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Exploring Language Learners' Experiences and Perceptions of Sakai Online Exams at the University of Ghana

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ABSTRACT

The COVID-19 pandemic brought major changes to teaching, learning, and assessment in higher education. At the University of Ghana, many courses were delivered online; hence, some assessments had to be conducted virtually. One major response by the university was the introduction of Sakai-based exams, which could be taken either on campus or remotely. This approach, which was used to support traditional in-person exams, has now become a long-term method of assessment. This study aims to explore how language learners experience and perceive Sakai-based exams. Using a mixed-method approach and a sample size of 387, we gathered data from language learners at the School of Languages, University of Ghana, to examine their opinions, challenges, and overall satisfaction with online exams on the Sakai platform. The findings reveal that, despite challenges reported by language learners, such as the absence of special characters, technical issues, and inadequate support systems, approximately 73% prefer Sakai-based exams to traditional exams. Based on the respondents' experiences, this study makes the following recommendations: 1. There should be the inclusion of on-screen special characters for languages that require them. 2. Institutions of Higher Learning should have pre-recorded training sessions that tackle technical aspects of Sakai during exams. 3. There should be enhanced and real-time support systems during Sakai-based exams. The findings will help inform strategies to improve online assessment methods, ensuring they are fair, user-friendly and supportive of student success. These recommendations are valuable for both instructors and institutions as they continue to use digital tools in assessment.

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Introduction

In the era of growing instructional technology and assistive assessment tools that help improve teaching and learning, language learners seem to be a few steps behind in fully accessing all their benefits. As such, Hoque et al. (2020) argue that Learning Management Systems (henceforth LMS) need to address the specific needs of language learners. LMS has become essential in higher education globally, as they provide tools that support teaching, learning, and assessment. Studies have shown that LMS platforms can streamline examinations, support independent learning, and provide immediate feedback to students (Bui, 2022). They became widely used when universities were forced to adopt online and distance learning solutions to sustain academic activity during the COVID-19 pandemic (Khatser & Khatser, 2022). Even beyond the pandemic, pressures such as rising enrollments and limited physical infrastructure compelled institutions to adopt more blended learning approaches, making LMS platforms an essential part of the university ecosystem.

However, their effectiveness depends on the experiences of learners. For language learners in particular, online assessments present unique challenges such as difficulties with diacritics, written accent marks, and media integration. While existing research has examined LMS use in higher education broadly, less attention has been given to language learners' specific needs (Hoque et al., 2020). This gap is significant because language courses often require special features such as written accent marks and special characters not as critical in other fields, and overlooking them may limit the effectiveness, usability, accessibility and fairness of language-related assessments via these platforms.

At the University of Ghana, Sakai (LMS) has been operational for ten years now, at the time of this study. In this regard, the present study seeks to:

- Explore the effectiveness of Sakai-based assessments from the perspective of language learners at the School of Languages, University of Ghana.
- Examine the opinions, challenges, and overall satisfaction of language learners with the platform.

By analysing the perception of language learners, we can gain a deeper understanding of whether Sakai enhances assessment and allows them to really demonstrate their depth of knowledge and understanding of course items.

General Perceptions of Sakai LMS-based Exams

Learning Management Systems platforms have assessment tools embedded in them to administer and manage assessments. It enables instructors to create and grade

assessments efficiently (Slamet & Mukminatien, 2024). Research suggests that LMS-based assessments can help improve learning as they allow instructors to give timely feedback to students (Slamet & Mukminatien, 2024). In addition, the use of LMS has been shown to significantly reduce teachers' workload, with studies reporting up to a 40% decrease in marking time (Atkinson & Lim, 2013). Students generally view LMS-based examinations positively, highlighting friendly interfaces (Cakiroglu et al., 2017; Slamet & Mukminatien, 2024). This view is supported by Garg & Goel (2022), who argue that the ability to navigate LMS easily and receive instant feedback can make assessments more interactive and learner-centered. However, technical issues or insufficient support can undermine student confidence in the assessment process. As such, LMS platforms must fully support the exam process with reliable servers and technical help (Khare & Lam, 2008). Even though these perceptions explained above are coming from a general contextual background, they will serve as a basis for examining related perceptions by language learners from the University of Ghana context.

Comparison of Online vs. Traditional Exams

When comparing Sakai to traditional pen-and-paper examinations, Sakai offers significant logistical and pedagogical benefits. For example, automated grading, reduced marking times, and lower administrative costs ease the burden on instructors, particularly in large classes (Atkinson & Lim, 2013; Turner, 2015). For students, online formats can reduce exam-related anxiety, particularly in the arts and social sciences, where preparation for digital assessments is often perceived as less stressful (Cross et al., 2023). In sharp contrast to Cross et al. (2023), Al Hashimi et al (2022) reported that several respondents who were art and design students from the University of Bahrain and Petra University in Jordan preferred face-to-face to online exams. They attribute this preference to online learning and assessments negatively impacting their performance. Even though Atkinson & Lim (2013) revealed the advantages of online assessments, their observations did not specifically address their impact on language learners. We also observe that Cross et al. (2023) and Al Hashimi et al (2022) report on student preference on the use of online and face-to-face exam modes had no consideration specifically for language learners. Thus, in this study, we explore language learners' perception of online assessments.

Challenges in Online Assessment

There are multifaceted challenges emerging from technological, psychological, and procedural domains associated with the use of LMS platforms for assessments. Majola and Mudau (2022) posit that frequent technical challenges and unresponsive digital platforms can distract exam participation, thereby increase student anxiety and affect performance. It is important to note that these disruptions and distractions may not merely inconvenience learners, but they also affect the examination's fairness and reliability.

Also, Hoque et al. (2020) discovered that online platforms' current support for essential features like the incorporation of special characters, audio input, and interactive elements for valid and reliable language assessment is a challenge. This reveals a significant gap in both research and practice. With the knowledge that language assessments often require these features, it is essential to investigate this area about language learners' assessment. Thus, understanding the limitations and challenges of Sakai's design is crucial to improving its usage in language learning across diverse educational contexts like the University of Ghana.

Additionally, Majola and Mudau (2022) explain that in South Africa, frequent interruptions in power supply and unstable internet connectivity are the basis for some of the challenges faced during online-based exams. These conditions cause an intermittent cutting off of access during exams, causing frustration and sometimes forcing students to retake the exams. In the long run, the psychological burden on students who often feel helpless due to technical failures beyond their control deepens. With the University of Ghana being in a country faced with such a predicament, students may be exposed to challenges of a similar nature during Sakai-based online examinations.

Similarly, Romaniuk and Łukasiewicz-Wieleba (2021) reveal systemic issues such as sudden platform crashes or lagging during critical exam phases, which further temper with student confidence in the exam process. They establish the premise that many students rely on older computers or mobile devices that may not fully support Sakai's functionalities, leading to inconsistent interaction with exam materials and potential data loss. Malik (2023) observed that students used the new LMS because they could easily access it on their phones. Since this observation cuts across online examination platforms and some language learners at the University of Ghana are exposed to, it explains why we seek to explore the challenges that they face during Sakai-based online exams and propose solutions for these issues.

Moreover, diacritics and special characters are important features in language learning as noted in Akimov and Malin (2020). However, Yilmaz (2017) discloses that inconsistencies in how Sakai renders these characters across different browsers or devices can result in corrupted or missing text, further confusing examiners and unfairly penalizing learners who take the online-based assessments. The challenges directly undermine and impact language learners' confidence and motivation. This calls for intervention, especially on the part of language learners. Hence, the study addresses the situation and suggests ways to make Sakai-based exams fair to language learners.

Support Systems in Digital Assessments

Amid these challenges, Romaniuk & Łukasiewicz-Wieleba (2021) state that faculty members play a pivotal role in addressing challenges related to online assessment contexts. Their roles include mastering Sakai's functionalities, anticipating common student difficulties, and devising flexible assessment approaches that accommodate varying learner capabilities and technical constraints. Also, faculty availability for prompt communication alleviates student anxiety and clarifies expectations, fostering a more supportive examination environment. Likewise, Majola and Mudau (2022) suggest that institutional support structures are useful in controlling technical and procedural difficulties experienced by students during online exams. Instituting effective and accessible IT help desks constitutes a great step for addressing issues ranging from login troubles and software problems to real-time connectivity disruptions. Their responsiveness and competence influence student exam confidence and success. Again, Abeywickrama and Dissanayake (2022) reveal that comprehensive training programs focusing on Sakai's functionalities and exam protocols enhance learner familiarity and reduce avoidable errors. Initiatives such as orientation sessions, practice exams, and available tutorials enable students to anticipate and navigate exam conditions. Additionally, Yilmaz (2017) posits that continuous technical support during live exam sessions offers critical intervention opportunities, preventing minor issues from escalating into major disruptions.

Similarly, Reedy et al (2021) state that faculty willingness to adapt assessment formats based on learner feedback signifies a student-centered approach that acknowledges emerging challenges. They propose that relaxing time constraints or redesigning question types can significantly improve inclusivity and fairness. On this claim, Khan et al. (2021) also stipulate that instructors often serve as intermediaries between students and IT departments, transmitting technical guidance and mediating support access. Moreover, Munyaradzi et al (2022) found that lack of user expertise and inadequate support for lecturers and learners impacted their willingness to use the LMS platform.

The studies above reveal the importance of support from faculty, LMS technicians and designers and institutions in creating a user-friendly environment for learners who take online assessments. They should not only be preoccupied with using new technologies but rather see to it that it is effectively used to maximise its benefits.

Research Design

This study employs a mixed-methods research design, combining both quantitative and qualitative approaches to provide insight into students' experiences and perceptions. Quantitative data was gathered through close-ended questions, which allowed for statistical analysis of general trends and patterns, while qualitative data was gathered from open-ended questions. This data provides detailed insights into experiences and perceptions of language learners in the School of Languages at the University of Ghana.

Population and Sampling

The target population of this study comprises undergraduate language learners enrolled in the School of Languages at the University of Ghana who have experienced Sakai online exams. A purposive sampling technique was used to select participants who are language learners and have participated in online assessments. Purposive sampling was used because it gave researchers the opportunity to select participants who fit their study. A total of 387 students participated in this study. The study population was made up of students enrolled in a language course in the School of Languages at the University of Ghana who had previously participated in at least one Sakai online exam. Names and other personal identifiers were not collected from the participants to prevent any bias.

Data Collection Instruments

A structured questionnaire was developed, comprising both closed-ended questions and open-ended questions. Language learners' perceptions regarding ease of use, fairness, and overall satisfaction were quantified by using multiple-choice questions. The personal experiences, challenges, and suggestions for improvement of the learners were explored using open-ended questions. This study did not use pre-existing instruments. Researchers designed the questionnaires to seek the perspectives of Ghanaian foreign language learners on using Sakai LMS for assessments at the University of Ghana.

Ethical Clearance Statement

Participation in this study was voluntary and the questionnaires for this study were distributed electronically via student platforms over a period of three weeks. Participants were also provided with an information page explaining the purpose of the study and

assured of confidentiality. Also, in the preparation of this paper, Microsoft Copilot was used to draft the questionnaire for data collection. The authors acknowledge full responsibility for the intellectual content of this work and have ensured that the questionnaire was reviewed and revised for accuracy and appropriate academic style and to maintain the scholarly integrity of this paper.

Validity and Reliability

To ensure that only language students answered the questions, the questionnaire link was shared during language class times. Then, students who opted to participate were encouraged to complete the form within 10-15 minutes. Even though participation was anonymous, participants were able to access the questionnaire using their email address. Hence, one participant could not answer the questionnaire twice.

Data Presentation and Discussion

In this study, the qualitative components of the data were coded manually and analyzed thematically using Braun and Clarke framework. This allowed researchers to identify patterns in learner's experiences, challenges and perceptions of Sakai based exams. On the other hand, data from quantitative components were analyzed using descriptive statistics such as charts and table. Descriptive statistics were chosen over inferential analysis because the study did not seek to test hypotheses or establish causal relationships, but rather to identify dominant patterns and areas of convergence or divergence in learners' experiences. This choice aligns with the study's pedagogical focus on understanding learner perspectives rather than making generalisable predictive claims.

The quantitative data collected from the closed-ended items in the questionnaire were analysed using descriptive statistical procedures. This approach was considered appropriate given the exploratory nature of the study and its focus on capturing language learners' perceptions, experiences, and preferences regarding Sakai-based online examinations. First, responses from participants who indicated that they had not taken a Sakai-based language examination were excluded from further analysis. As a result, all quantitative analyses were conducted on data from 336 respondents, representing 86.8% of the total sample. This ensured that findings reflected the experiences of learners who have participated in Sakai-based online language assessments.

The questionnaire items were measured using Likert-scale response formats such as agreement levels, frequency, and preferences. Quantitative data were coded numerically and analysed using percentages and distribution patterns. These statistics were used to summarise key trends in learners' perceptions of platform accessibility, assessment effectiveness, fairness, satisfaction, preference for exam mode, and the prevalence of technical challenges. Results were presented using tables and charts to enhance clarity and allow for straightforward interpretation of response patterns.

Lastly, the quantitative findings were not treated in isolation. They informed and guided the qualitative analysis by highlighting key areas such as technical challenges, support mechanisms, and assessment preferences. Thus, at the discussion phase, quantitative trends were therefore triangulated with qualitative responses to strengthen the credibility and reliability of the findings.

This section thematically presents the findings of the study on language learners' experiences and perceptions of Sakai online exams in the School of Languages at the University of Ghana. Three main themes are analyzed in this study: students' perceptions of Sakai, challenges experienced by language learners, and recommendations for improvements. The purpose of these themes is to answer the following research questions:

1. What are the perceptions and experiences of language learners in the School of Languages at the University of Ghana towards Sakai online exams?
2. What challenges do language learners in the School of Languages at the University of Ghana face when using Sakai for examinations?
3. In what ways can Sakai be improved to accommodate language learners' exam experience?

Data Presentation and Discussion

A total of 387 students participated in the survey. The demographic breakdown is as follows:

Table 1: Gender

Male	19.4%
Female	80.6%

Source: Data

Table 2: Age

15-20	44.2%
21-25	53.5%
26 and above	2.3%

Source: Data

Table 3: Language Program

Arabic	3.1%
Chinese	40.6%
French	16.8%
Kiswahili	19.6%
Russian	2.1%
Spanish	31.5%
English	1.2%

Source: Data

Table 4: Level of Study

Level 100	37.5%
Level 200	14.5%
Level 300	35.4%
Level 400	12.7%

Source: Data

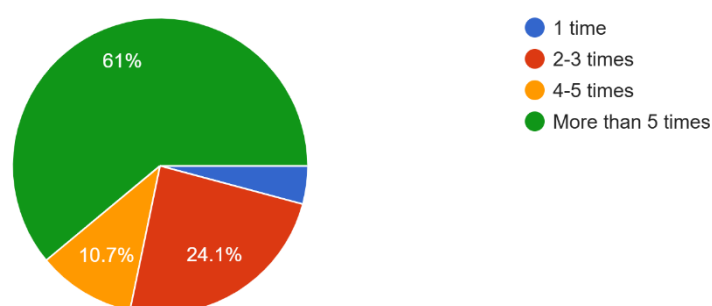
Table 5: Taken Sakai Exam at least once

Yes	86.8%
No	13.2%

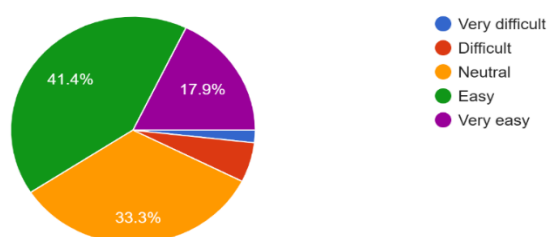
Source: Data

As presented in table 5, only 86.8% of respondents have taken online language assessment via Sakai. The remaining 13.2% of the respondents who selected 'No' automatically ended the questionnaire session, and hence the data on perceptions, experiences, challenges and recommendations towards Sakai for exam purposes among language learners was based on the 86.8% (336), which from this point is considered as our 100%.

Language Learners' Perceptions of Sakai for Language Assessment

Chart 1: Frequency of Language Assessment via Sakai

Data collected shows a total of 34.8% of respondents have taken language assessments on Sakai between 2-5 times while 61% of the respondents have taken Sakai based assessments more than 5 times. The remaining 4.2% of the respondents have used it only once.

Chart 2: Accessibility and Usability of Sakai

Respondents were asked to rate the ease with which they navigate the Sakai platform, and as shown in Chart 2, most of the respondents said it was easy and very easy to use, making up 59.3% of the responses.

Consistent with the earlier data presented in Chart 2, 59.2% of the respondents stated that they are confident navigating the Sakai platform, while only 3.3% indicated that it was difficult using the platform during assessments. Similarly, 48.5% of the respondents admit that Sakai assessments allow them to demonstrate their knowledge effectively. 64.3% of the respondents agree that using Sakai for exams supports fair and unbiased assessment,

with only 8.4% disagreeing with this statement. The study probed further into the suitability of Sakai in reflecting their true abilities. 50% of the respondents agreed that using Sakai reflected their true abilities, as against 17.6% who disagreed with this. The overall satisfaction of the Sakai platform was tested. 53.6% of the respondents reported that they were satisfied with Sakai for assessment purposes. 36.3% of the respondents took a neutral stance, while 10.2% were not satisfied with Sakai. The qualitative data provides responses in this regard such as:

“Easy to navigate”

“Easy, navigable, accesible”

“Effectively convenient for use”

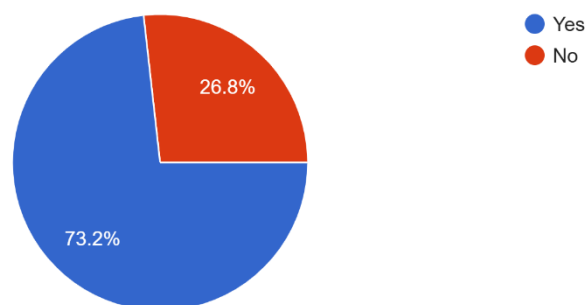
“Efficient, accessible, secure”

“Effective, easy to use and navigate”

“Effective, easy to operate and beginner friendly”

“Easy, suitable and learner friendly”

Chart 3: Preference on Sakai vs. Traditional Exams



In chart 3, we observe that 73.2% of the respondents prefer Sakai end-of-semester exams to traditional exams with answer booklets. The respondents went on to choose various reasons why they prefer Sakai, including:

I feel less exam stress in a digital environment. (63.9%)

The timer and progress tracker help me manage my time. (55.6%)

I don't have to worry about my handwriting not being legible. (51.2%)

Typing is easier and faster for me than writing by hand. (45.2%)

The remaining 26.8% of the respondents who prefer traditional exams to Sakai-based exams also chose factors that influence this decision. These include:

Technical issues during Sakai exams cause me stress. (58.7%)

I express thoughts more clearly in handwriting. (57.7%)

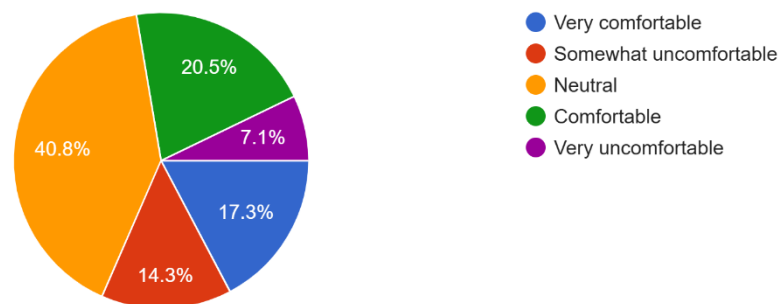
I do not trust Sakai to submit all my answers in case of a technical challenge (39.4%)

I concentrate better in a traditional exam setting (36.5%)

Challenges Experienced by Language Learners when Taking Sakai Assessments

This section presents data showing that respondents experience challenges when taking Sakai based assessments. The data is presented in the charts below.

Chart 4: Using the Keyboard for Language Assessments



As depicted in chart 4, the majority of the respondents are neutral on this question, and 27.6% are comfortable using the keyboard for their language assessment.

Some respondents mentioned personal experience in relation to their use of special characters during Sakai-based exams. Some of the experiences shared include:

“Unavailability of special characters.”

“It’s hard to access special characters.”

“Not being able to use special characters.”

“Not being able to input characters.”

“Chinese characters are not visible enough on the screen.”

“As [a] Chinese students, we have no access to special characters than to copy and paste.

This hasn't proven to be effective all time[s] and it end up affecting the overall score. In addition, there are times whereby some diagrams may not have some features for you to look at it and answer, even though the answer has been programmed on the system and in that case, refusing to answer it is a zero and answering it anyhow you think too will give you zero. In tandem to the earlier indicators, it has an impact on the overall score.”

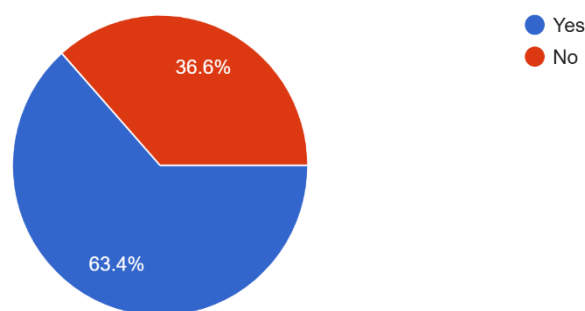
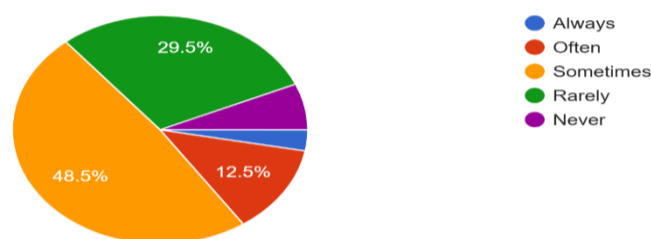
Chart 5: Respondents' Experiences with Technical Issues

Chart 5 confirms technical challenges are experienced by language learners when taking language assessments. 63.4% of the respondents have faced technical challenges while taking assessments.

Chart 6: Frequency of Technical Challenges

In chart 6, respondents report on the frequency of technical challenges during language exams. A majority of the respondents suggested that they experience technical challenges sometimes. 3% of them said that they always experienced technical challenges.

Some examples of technical challenges were presented to the respondents. The distribution of the options is as follows:

"Sakai was slow and unresponsive." (51.2%)

"The computer froze." (31.5%)

"I could not input special characters." (30.1%)

"Submission issues." (20.5%)

Respondents also reported personal experiences that are related to technical challenges during assessment on Sakai. Some of the most mentioned are stated below:

"Network Issues"

"Technical glitches"

"Slow and unresponsiveness"

“Moving to the next question delays and there were some few times I was unable to access Sakai”

“Submission of assignments before I finished and before the allotted [allocated] time had elapsed”

“Sometimes impossible to see the characters given for some questions”

Other technical issues revealed by respondents include:

“Sometimes an image attached to a question doesn’t appear even though the lecturer uploaded it.”

“Submission of assignments before I finished and before the allotted [allotted] time had elapsed”

“Erasure of answers during technical difficulties”

“If the network is disrupted, then SAKAI starts logging people out. It sometimes doesn't open when you want it to either.”

“For audio assessments, students are unable to either forward or replay audios to and from a specific point. We have to wait till the audio ends before we can do so.”

Chart 7: Challenges when Seeking Help during Sakai Exams



The data in chart 7 suggests that 36.6% of the respondents received help, but the help was delayed, while 30.1% of the respondents noted that the help they received was very timely and effective. 16.4% mentioned that even though help is available, it is not useful for the language-related problem. Respondents also register their personal experiences with getting support when needed during Sakai exams. Some of these include:

“Couldn’t load pictures but it was solved fr me because it was somewhat a general issue.”

“...unhelpful invigilators or IT personnel...”

“The indifference of some invigilators”

64.3% of the respondents also stated that they turned to invigilators for support during Sakai exams, while 37.5% of the respondents stated they turned to IT personnel for assistance when taking exams on Sakai.

Recommendations made by Learners for Improvement on Sakai-based Exams

In this study, the respondent made recommendations that can be considered for improving Sakai-based exams for language learners:

60.1% said there should be an on-screen keyboard for special characters

Give more time to students studying languages with special characters (55.4%)

Language lecturers should allow for practice exams on Sakai before the real exam (48.8%)

Real-time support for students when there are technical issues (35.4%)

The above figures illustrate the changes the respondents would like to experience while using Sakai for exam purposes.

Respondents also highlighted some personal recommendations that are mentioned below:

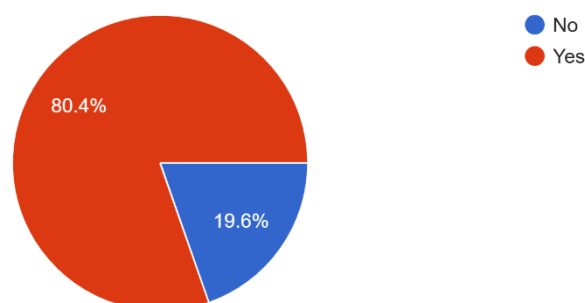
“More practice with the Sakai before exam so that we can get used to it”

“Language lecturers should allow for practice exams on Sakai before the real exam, Give more time to students studying languages with special characters”

“Lectures should consider students who face technical issues during examination on Sakai since it's bo[not] fault of theirs”

“New introduction of characters on exam day”

Chart 8: To use or not to use?



When the respondents were asked if they would recommend the use of Sakai-based language assessments, an overwhelming 80.4% of the respondents said they would recommend Sakai for language assessments.

Discussion

In this section, we interpret and contextualize the key findings presented in the previous section. It explores the implications of learners' experiences and perceptions of Sakai-based assessments at the University of Ghana, relating these findings to existing literature thematically. The discussion aims to provide a comprehensive understanding of the challenges and areas for improvement within the current Sakai online assessment system for language learners, ultimately informing recommendations for enhancing the online assessment process. The discussion for this study will be presented thematically, following the structure of the data presented in the previous section.

Language Learners' Perceptions of Sakai Platform Accessibility: "Easy, Navigable, Accessible"

The issues of platform accessibility, ease of use, and a navigable interface have been raised in recent studies of LMS platforms in conducting assessments. As mentioned by Slamet and Mukminatien (2024), the LMS interface plays an important role in platform usability. This study reveals, as shown in chart 2 that, majority of the students found the Sakai platform fairly navigable and easy to use. This reflects a similar study by Grag and Goel (2022), who also reported that students found the online assessment platform easy to navigate when answering questions. It is important to mention the overall accessibility of the Sakai platform, as Abeywickrama and Dissanyake (2022) confirm that usability issues within the software environment of online exams significantly affect students' experiences. In support of their claim, 59.2% of the respondents of this study strongly agree and agree that the easy interface that the Sakai platform provides makes them confident when taking language assessments.

Also, in line with previous studies on Sakai and other LMS usability, some respondents perceived the Sakai platform to be easy to navigate, effective, convenient for use, beginner-friendly, suitable, secure, and accessible. This suggests that Sakai reduces possible barriers that might distract learners during examinations. However, the findings also indicate that general navigability does not guarantee pedagogical accessibility for language learners. Learners' positive perceptions of Sakai's interface coexist with persistent challenges related to linguistic representation. This contradicts claims in prior studies that LMS design necessarily enhances assessment effectiveness. For language learners, accessibility is not limited to logging in or moving between questions. It also includes the ability to demonstrate depth knowledge in language related courses through examinations. The findings highlight that platforms designed without sensitivity to language-specific needs may remain pedagogically limiting despite being user-friendly.

Effectiveness of Sakai as an Assessment Tool

Furthermore, on their ability to demonstrate understanding of course materials during assessments, 48.5% of respondents agreed and strongly agreed that Sakai was an effective tool for assessment. However, the majority, which was 51.5%, disagreed and strongly disagreed with this assertion. This differs from what Slamet and Mukminatien (2024) reveal in their study: that the use of LMS helped students to achieve the expected learning outcomes. 64.3% of respondents also agreed that the Sakai platform is fair and unbiased for language assessment. This confirms an assertion made by Turner (2015) and Akay and

Gumusoglu (2020), that online quizzes and examinations easily measure the students' knowledge and comprehension levels. When it comes to self-reported performance on Sakai, 50% of the respondents agreed or strongly agreed that the Sakai assessment truly reflected their ability, whilst 32.4% of respondents were neutral. This representation is also reflected in the respondents' opinions on their overall satisfaction with Sakai-based online assessment, where about 53.6% were generally satisfied with Sakai LMS. It is discovered that Sakai based language assessment was the best experience ever, and okay to use.

In spite of the above assertions confirming that some learners agree that Sakai is effective for language-based assessments, the quantitative data reveal that learners' views on Sakai's effectiveness as an assessment tool were divided. This shows the diverse opinions on online assessments in language education. While some respondents felt Sakai enabled them to demonstrate understanding, others had varying opinions. This finding contrasts with studies that report LMS-based assessments as broadly effective in measuring learning outcomes (Mukminatien, 2024), suggesting that effectiveness is conditional rather than universal. This means that when platforms restrict learners' ability to input or display language accurately, assessment effectiveness is compromised.

Students' Perception of Sakai versus In-person Exams with Answer Booklet

The transition from traditional to online examination using LMS has shown promising results in various educational contexts. In gauging the language learners' perspective on their preference when it comes to taking exams on Sakai versus the traditional in-person exams with answer booklets, 73.2% of the respondents, constituting a majority, stated that they prefer exams conducted on Sakai to the traditional exams. This reflects a positive attitude by students towards Sakai-based exams. This sentiment is similarly expressed by Cakiroglu et al. (2017) and Figaredo et al. (2022), whose participants favoured LMS-related exams. A major factor that seems to influence this decision was that students reported feeling less exam stress in a digital environment (63.9%). Cross et al. (2023) also found out that students feel less anxious when revising for online exams. Other factors that students reported on include the role that the timer and progress tracker play in time management (55.6%) and that they don't have to worry about the legibility of the text since it isn't handwritten (51.2%).

However, the remaining 26.8% who prefer the traditional exams state reasons like stress caused by technical challenges (58.7%), better expression of thoughts when writing by hand (57.7%), and difficulties faced when typing special characters in languages other than English (47.1%). Participants in Slamet & Mukminatien (2024) report experiencing technical issues when taking online exams. Majola and Mudau (2022) also list certain challenging factors that are similar to those found in this study. They highlighted aspects that range from technological, psychological, and procedural domains.

Moreover, from the qualitative data, it can also be noted that Sakai-based online examination is preferred over in-person because it is eco-friendly. Its usage helps prevent the indiscriminate cutting down of trees to produce examination answer booklets in the case of traditional pen and paper exams. Hence makes online exams sustainable and eco-friendly in comparison to answering questions on paper.

Again, what is notable is that the preference for Sakai-based online exams persisted despite the prevalence of technical challenges. Rather than rejecting online assessment in

response to these issues, learners chose to balance the benefits of Sakai-based online exams against their limitations. This finding challenges the negative interpretations of online assessment and suggests that learners may be more adaptable and open to digital assessment than in-person exams with answer booklets.

Technical Issues

When it comes to reliability on the Sakai platform, students reported having experienced technical issues. When asked whether or not they have encountered these technical issues on the Sakai platform, about 63.4% of the respondents chose yes. Upon further investigation into the frequency of these issues, only 6% of the respondents indicated that they have never experienced these difficulties during a language-related exam. This data confirms some respondents' fear of experiencing a technical issue during exams online, hence their preference for traditional methods of writing exams. Technical difficulties, such as unreliable internet connectivity and software failures, as identified by Majola and Mudau (2022), frequently disrupt and distract exam participation, causing a rise in student anxiety and potentially affecting performance outcomes. Even though 63% of our respondents feel less stressed in digital environments, frequency with technical issues could cause anxiety as Abeywickrama and Dissanayake (2022) confirm that usability issues within the software environment of online exams significantly affect student experience. Our findings revealed that about 51.2% of respondents noted that Sakai was slow and unresponsive during assessment. In addition, 31.5% of respondents indicated that the computer froze during the exam. Another 19% of respondents reported having login issues. These technical inconveniences contribute to cognitive distractions, diverting attention from content mastery to interface management, which is particularly detrimental during high-stakes assessments as posited by Abeywickrama and Dissanayake (2022). For example, students revealed that Sakai wasn't able to save answers, which led to restarting the assessment. Also, Sakai would log out without completion of ongoing exams. And there are times where the platform is unable to display images that are uploaded for assessment purposes.

The above opinions clearly reveal the kinds of technical issues that language learners encounter when participating in online exams via Sakai. The coexistence of reported technical issues and lower exam stress among some respondents contradicts prior claims that technology heightens anxiety. The findings in this study suggest that anxiety in online exams is shaped less by the digital format itself and more by the reliability and predictability of the assessment tool. As such, there is the need to make LMS more reliable and accessible.

Keyboard/special characters: “Sometimes impossible to see the characters given for some questions”

Special characters play a big role in assessing language learners. One key feature of language is the special characters that come with it. According to Akimov and Malin (2020), the display of special characters, including accents, diacritics, and unique scripts that form the orthographic standards of languages, is required in language assessments. They emphasize that problems with entering these characters are common on online platforms like Sakai, which depend on standard keyboard layouts that may not ordinarily support these special symbols. This often causes language learners to use alternatives or incomplete representations, which can lead to a decline in answer quality and assessment

accuracy. In our present study, about 30.1% of respondents revealed that they could not input special characters during an online exam. When it comes to mastery of the keyboard, only 37.8% indicated that they were comfortable using Sakai in typing the target language. This is consistent with data obtained where students chose the traditional method of writing exams over Sakai. 41.7% said that they had difficulties typing special characters during assessment.

Moreover, language learners face challenges with typing special characters in the language exam. This finding represents a critical contribution to the literature, as it draws attention to how the lack of subject-specific functionalities in instructional technologies can limit their effectiveness. In language learning contexts, diacritics, accents, and scripts are essential as they carry and convey meaning in the respective language. When learners are unable to represent these accurately, assessment outcomes may fail to reflect true competence. As such, considerations of fairness and validity must include learners' capacity to express language accurately within the platform, rather than focusing only on task design or scoring procedures.

Support Mechanisms during Online Assessments:

Online assessments require support for technical challenges that students face. In this study, the respondent indicated having challenges like login issues, slow internet connectivity and unresponsive Sakai. To ascertain the support students get, we asked the students who they turned to for support during these issues. About 64.3% of respondents turn to invigilators while 37.5% turn to IT personnel for support. 12.3% of respondents opted to solve their issues by themselves, and 6.3% did not ask for help. We asked students to rate the support they have received during Sakai-related exams, and 33.6% reported that despite receiving support, the support was delayed. Also, 30.1% indicated that they receive timely and effective support. About 16.4% stated that help was available but was not useful for language-related problems. 8% of respondents indicated that they did not receive any support when they needed it. Majola and Mudau (2022) suggest that institutional support structures are useful in controlling technical and procedural difficulties experienced by students during online exams. Instituting effective and accessible IT help desks constitutes a great step for addressing issues ranging from login troubles and software problems to real-time connectivity disruptions. Their responsiveness and competence influence student exam confidence and success. Engaging students on their perception of how supportive their instructors were in preparing them for online exams on Sakai, about 54.8% of respondents indicated that their instructors were helpful and very helpful. 33.3% of respondents were neutral. Romaniuk and Łukasiewicz-Wieleba (2021) are of the view that faculty members play a key role in facilitating smooth online-based examination experiences. Their preparation does not only involve mastering technological interfaces but also realizing common student difficulties and devising contingency strategies. Responsive communication channels established by faculty help resolve student concerns, contributing to reduced anxiety and clearer expectations of outcome.

Again, language learners face problems with invigilators and IT personnel during online assessments via Sakai. While some students received timely assistance, others reported delayed or ineffective support in relation to language-specific issues. The reliance on invigilators rather than IT personnel suggests a blurring of pedagogical and technical responsibilities during online exams. This indicates a need for clearer coordination and role

preparation so that support providers can respond effectively to both technical disruptions and language-specific assessment challenges. It could also mean that students reach out to invigilators when they face technical issues because they are their immediate point of call in the exam hall.

Recommendations: “There is more room for improvement”

Students are the main users of the Sakai thus it is prudent to explore changes and improvements through their lenses. When asked on aspects that need improvement, 9.8% of respondents mentioned platform usability, 17% chose time management tools and 49.4% of respondents indicated technical support issues. Also, on-screen keyboards with alphabets of the target language and time limit were among concerns raised by the respondents.

It is important to acknowledge that 60.1% of our respondents recommend the inclusion of special characters for language-related exams. Another recommendation that was made by 55.4% of respondents highlighted the need for more time for languages with special characters and diacritics. On the issue of student familiarization with the Sakai platform about 48.8% say there is also the need to develop mock exams for language students to enable them practice taking assessment via Sakai to familiarize themselves with the Sakai interface and the Test and Quizzes tool. This recommendation aligns with the proposal made by 33% of respondents for the inclusion of asynchronous workshops to train students on how to navigate the Tests and Quizzes tool on Sakai before exams. It is worth mentioning that about 35.4% indicated that there should be real-time support for students when there are technical issues. In addition, 38.4% of respondents hint at improved display of attached media files during language exams.

Notably, the views show that Sakai online-based exams can be improved to optimize its effectiveness for language-related exams. Recommendations from learners demonstrate a strong desire to improve Sakai-based online assessment rather than abandoning it. Request for on-screen keyboards, inclusion of special characters for language-related exams, additional time, practice exams before main exams, and real-time support reflect learners' understanding of what they need to demonstrate learning and taking assessments more effectively.

Conclusion

Overall, the current study suggests that LMS-based examinations can be effective alternatives to traditional formats as more universities adopt blended and online learning. The data from the study shows that 80.4% of respondents favour the use of Sakai for language-related assessment despite highlighting significant challenges. As a result, it is worth noting that for these platforms to be fully effective and support fair and inclusive assessments, there is the need to address challenges reported by respondents. Again, drawing from student feedback, we recommend that LMS platforms invest more in making their platform accessible and tailored to the specific needs of the diverse learners, including language learners. They should also have periodic system updates to address challenges of connectivity and usability to optimize user experience. Universities should also partner with LMS companies to organise periodic training for instructors and IT personnel on how best to support learners in real-time during exams. The suggestion made by students for

asynchronous training should be made into a simple course for freshmen, which is required to be completed on Sakai before the commencement of first-semester exams.

Recommendations

Future studies could adopt mixed-method or experimental research designs that combine survey data with objective measures such as Sakai's system analytics and students' performance. In addition, investigating instructors' pedagogical practices, assessment strategies and technological challenges would provide a more comprehensive understanding of Sakai-based language assessment and strengthen evidence-based decision-making in higher education. Future research should also consider comparative studies across multiple universities and educational contexts, which would provide broader insights and perspectives into Sakai-based examinations across institutions. Also, future studies should incorporate focus group discussions or in-depth interviews to give room for respondents to express their views in detail.

Limitations

This study has some limitations that should be considered when interpreting the findings. First, the study relied on self-reported data, which may be subject to self-report bias and recall inaccuracies. Also, the study only focused on the School of Languages at the University of Ghana and allowed for an in-depth examination of students' experiences with Sakai only at the University of Ghana leaving out other institutions. Finally, the uneven representation of language programs among participants may not fully capture the experiences of learners across all language disciplines. Moreover, the limited depth of some responses hindered a detailed interpretation of students' experiences.

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