Greer, 2016) advised that going "over, under, and through" is perhaps warranted and attended to how much additional work this creates for instructors and students. In addition, efficiency must always be balanced with sufficiency, or the ecology of OWI becomes quickly unsustainable (Hutchison, 2019). One of the excerpts displayed is potentially considering selecting LMS as one of the aspects of the learning tools and modular content.

Subsequently, the following finding of LMSs implementation that related to the writing activities as the questions "How is the LMS that you use in facilitating the writing activities (pre-writing-draftingrevising-final writing) that you present sequentially?" From the displaying excerpts in Table 6. Excerpt 3 (enclosed in the Appendices), all the LMSs provide simplicity in facilitating the writing activities. However, two LMS (GC and MT) may connect to other platforms to support the writing activities. As in the following excerpts:

UN: "Write a summary or write in GC then (connected to Google Docs)...." (25/08/21, 10:40).

BN: "The MT platform allows me to use OneNote – the 'online notebook' of 365 Office – to share, write, and work with students without sharing the laptop/computer screen..." (25/08/21, 07:58)

Considering efficiency, an LMS provided all the materials and writing activities automatically appropriately. Nevertheless, the extension platform may offer better features, so it should hyperlink the writing activities. Harris & Gree(Harris & Greer, 2016) informed that Google Docs provides a more helpful framework for student collaboration. Many students will need to use it in professional workplaces, so a writing course helps students practice real-time collaboration in the Google apps. At the same time, Quezada-Sarmiento et al. (2017) used the OneNote tool as it was considered the most suitable for improving writing skills due to the facilities and access. Even though the extending platforms are needed, it is more concerning how the LMS may assign writing activities first.

The upcoming finding is about LMSs implementation that pertained to achieving the writing outcomes as the questions" How is the LMS that you use in teaching writing help your students to attain the targeted outcomes?" The obtained data from the excerpts Table 7. Excerpt 4 (enclosed in the Appendices) resulted in two views for the LMSs such as MT, Ed, and Sc that seemed optimally help the instructors to achieve the targeted outcomes, while GC and Md were inadequate. The following are part of the excerpts:

UN: "GC is not enough to be able to achieve the output target, GC doesn't have a feedback feature, so you have to use GDocs, and for meetings, you have to be assisted by GMeet, which is sometimes visually inaccurate (at that time)." (24/08/21, 18:10)

UA: "I don't see the Md LMS as a medium to help significantly I only see it as a medium to organize materials, I am not sure the LMS has a significant impact." (25/08/21, 10:24)

Harris & Gree(Harris & Greer, 2016) clarified that once a series of learning activities, instructors identify tools and concepts students will need at each journey toward the outcomes. In this backward design, the faculty member reflected on the student's process in achieving the results where the tools facilitate optimally/minimally to reach the output/outcome. However, the user-centered design of LMS should be a priority. It is a fact that an LMS is only a learning medium. On the other hand, the initiative from the instructors to apply other platforms to fill inadequately from the LMS is necessary.

Furthermore, the finding of LMSs implementation related to the feedback activities is the question" How is the feedback process for lecturer-student or student-student through the LMS that you use?" (Table 8. Excerpt 5. enclosed in the Appendices). The feedback issue is mainly part of the writing activities since the instructors scaffold the students to produce an expected artifact. Nevertheless, not all LMS provide specifically on feedback space. The following are two of the excerpts on the feedback issues:

UN: "Not much feedback on GC, I helped Gdocs or synchronous sessions with zoom." (24/08/21, 18:10)

NJ: "It is not sufficient to have written interactions on discussion/chat forums in the Md LMS, but there must be direct interaction with the big blue button on the LMS or zoom to ensure student understanding and respond to problems or questions from students." (25/08/21, 11:28)

The deficient LMS tools, such as in GC and Md LMS, required creativity and initiative from the instructors. The faculty member might be more flexible such as using external web tools to embed content over the standard LMS and providing more multimodal instruction than the LMS might allow (Harris & Greer, 2016). Since encouraging feedback needs live scaffolding from the instructors, applying the multimodal is applicable.

Next, the obtained excerpt is about LMSs implementation in the writing collaboration as the question "How is the collaboration process when learning writing through the LMS that you use?" By the finding on the displayed excerpt Table 9. Excerpt 6 (enclosed in the Appendices) GC and MD LMS was inadequate on conducting collaborative writing activities; if any, they must connect to other platforms. However, one of the participants stated that lack of tools that support collaboration activities. As in the following excerpt:

UN: "The collaborative task process cannot be thoroughly carried out only with GC, it must be assisted by other platforms." (24/08/21, 18:10)

UA: "I am not sure with collaborations in Md LMS. I did more collaborations... I was using Padlet..." (25/08/21, 10:31)

NJ: "Collaboration/grouping activities in the Md LMS are provided, but I don't understand how to use them so that group exercises will be guided via WAG, students will interact via *WAG with each other...*" (25/08/21, 11:39)

Practicing student collaboration in OWI is also a prominent part of attaining the outcome and building the social interaction field (Harris & Greer, 2016). At the same point, Duin & Tham (Duin & Tham, 2020) declared that an LMS could be a medium for exchanging ideas and collaborative learning, generating sociocognitive development. And, the instructors may gain insight into student participation through students' contributions and group dynamics (e.g., group communication and material sharing). Nonetheless, not all the LMSs facilitate the tools for writing collaboration. However, Harris & Greer (2016) advised developing modular content that multimodal may support. For instance, the instructors embed a video conference link, video link, or real-time typing link (e.g., GoogleDocs) otherwise, as the participants practiced using a message application (e.g., WhatsApp) or other platforms (e.g., Paddle) to establish in writing collaboration. Even though the movement from the LMS to other platforms sounds unpractical, the students' enhancement of the writing process is a priority. Therefore, it is necessary to add additional applications or platforms to cover the inadequate of the LMS.

Next, LMSs implementation related to the writing activities for student choice as the question: "How does the LMS that you use provide options and opportunities for students to have the freedom to choose various methods of submitting assignments (e.g., through Google docs, pdf, scanned document, youtube, video recording, google drive link, or others) media?" (Table 10. Excerpt 7. enclosed in the Appendices). The excerpt presents that all the LMSs provide the navigation features that lead the instructors or students to select media freely in distributing or submitting writing assignments or tasks. As the following excerpts:

UN: "LMS, mainly GC provides in distributing materials and submitting assignments for asynchronous sessions. I use the link feature to get access to other files." (24/08/21, 18:10)

KE: "In the assignment feature, the student can attach the tasks in Edmodo." (26/08/21, 14:26)

KA: "The Schoology facilitates users with the options what to upload. it can be through direct link or file." (26/08/21, 23:10)

Giving students navigational, content, and medium choice in joining and engaging OWI course may include flexibility in sharing materials or submitting assignments (Harris & Greer, 2016). As all LMSs accommodate the features that can hyperlink to upload or download in all kinds of various files and sizes. Duin & Tham (2020) offered students multiple submission options depending on the assignment (e.g., websites, video, audio, document files). They didn't include specialized tasks for individual students or exempt students from some assignments. Therefore, the hallmarks of the LMS involve student choices in adaptability, customization, and pedagogical flexibility.

Finally, the following finding of LMSs implementation related to the LMS in facilitating scoring as the question "How is the LMS that you use enabling scoring?" The obtained data from the excerpt revealed that basically, all the LMSs provide a space for scoring. However, to pursue the detailed OWI objectives for the instructors subjectively, some LMSs are inadequate such as in the following excerpt:

UN: "I use the assignment feature to collect exam documents. GC also provides a scoring part, so it's easier in terms of grading/scoring, but I tried to be more detailed in the scoring criteria, it didn't work." (24/08/21, 18:10)

UA: "Scoring feature is actually there in the Md LMS, but I never really use it (as far as I remember) because the interface is not very friendly. The scoring box is individual, forcing us to find the essay first then input the score, which is very time-consuming. Although I feel that I have to explore the Md LMS for a better experience and see if perhaps there are features I do not realize yet." (25/08/21, 10:36)

NJ: "Substantially the Md LMS has prepared a question bank and grading report well, unfortunately, the Md LMS grading system is not yet connected to the Academic Division, so it is very inefficient in time and energy..." (25/08/21, 10:45)

One of the criterion tools in the LMS is assessment tools and reports of learning progress and student activities (Kasim & Khalid, 2016). At the same time, Salisbury (Salisbury, 2018) is concerned that the LMS provides administrative tools like grading center, plagiarism checker tool, and submission date reminder. In addition, the grading tool in the LMS is crucial since the student can monitor the achievement of the writing competence development (Duin & Tham, 2020). As described in the excerpt that all the LMSs standardly provide, all the LMSs standardly provide scoring/grading features. However, grading in the OWI seems complex that there must be available clarity in the scoring rubric and the justification of each score. Therefore, it needs more profound and further studies, particularly in the specific writing scoring discussion. Moreover, the consideration of LMS features related to the scoring tools, particularly for the OWI needs, for instance, that appeared by the participants such as grading integrating with the rubric calculation, friendly scoring usage, and integrating to another server (e.g., Academic Division) is essential.

CONCLUSION

The Learning Management System (LMS) is a medium designed to help the faculty members in the pedagogical process including in Online Writing Instruction (OWI). LMSs offered various features to accommodate in OWI. However, the faculty members have multiple perspectives in implementing LMS in OWI in the Indonesian context. Beginning from deploying LMSs characteristics, the participants applied Google Classroom, Moodle, Microsoft Teams, Edmodo, and Schoology in OWI. Meanwhile, the descriptions of all the LMSs have displayed the required tools, such as providing learning tools, communication tools, and productivity tools. Even though some LMSs need to integrate with external multimodal like applications or platforms to support the OWI activities such as conducting a video conference, distributing materials, and grading.

Moreover, the initiative and creativity of the instructors to enhance the OWI sustainability through the LMS is required, for instance, conducting hyperlinks, embedding other resources, or connecting to other multimodal. Furthermore, in deliberating LMS, the participants met the obstacles and generated the expectations. In addition, the participants illustrated the OWI implementation through LMSs regarding the writing materials distribution, the writing activities, facilitating to achieve the writing outcomes, encouraging the feedback, facilitating the collaboration activities, and discretion student choice in the task/assignment submission, and facilitating the scoring. Concerning OWI implementation through the LMS is supposed to cover the scope of the principles such as backward design, modular content, and student choice. Nevertheless, this study meets a limited number of participants that cannot be generalized. Additionally, further research on LMSs in the OWI field is still broad, such as designing LMS, developing materials in LMS, integrating multimodal through the LMS, and so forth.

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