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Exploring Experiences: University Students' and Lecturers' Engagement with Schoology for Online Assessment

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ABSTRACT: This mixed-methods research investigated how Indonesian learners and lecturers perceive Schoology, an interactive learning management system, in blended learning contexts. Through structured questionnaires and interviews involving 25 lecturers and 220 students, data were analysed using SPSS and triangulated for validity. The findings provide insights that although Schoology has strengths in its feasibility and user-friendliness for teaching and assessment, participants also reported concerns about internet reliability, trust, plagiarism, and the risk of cheating.

Keywords: schoology, e-assessment security, blended learning, lecturer-student perception in higher education

ABSTRAK: *Penelitian dengan metode campuran ini mengkaji persepsi mahasiswa dan dosen di Indonesia terhadap Schoology, sebuah sistem manajemen pembelajaran interaktif, dalam konteks pembelajaran bauran. Data dikumpulkan melalui kuesioner terstruktur dan wawancara yang melibatkan 25 dosen dan 220 mahasiswa, kemudian dianalisis menggunakan SPSS serta ditriangulasi untuk menjamin validitas. Hasil penelitian menunjukkan bahwa meskipun Schoology memiliki keunggulan dari segi kelayakan dan kemudahan penggunaan dalam proses pembelajaran dan penilaian, para partisipan juga menyampaikan sejumlah kekhawatiran terkait keandalan internet, tingkat kepercayaan, plagiarisme, serta risiko kecurangan.*

Kata kunci: *keamanan e-penilaian, pembelajaran bauran, persepsi dosen-mahasiswa di pendidikan tinggi, Schoology*.

INTRODUCTION

The shift towards blended learning has fundamentally changed how people interact and perform routine educational tasks. Blended learning, which integrates traditional face-to-face instruction with online activities, has become increasingly important as educational institutions seek to leverage the benefits of both modes. This approach allows for more flexibility in learning, accommodating

the need for information, knowledge, and interaction both online and in-person. The Indonesian Ministry of Education encourages the educational system to utilize blended learning to maintain and enhance the teaching and learning process. Consequently, learning now combines regular face-to-face classes with digital and virtual components, where classroom interaction and assessment are facilitated both in physical classrooms and online platforms.

In analyzing teaching and learning practices, several scholars argue that these processes undergo various developments that not only extend beyond technology but also expose discrepancies between methods and procedures in the classroom. (Li, 2023; Vaghela & Parsana, 2024). Several Learning Management Systems (LMS) are commonly in use in education. Schoology is one such Learning Management System (LMS) feature that allows educators to combine both traditional classroom and online learning. Schoology facilitates teachers and students with various tools to carry out the learning process and interact with each other, such as social media (Aminoto & PAthoni, 2014; Virdinarti Putra & Yulfani, 2022; Widianingsih et al., 2021). It includes features that allow for the automatic management and delivery of learning materials, quizzes, assessments, etc., making it an ideal platform for blended learning environments (Bhadri & Patil, 2022; Riad et al., 2009; Sukirno et al., 2021). The effectiveness of integrating traditional and online modes in blended learning is highlighted by the increasing engagement of students in this model, as observed in various educational settings (Adams et al., 2020; Abednego et al., 2023; Cai, 2024; Rix, 2011). The study, therefore, will bridge the gap in the undertsanding of the benefits and challenges concerning the use of Schoology in the Indonesian classrooms.

Assessment measures based on students' results help teachers or educators improve the quality of learning and teaching. Online assessment can mean a student assessment process using a website or application. The main advantage of online assessment is the flexibility of the time and place of the test (Baleni, 2015; Hidayat & Syamsi, 2022; Sonpipare et al., 2022). Numerous authors supported this view and found that online assessment provides other advantages for educators, such as auto-correction, quality feedback, and valid and reliable discussions (Khairil & Mokshein, 2018; Peat & Franklin, 2002; Walsh, 2015). Similarly, scholars assert that participants' perceptions of alternative assessments through web 2.0 tools are positive (Cirit, 2015; Luo et al., 2020). Likewise, most of their participants reported being comfortable with online assessments (Khan & Khan, 2019; Usir & Ahamad, 2017). In addition, the studies also found several benefits of using E-assessment, including students getting direct input (Marimuthu & Ramraj, 2019; et al., 2018; Wang & Kubincová, 2017). Drawing on extensive sources, the studies investigated students' perceptions regarding the use of online assessment in Schoology within classroom settings. The findings from these researches indicate that students generally hold a positive perception of online assessments (Amalia, 2018; Trinh & Trinh, 2023; Ziraba & Nforgwei, 2019). The present study is an attempt to understand the perceptions concerning Schoology in the Indonesian context. It explores the following research questions: 1) How do Indonesian students and lecturers perceive the use of Schoology as an alternative

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online assessment platform in Higher Education? 2)What are the benefits of using Schoology as an alternative online assessment in Higher Education?

Although there are hundreds of studies on online assessment and perceptions across various academic disciplines, there have been few empirical investigations into students' and lecturers' perceptions and the benefits of using Schoology as an online assessment. Therefore, this study has established students' and lecturers' perceptions about using Schoology as an alternative online assessment platform. In addition, it assesses the benefits of using Schoology. In light of these facts, the study fills the gap by enriching the understanding of Schoology as a platform and seeks to achieve the objectives mentioned above. By incorporating 30 questions into the questionnaire, the present study develops a holistic understanding of the platform's use in terms of clarity, efficiency, ease of use, students' performance, time management, and access, etc.

Schoology: An Alternative Online Assessment and ICT Development

Internet use has increased rapidly due to technological advancements that may offer many opportunities in many walks of life to enhance competencies, particularly in education. The demands of the 21st century have brought some frameworks that currently focus on specific competencies and engage the use of ICT learning, including collaboration, critical thinking, technology, digital literacy, and problem-solving (Rabiman et al., 2020; Salas-Pilco, 2013; Silber-Varod et al., 2019). While blended learning develops, enabling the integration of online platforms as part of technological advancement literacy in higher education, which has become essential, technological advancements require a focus on essential skills factors, such as mastering information, media, and technology-related skills (Mokhtari, 2023; Silitubun et al., 2024). In blended learning settings, learners take on more responsibility, flexibility, and independence, making self-regulation a vital factor for success in online education (Albelbisi & Yusop, 2019; Lim et al., 2020). More studies highlight the advantages of these educational approaches involving information and communication technology (ICT) which support collaborative, interactive, self-driven, and lifelong learning, without investigating the impact of the assessment and learning outcomes from the utilization of any specific learning system (Asamoah, 2021; Elmi et al., 2024; Jimoyiannis & Komis, 2007; Sahija & Cruz, 2022).

As a result of the development of technology for teaching - learning, lecturers might integrate the internet to promote new ideas, methods, and practices for higher education, to implement helpful teaching - learning that fits students' needs. Regarding this issue, implementing technology for teaching and learning will require platforms or media, such as a Learning Management System or LMS, a kind of weblog that promotes integrating traditional classroom and online modes (Bhadri & Patil, 2022; Hrastinski, 2008; Rahman et al., 2019). Schoology, an interactive learning management system and an online social learning network used by seven million users worldwide, was established in 2007 by four college students named Jeremy Friedman, Ryan Hwang, Tim Trinidad, and Bill Kindler (Sarrab et al., 2016).

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As technology for teaching and learning develops, lecturers need platforms or media for better ideas, methods, and practices that fit to teach in higher education based on students' needs, one of them is known as Learning Management System or LMS, a sort of weblog that promotes integrating traditional classroom and online modes (Bhadri & Patil, 2022; Hrastinski, 2008; Rahman et al., 2019). Schoology, established in 2007 by four college students named Jeremy Friedman, Ryan Hwang, Tim Trinidad, and Bill Kindler, offers interactive learning management system and an online social learning network used by seven million users worldwide, was (Sarrab et al., 2016). Several studies reported its strengths, related to the features that promote administration, documentation, tracking, reporting, classroom events, and e-learning program, enabling teachers to systematically administer the learning materials, assignments and assessments (Ardi, 2017; Husain et al., 2017), however, other research emphasized some issues related its quality on feedback or assessment for users' learning evaluation (Atikah & Amelia, 2024; Brown, 2019).

Although questions on its practices still remain, some students believe that Schoology brings benefits in terms of its accessibility, ease of use, capacity to provide a vast opportunity to access the materials, and possibility for students and teachers to have a discussion anytime and anywhere by posting comments or responses through private messages (Sukirno et al., 2021), such a good option to support effective distance learning that support students' learning (Adams et al., 2020). Some studies point out that Schoology accommodates students' preferences regarding the assessment options (Chauhan et al., 2024; Furnham et al., 2008; Mingo et al., 2018). Students with high confidence in their academic ability and good learning skills would prefer the assessment with essay-type examination rather than multiple-choice questions Meanwhile, students with low confidence in their academic knowledge and poor learning skills tend to prefer the multiple-choice assessment to the constructed-response type. However, evaluation is needed regarding how these modes can really impact students' confidence and academic improvements. Besides, teachers who need to expand their professional networks to grow as educators, tend to use digital sites frequently, then start being concerned with evaluation practices, believing that assessment is essential to influence students' learning (Novković Cvetković et al., 2023; Struyven et al., 2005). Even tough more studies reported positive reviews on Schoology on its flexibility and effectiveness (Adams et al., 2020), some also found challenges and technical barriers, including its implementation include class limitations, boredom, and limited interactions. Additionally, educators need extra time to prepare well-organized teaching materials before the learners access the materials (Rabiman et al., 2020).

Regardless of those gaps and challenges, Schoology is assumed to be designed based on the students' and educators' needs to facilitate blended learning in an increasingly digital and flexible educational environment. With adaptable features Schoology could offer, this online platform seems promising for teacher-student interaction in blended learning mode. In the other hand, more reports on its best practices or evidence-based insights are definitely needed for

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better implementations. Recognizing this need, this present research specifically observes the use of Schoology for assessment purposes, reviewing the experience given by teachers and students during their blended learning mode.

RESEARCH METHOD

The present study employs a mixed-method approach that combines qualitative and quantitative data to explore the use of Schoology within a blended learning framework. The researchers used a quantitative approach since the research needed a wide range of participants, while the qualitative method offers an adequate data description. As a result, the qualitative study was prepared according to the procedure used by Miles and Huberman, as cited in Aminudin, Haryanti, and Sutopo (2018), who define collecting, reducing, and presenting data, and drawing conclusions, as the interactive stages of analysis. The participants who contributed to this study included 25 lecturers and 220 students in Indonesia. They were lecturers and students with at least a semester of experience using Schoology.

Data were collected using two instruments: a questionnaire and a formal interview. The questionnaire determined the lecturers' and students' perceptions of using Schoology as an alternative online assessment. In ensuring validity, the study adopted Likert scale questions based on the previously carried out related studies, which were adapted to be relevant to the present study. It used five-point scales: strongly agree, agree, slightly agree, disagree, and strongly disagree, for balanced answer options, distributed and collected through Google Forms from March 1st to May 1st, 2022. The formal interview was conducted randomly with ten lecturers, then named 'LR' and ten students named 'SR' to validate the answers to the questionnaire. To make each interviewee feel as comfortable as possible, the interviewer used a WhatsApp feature called Voice Note (VN) to record the interview session. The collected data of the questionnaire in the field were measured by performing SPSS statistics version 21, triangulated, and analyzed. The data tabulation measures the levels of lecturers' and students' perceptions about using the Schoology platform as an alternative online assessment tool in higher education. While to establish the level of respondents' achievement (LRA) criteria, the data were analyzed by adapting the formula used by Arikunto's concept (2009) as follows:

$$\boldsymbol{LRA} = \frac{Mean\ Score\ of\ Each\ Item}{Highest\ Score}\ X\ 100$$

The characteristic criteria of this study's respondents are in the result of LRA categorized as in the following table:

Table 1. Level of Respondent Achievement Criteria

Level of Respondent Achievement (LRA)	Criteria

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91 – 100	Very Good
81 – 90	Good
66 – 80	Quite Good
56 – 65	Poor
0 – 55	Bad

RESULT AND DISCUSSION

Students' Perceptions

The present study aimed to examine the students' and lecturers' perceptions of using the Schoology platform to promote alternative online assessment by measuring 15 questions classified into four indicator statements on the questionnaire distributed among 220 students as respondents of this study. The first set of analyses examined the students' perceptions of Schoology as an alternative assessment based on the questionnaire is illustrated through the table given below:

Table 2. Students' Perception of Results

No	Statement	Mean	LRA	Criteria
The Use of Schoology		**3.99**	**79.8**	**Quite Good**
1	Easy-to-use features in Schoology	4.10	82	Good
2	Using Schoology saves time	3.93	78.6	Quite Good
3	It helps me to learn the course by using Schoology	3.93	78.6	Quite Good
4	It is easy to take quizzes or tests in Schoology	3.98	79.6	Quite Good
The Instruction in Schoology		**3.94**	**78.8**	**Quite Good**
5	Instruction in doing the test is easy to understand	3.94	78.8	Quite Good
The benefit of Online Assessment in Schoology		**3.85**	**77**	**Quite Good**
6	I feel more comfortable working on tests per item than all the questions on one page	3.68	73.6	Quite Good
7	I feel comfortable working on an online test because no one is controlling	3.70	74	Quite Good
8	I can change my answer when doing an online test	3.93	78.6	Quite Good
9	I have enough time to check my answer before when doing an online test	3.82	76.4	Quite Good
10	Better and faster than paper assessment	4.10	82	Good
Challenges in doing Online Assessment in Schoology		**3.85**	**77**	**Quite Good**
11	It must think fast in doing the test	3.76	75.2	Quite Good
12	I can't answer quickly if the question is open-ended questions	3.75	75	Quite Good
13	It takes enough time to think while working on a test	3.91	78.2	Quite Good
14	I feel challenged when answering questions that are limited by time	3.46	69.2	Quite Good
15	It needs a good internet connection when doing an online test in Schoology	4.38	87.6	Good

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As shown in Table 2, the survey results reveal that students' perceptions of Schoology are generally positive. The first indicator, with a mean score of 3.99 and an LRA of 79.8, indicates that students view the platform's usability as 'quite good.' Similarly, the second statement of "The instruction in Schoology" revealed that the mean score is 3.94. The LRA of 78.8 shows that the criteria are 'quite good.' While both the third and the fourth statements of the indicator have a similar mean score (3.85) in terms of the "Benefit of online assessment in Schoology" and "Challenges in doing online assessment in Schoology." Both LRA of the third and fourth statements are 77 and categorized as 'quite good' of perception.

By the end of the survey and data collecting period, from 220 respondents, ten were selected to participate in a random interview to scrutinize the finding. They had to provide their opinion regarding four questions about the ease of using Schoology to do the exams or assignments, how Schoology provides instruction in doing the test, the benefit of Schoology for dealing with lecturers' assessments, and challenges or obstacles while working with Schoology in their assessment. In response to interview question 1, ten interviewees agreed that Schoology is handy in dealing with lecturers' exams or assignments. An important finding asserted by SR1 in the following:

> *"Schoology is easy to operate. When the tasks are available in Schoology, as long as having sufficient internet access, they are accessible whenever and wherever. The most thing I love is that while doing the tasks, I can discuss them with my friends since the exam is accessible anywhere. I can open and finish the tasks next to my friends".*

This reflects the survey's finding that students appreciate Schoology's flexibility and accessibility. However, some interviewees raised concerns. For example, SR10 prefers other platforms to Schoology that enable checking other students' works since those lecturers usually set the test in Schoology into random questions or options which might be different for each screen while accessing the assignments. This suggests that while Schoology's randomized assessments enhance security, it may also limit opportunities for peer collaboration and comparison. In contrast, The interviews of SR4, SR7, and SR9 depict Schoology as more effective and efficient while doing tests or assignments, even though it is the first time someone has operated Schoology. They found the platform efficient for completing assessments, reinforcing the overall positive perception in both the survey and interviews.

The next section of the interview concerned the clarity of instruction in Schoology. The results disclosed that a shared view among interviewees was that the instruction was understandable. Four interviewees, SR1, SR3, SR5, and SR6, argued that Schoology provides transparent time allocation and the deadlines of assignments so that students can manage their time while doing the exams or the assignments and prioritize which shall be done earlier according to the upcoming deadlines. Besides, other interviewees (SR5, SR7, SR9) alluded to the submission notification that can determine an 'on time' or 'late' submission.

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In the final part of the interview, interviewees were asked to assert their opinions on the benefits and challenges faced in conducting lecturers' assessments in Schoology. Most ten interviewees believed that Schoology is beneficial for dealing with lecturers' assessments. Meanwhile, SR5 and SR9 confessed that Schoology is user-friendly since the features are complete enough and easy to use. Two of the features mentioned by SR10 are 'Upcoming Assignment Feature' and 'Test Time for Each Page,' which encourage performing the test carefully. Another interviewee, SR2, commented that sometimes the uploaded materials in Schoology are still available. Therefore, those can be used as study sources to recall the materials. The most striking result from the interview done with SR7 is that Schoology is needs-based. Moreover, the assignment can still be uploaded to the submission box even though there is a notification for "late submission".

On the other hand, despite the benefits of Schoology, the interviewees also elaborated the challenges they faced. The results showed that half of the interviewees who answered this question reported similar opinions of challenges in terms of 'internet connection.' Suppose the connection is low when doing the assignments or tests. In that case, it will log out automatically, and Students shall re-login to finish those assignments, which will sometimes be time-consuming. Other challenges vocalized by SR9 about time notification for each question page that will be only clearly displayed when he used it on laptops, not smartphones. Regarding time notification for each question page, SR1 and SR2 argued that they encountered difficulties finishing the exams with unsure answers.

Lecturers' Perceptions

This section outlines the lecturers' insights toward the Schoology platform as an alternative online assessment in their classes. Table 3 below presents the summary of the statistics for three statements of indicator in the questionnaire that consists of 30 answers collected from 20 lecturers who participated in this study.

Table 3. Lecturers' Perceptions Results

No	Statement	Mean	LRA	Criteria
The Usefulness of Schoology Assessment		**3.86**	**77.2**	**Quite Good**
1	Using Schoology gave me greater control over my courses	4.00	80	Quite Good
2	Schoology improved my students' academic performance	3.56	71.2	Quite Good
3	Schoology improved my academic productivity	3.68	73.6	Quite Good
4	Schoology enhances the effectiveness of my teaching activities	4.04	80.8	Quite Good
5	Schoology improved the quality of the examination for students	3.76	75.2	Quite Good
6	Schoology provides an attractive test examination for students	3.64	72.8	Quite Good
7	Schoology is relevant to the course I teach	3.88	77.6	Quite Good
8	My university requires me to use Schoology for my test	3.76	75.2	Quite Good
9	Schoology makes marking easier	4.20	84	Good
10	Schoology is easier to do in my course	4.08	81.6	Good
Ease of Use of Schoology		**3.74**	**74,84**	**Quite Good**

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11	Overall, Schoology is easy to use	4.12	82.4	Good
12	I do not need someone to tell me the best way and time to use Schoology	3.60	72	Quite Good
13	Testing with Schoology does not require a lot of mental effort.	3.64	72.8	Quite Good
14	Due to ease of use, I will use Schoology for my courses in the future.	3.64	72.8	Quite Good
15	My students find Schoology Easy to Use	3.88	77.6	Quite Good
16	Schoology needs more technical skills in the computer that I do have	3.25	65	Poor
17	There is enough time to use Schoology for Test	4.05	81	Good
18	I do have sufficient access to Schoology resources	3.30	66	Quite Good
19	Set questions for Schoology takes up a little of my time	4.30	86	Good
20	Schoology is convenient for supervising	3.64	72.8	Quite Good
The Credibility of Assessment in Schoology		**3.54**	**70.8**	**Quite Good**
21	Schoology allows reusing questions	4.04	80.8	Quite Good
22	Schoology enables the assessment of a wide range of topics very quickly	3.80	76	Quite Good
23	Schoology reduces the time dedicated to marking	4.24	84.8	Good
24	Schoology enables more detailed knowledge of students' progress	3.48	69.6	Quite Good
25	Schoology leads to deep learning with more transient gains	3.08	61.6	Poor
26	Schoology allows course evaluation by lecturers to be undertaken more efficiently.	4.12	82.4	Good
27	Schoology allows testing of a superficial level of understanding.	3.68	73.6	Quite Good
28	Schoology measures students' ability to communicate with the lecturers	2.84	56.8	Poor
29	Schoology creates a propensity for original thinking during the test	3.04	60.8	Poor
30	Security measures during assessment using Schoology reduce plagiarism.	3.12	62.4	Poor

As presented in table 3 given above, the summary statistics for lecturers' perceptions concerning the use of Schoology as an alternative online assessment revealed that the mean score of the first statement of the indicator is higher (3.86) than the second (3.74) and the third (3.54). Those three statements of the indicator are classified into 'quite good' in which the LRA of the first statement of the indicator is 77.2, the second is 74.84, and the last report of the indicator is 70.8. In the final part of the survey, ten lecturers were selected randomly to contribute to the interview session to reinforce this study's findings. Eight items of the questionnaire in the first statement measured the extent to which lecturers' perceptions of the usefulness of Schoology to assess their students indicate a pretty good perception. Interestingly, items number 9 and 10 were shown to have a positive perception or namely 'good' of the criteria. Strong evidence of this was found when all lecturers of the interview agreed that Schoology helped them mark their students' works. Further analysis of the discussion found that six interviewees (LR2, LR3, LR4, LR6, LR7 and LR8) admitted that Schoology is relevant to the course they taught. Moreover, LR2, LR3, and LR7 argued that various

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features in Schoology allow lecturers to set different questions to attain assessment quality.

The next stage of the survey concerned lecturers' perceptions about the handy use of Schoology. This part consisted of 10 questions. Six questions (Q12, Q13, Q14, Q15, Q18, and Q20) responses are quite good, three questions (Q11, Q17, and Q19) as good, and the single most striking response (Q16) emerged from the data collection was poor. Various perspectives in the interview were expressed to reinforce the data finding related to the easy use of Schoology, specifically concerning time allocation to set the questions. This response was reassured by LR2, LR3, LR5, LR7, and LR9, underlining the integration of the online test generator site 'Blackboard Test Generator' (LR3, LR5, LR6, LR7, and LR8) into Schoology to assist the lecturers in formulating question later as an assessment given to students. What follows is an account of the interview section; a participant (LR6) proclaimed:

> *"Schoology is relatively handy for its users. We, as a lecturer, can easily import questions from one of the sites, namely 'Blackboard Test Generator.' But, somehow, I found difficulties since I could only implement multiple choice questions and not for different questions such as ordering type, true-false, and matching. It is quite tricky because sometimes it requires a good understanding of computer operations."*

This comment suggests that while external sites like 'Blackboard Test Generator' simplify the question creation process, certain features may require a higher level of computer literacy. Schoology offers various features for setting up questions, including the ability to integrate external sites. However, lecturers without adequate computer skills may struggle with these advanced options. Concerning the technical skill of using the computer when designing assessments in Schoology, correspondingly, LR7's response is essentially identical:

> *"Designing an assessment for Students in Schoology is quite simple. It must integrate into the 'Online Test Generator' to import questions to Schoology. Unfortunately, this only applies to the old version of Schoology, not the latest version. The latest version of Schoology entails better awareness of computers as a means to modify miscellaneous assessments."*

As LR7 pointed out, the latest version of Schoology demands more advanced computer skills, making it more challenging for lecturers to incorporate external test generators. This shift from the older to the newer version suggests a need for increased technical proficiency when using Schoology's more complex features for assessment design.

The results of the credibility of the assessment are summarized in TABLE 3 that the credibility of the assessment in Schoology was quite good because Schoology provides the opportunity for reusing questions. Lecturers admitted that using Schoology enables assessment of a wide range of topics very quickly and

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more detailed knowledge of students' progress. Schoology, for lecturers, can also be used to quiz students' comprehension at a surface level, which is fast and effective. In the survey, Q24-efficiency of grading got the highest mean score of 84.8 (good) and was statistically significant. Their interviews confirmed this conclusion, with most participants claiming that Schoology significantly enhanced grading efficiency, if the gradebook was adequately setup. One participant (LR10) commented:

> *"I do love Schoology rather than other platforms since it does not spend much time grading my students' tests. I need to download their results by clicking the 'transfer history menu,' and they easily will be converted into MS Excel forms."*

However, when the participants were asked about Q28, ' measuring students' ability to communicate with lecturers', and Q29, ' creating of original thinking during a test done by students, the response rate was 56.8 and 60.8, classified as 'poor.' As a sample of evidence found in the interview session, a respondent (LR4) acknowledged:

> *"In my perspective, Schoology is not applicable for assessing my students' ability to communicate since it did not provide live chat like WhatsApp, so it is quite difficult to follow up on my students' responses. Furthermore, I'm quite doubtful about the students' results since the test was undertaken online without any live face-to-face test control. Whenever I gave assignments, evaluations, or tests, I felt doubt of the originality of their works."*

Other interviewees, including LR1, LR8 and LR9 voiced similar concerns regarding a lack of academic integrity by students. They said students could easily just visit online sites, talk with friends or even hire someone to complete their work. In addition, LR5 noted that Schoology does not have plagiarism checking functionality such as Turnitin, so it is difficult to spot cheats.

Despite these challenges, interviewees suggested solutions to improve the validity of tests in Schoology. Zoom meetings were also suggested to be arranged for the live virtual test monitoring through LR1, LR8 and LR10 to address such absence of real time interaction. LR7 recommended the additional use of Safe Exam Browser (SEB) software to prevent student sharing during examinations. Likewise, LR6 and LR9 requested adding time limits to individual questions as well as randomizing questions or answer choices in an effort to minimize student collusion and/or access to answers over the web.

Although users in the survey seem to consider Schoology “moderately efficient” for grading, we would like to emphasize here mattered issues of communication, originality and safety that can not be set aside. The less satisfactory results obtained for Q28, Q29 suggest that while assessment management is identified as a strength of Schoology, it also has limitations in terms of academic integrity and student response. The interview previews offer

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some insights for these issues, including a few valuable glimpses of potential course-based solutions (like incorporating live monitoring and security structures) to the lack of student authenticity in both performance and communication on Schoology.

Discussion

The results of this study revealed that the students positively perceive the Schoology platform as an alternative assessment of teaching learning practices in higher education. The students would prefer to use online exams through Schoology rather than other platforms because it is convenient. They believed that Schoology features are user-friendly and handy to operate. Furthermore, the students feel comfortable with the technology they use, specifically in utilizing Schoology. This finding agrees with Cirit's (2015) result, which shows that students can work more efficiently if they are aware of the provided technologies to conceive and evaluate efforts to integrate technologies into the learning process. Therefore, technological awareness is required for both lecturers and students in teaching and learning.

The students are interested in online assessment since they believe it is much better than paper assessment. Schoology is visualized in an attractive and interactive display. The results are consistent with those of other studies and suggest that Schoology has innovative features where the users can easily share or upload images, documents, animations, and audio-videos (Rojabi, 2019; Yoshida, 2018). In contrast to the previous finding, however, paper assessments are assumed as monotonous assessments. There are no other media in written or paper assessments, such as online assessments. Therefore, the students are interested in doing online assessments using Schoology. The present findings seem to be consistent with other studies that found that students prefer to take online tests rather than written tests (Marriott, 2009; Yeboah, 2023). Accordingly, fulfilling compelling features can trigger students' desire to finish online assignments.

The students are captivated in using Schoology platforms for their flexibility and simplicity. Regarding flexibility, using Schoology, students can take tests anywhere and anytime in line with the due date of the test or task. Likewise, in terms of simplicity, the use of Schoology can be managed everywhere without bringing any test equipment to the classroom by the lecturers. These findings further support the idea that Schoology, an online learning platform, is flexible and easy to use. Interestingly, it has features to share materials or exercises, create an account easily, and turn in academic assignments from the teachers (Ferdianto & Dwiniasih, 2019). A possible explanation for these results is one of the most notable features of Schoology is that it is practical and flexible, which can save users' time.

The positive perceptions from both lecturers and students in Schoology's utility underscore its viability and ease as a platform that is in line with blended learning principles. The blended learning itself seeks to influence strong points of both online and face-to-face atmospheres to create a flexible student-centered

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learning experience (Hrastinski, 2008; Bhadri & Patil, 2022). The students confirmed that the Schoology's practicality, flexibility and user-friendly interface effectively eliminate distance matter, a key objective in blended models. The ease of use is not only convenient, but practical for learners to focus on mastering content rather than navigating software. In this context, it supports the self-regulated learning strategies (Albelbisi & Yusop, 2019). A deeper interpretation revealed that the functionality and logistical benefits such as accessibility, efficient grading and time saving resulted those positive perceptions.

Contrary to expectations that many students positively perceive the use of Schoology in online assessment, several students confirm the idea of the negative perception of online assessment through Schoology. The students argue that online assignments may be problematic and complicated enough. The students can face several problems with internet access, the high cost of the internet, and difficulties in managing test time. Despite the issue of using online assessments through Schoology, some students also feel that the online test system is complicated since the students are required to think and answer quickly so as not to exceed the provided time limit.

Another drawbacks identified is also interesting as risk of plagiarism, connection dependency become challenges in evaluating. It is not only technical problems, but also a fundamental challenge to assessment validity, reliability, and academic integrity in higher education. These issues outdo the platform and are dominant to wider issue on online assessment (Chapelle & Voss, 2008; Bukhari et al., 2022).The heavy dependence on steady internet connection highlighted by students worsens the digital gaps.

As pointed out in the introduction to this article, lecturers (and teachers) are considered subject matter experts whose instructional evaluations are crucial to consider (Hagen, 2020). The lecturers' perspectives in this study saw that Schoology is helpful and easy to use in instructional activities and assessment even though there are several concerns related to the assessment credibility. Despite its ease, there are technological demands for the lecturers-users and some needs that Schoology cannot accommodate, besides the fact that the latest version of Schoology provides more and more varied available features.

Regarding the usefulness of Schoology, all lecturers sharing their opinion in the interview of this study agree that Schoology can make marking their students' works more accessible, confirming the time efficiency benefits of online assessment (Baleni, 2015). The lecturers believe that Schoology is useful mainly related to student performance assessment activities and class control. They also think that Schoology improved the quality of the examination for students, improved their academic productivity, provided an attractive test examination, and improved their academic performance, demonstrating how learning management systems can enhance teaching activities in blended learning environments (Bhadri & Patil, 2022). These benefits are related to the ease of operating Schoology. The lecturers responded positively regarding the comfort and efficiency of time in managing questions and utilization for tests. They agree

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that Schoology is convenient to use. However, they still need Schoology resources and technical skills to optimize its use.

Related to assessment credibility using Schoology, some questionnaire aspects show positive responses from the lecturers regarding time efficiency to do an assessment and the ease they feel in course evaluation, aligning with findings about the efficiency of online assessment (Baleni, 2015). Schoology does not take time dedicated to marking the students' results as long as it has been adjusted for specific grading, as the teachers-users can set their scoring rubric for each assignment. The respondents (lecturers) feel helped because Schoology provides the facility to reuse questions and a wide range of topics, giving detailed information about students' progress, supporting the formative assessment approach that should provide chances to identify gaps (Green, 2014; Steen et al., 2022).

However, there are several negative responses related to the credibility of Schoology in providing assessment evidence. The lecturers doubt that Schoology leads to deep learning with more short gains, reflecting concerns about validity in online assessment (Chapelle & Voss, 2008). They also feel hesitant if it can measure students' ability to communicate with the lecturers. Schoology, they believe, cannot create a propensity for original thinking during a test, and it doesn't provide security during assessment using Schoology to reduce plagiarism, echoing identified challenges in online assessment security (Bukhari et al., 2022; Meney & Kitula, 2024). Thus, the lecturers thought Schoology insufficient for accommodating synchronous reviews of students' overall performance. They expect that there would be reliable features that enable students to demonstrate their understanding and application of concepts, accurately reflecting their true abilities in various forms of communication and problem-solving.

Schoology can sometimes be daunting to use, and this research highlights specific shortcomings or limitations that contribute to this, such as its inability to record voices or videos of students' performances for assessments as parts of evidence that accurately represent their practical abilities. The fact that Schoology lacks direct recording features greatly constrains teachers' opportunities to capture important dynamic and verbal aspects of student performance that cannot be captured through written assignments. This creates a gap in assessment evidence where Communication wrinkles, the reasoning behind verbalized logic, or practical movements may either be omitted from consideration or evaluated in an overly simplistic manner without rigorous objectivity and wholeness (Pongpirul & Jirathananuwat, 2018; Suhairom et al., 2024). As a result, instructors would want to avoid using authentic assessment options and will use contrived procedures instead, which require additional effort to collect evidence from other sites external to the learning environment, disrupting streamlined processes while compounding administrative load. From the learners' perspective, this feature may restrict their ability to exhibit fully breadth and depth of their capabilities whose expression is orally performed or visually demonstrated especially in pictures or videos which may erode their motivation towards learning activities that require fluent bodily expression. Hence, an ideal educational platform should

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provide extensive opportunities to capture as well as manage different forms of student performance evidences not restricted only to texts and multiple-choice questions for providing evaluation that is truly holistic and representative (Anghelo Josué et al., 2023; Yang, 2024).

In this study, the lecturers do not one-hundred percent agree that Schoology is a viable tool for measuring students' abilities, but they can use it for particular assignments. They can freely design questions following the types Schoology offers, including multiple choices, true/false, matching, ordering, fill-in-the-blank text, short answer/essay, audio, and video. These accessible choices allow teachers to accommodate a quiz or exercise as part of written evaluation. However, there are several concerns, including trustworthiness and limitations. Validity and security have become some of the issues in the assessment (Bukhari et al., 2022; Chapelle & Voss, 2008; Meney & Kitula, 2024).

One of the limitations found about assessment in Schoology is the lack of space for evidence of students' practical performances since there is no facility to record voice or videos of students' responses to a particular task. Although Schoology can provide varied types of assignments, cheating loopholes are always there. This gap directly impacts the validity of assessments intended to measure skills beyond written text, as it restricts the types of evidence that can be collected to demonstrate true understanding and application (Chapelle & Voss, 2008). Teachers cannot rely on what students do to judge and check students' actual understanding and development progress. There are possibilities of students getting help from other people or other test takers even though they are not allowed to do so. In addition, using the internet's search engine while they are working to seek help is also possible. Another issue is the essay writing work; this platform does not facilitate plagiarism checks. These are unavoidable limitations the teachers must consider and anticipate.

One of the essential things the teachers may want to consider in conducting assessments in Schoology is the type of assessment questions. Suppose the assessment is in the form of high-order thinking skill questions, reasoning exercises, and essays response rather than short phrases. Instructors should prioritize constructing questions that demand critical thinking and problem-solving, moving beyond simple recall to assess deeper understanding. This approach helps address fundamental concerns of validity and security in online assessment (Chapelle & Voss, 2008; Bukhari et al., 2022; Meney & Kitula, 2024). In that case, it may be sufficient to help with subjects such as Reading Comprehension, Essay Writing, Structure and Grammar, and Listening, especially if the students do it under supervision to ensure that what they do is the result of their original thinking process.

Schoology may provide a space for them to respond and communicate what they already know and can become a storehouse of their competence - related abilities evidence, supporting the formative assessment approach which should provide chances to identify gaps and suggestions for improvement (Green, 2014; Steen et al., 2022). However, still, there are possibilities for cheating, including using an internet search engine, machine translation, and other AI applications

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such as automated machine translation and other AI applications such as essay paraphrasers and developers, reflecting known challenges in online assessment validity and security (Bukhari et al., 2022; Meney & Kitula, 2024). Teachers can, however, choose to manage some anticipating strategies, such as adjusting assessment settings, including time limit, random question order, and potential points for each question during the attempt. Schoology is able for these options. Teachers can also configure whether students can flag questions for review, eliminate answer options, highlight text, and use a notepad.

As a result, a collaboration between students and teachers will significantly impact the assessment process. Teachers should communicate the direction of assessment that the students should follow, telling the purpose of monitoring progress and achievements, aiding them in the process of the competence, deepening their knowledge, and not all about grades. Students should also contribute to the effort and commitment of this assessment process. They need to be aware that the philosophy of learning is to develop their skills and that honesty is not to neglect when submitting factual information about their competence. Later, perceptions from both teachers and students are meaningful input for course technique or method evaluations, including assessments (Alzubi & Nazim, 2025; Zerihun et al., 2011).

There are things teachers can do to attempt a suitable assessment design to be effective, efficient, and meaningful for the students' understanding-related assessment. Their efforts include creating authentic quizzes and assessment tools unsearchable in internet search engines, investing time and energy to make and renew assessment models, and their creativity in implementing what they have designed. Using technology for assessment is a new challenge for some students, even their teachers. Although sometimes it can be time-consuming, they may find it very beneficial. One of the studies reveals how she successfully brought her students into filmmaking projects for formative assessments of their literature-based course and demonstrated communicative, innovative, and creative evaluation within the right design and implementation (Perry, 2018).

In conclusion, the use of Schoology, being accessible and valuable, also has the potential to be credible for assessment. This study proves that the tool helps lecturers organize students' assignments and portfolios. However, limitations are there to deal with, such as security and validity, and things Schoology cannot provide, such as no space being a storehouse of students' spoken elicitation and the absence of plagiarism checks. Thus, the students' factual competence can remain obscure if the design and implementation entirely rely on tasks given on Schoology without synchronous offline supervision. Most importantly, the lecturers, or teachers, as assessment designers, must consider formative assessment design elements, including content match, the chance to identify a gap, and suggestions for improvement (Green, 2014; Steen et al., 2022)

CONCLUSION

This study aimed to examine the attitudes of learners and lecturers about the use of Schoology as a platform for conducting online assessments in their blended

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learning class. The findings indicate that learners as well as lecturers hold a positive perception of Schoology, particularly regarding its convenience, flexibility, and usage. However, learners highlighted several difficulties, including time management challenges, internet accessibility, and confidence during examinations. Lecturers, however, express concerns regarding the risks of plagiarism and academic dishonesty in assessments, as it is impossible to monitor students' activities once questions are posted to Schoology.

These findings highlight the need for further investigation beyond simple perception investigation. Consequently, future research could focus on comparative analyses of Schoology against other online platforms, particularly on their efficacy in enhancing academic integrity. Moreover, exploring additional methods for detecting plagiarism, such as employing third-party plagiarism detection software alongside Schoology, should be considered to address concerns over academic dishonesty. Lastly, it is necessary to look at how Schoology can affect student involvement and learning results in different disciplines as well as the emotional experiences of lecturers and students during exams.

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Conflicts of Interest

The researchers declare that there is no conflict of interest in this work.

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