

Students' Perceptions of Using the Schoology Web Application as an Online Mid-Term Examination Platform: A Qualitative Study

ELDUCAT: English Language Education Journal
Vol. 1 No. 1 (April 2026) pp. 21-32

DOI:

P-ISSN:

E-ISSN:

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Article History

Received:
February 15, 2026
Revised:
March 14, 2026
Accepted:
April 01, 2026
Published:
April 30, 2026

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Citation:

Himawan, Wildhan Bangkit. 2026. "Students' Perceptions of Using the Schoology Web Application as an Online Mid-Term Examination Platform: A Qualitative Study." ELDUCAT: English Language Education Journal 1 (1): 21–32.



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Abstract

The emergency shifts to online learning during the COVID-19 pandemic necessitated the rapid adoption of Learning Management Systems (LMS) for high-stakes assessment, yet research exploring student perceptions of this specific use remains scarce. This study investigated students' perceptions of using the Schoology web application as an online mid-term examination platform and identified the challenges they encountered. A descriptive qualitative design framed within a hermeneutic phenomenological approach was employed. Data were collected through semi-structured interviews with eight purposively selected eighth-semester students from the Department of English Education at Universitas Muhammadiyah Surakarta. Thematic analysis revealed two major positive perceptions: the platform's flexibility in facilitating multimodal submission formats and its capacity to generate significant time and economic efficiencies. Conversely, two critical difficulties emerged: persistent problems with unreliable internet connectivity that induced anxiety, and a digitally enabled loss of concentration that created a propensity for academic dishonesty. The findings suggest that while Schoology offers logistical and economic advantages, its efficacy as an assessment tool is fundamentally compromised by infrastructural inequities and the misalignment between conventional closed-book exam designs and unsupervised digital environments. This study underscores the need for systemic institutional support and a paradigm shift in assessment design toward authentic, higher-order thinking tasks to uphold the validity and integrity of online examinations.

Keywords: *Schoology, students' perceptions, online mid-term examination, learning management system.*

Introduction

The integration of information and communication technology into education has fundamentally reshaped pedagogical practices, giving rise to a global ecosystem of web-based Learning Management Systems (LMS) designed to facilitate, augment, and manage the learning experience. These platforms, ranging from open-source solutions to proprietary commercial software, have been lauded for their potential to transcend the temporal and spatial constraints of the traditional classroom, thereby democratizing access to educational resources and fostering collaborative, student-centered learning (Dahal et al., 2023; Islam & Mahmud, 2020; Lugoma et al., 2025). Among the diverse array of available LMS platforms, Schoology has emerged as a prominent tool, specifically designed as a K-12 and higher education learning environment that integrates instructional management, communication, and collaboration into a single, unified interface (Nguyen & Nguyen, 2022). Its comprehensive suite of features, including Courses, Groups, and Resources, allows educators to organize curricular content, create and grade assignments, facilitate discussions, and monitor student progress, while simultaneously enabling students to manage their own learning trajectories more effectively (Edwar, 2025; Napitupulu et al., 2020; Nguyen & Nguyen, 2022).

Despite the pedagogical promises of LMS platforms, their global adoption had been gradual and often supplementary to face-to-face instruction, until the unprecedented disruption of the COVID-19 pandemic. The outbreak forced governments worldwide to implement large-scale social restrictions, compelling educational institutions at all levels to suspend on-campus activities (Hidayat et al., 2023b; Liu et al., 2024). In Indonesia, a national mandate required all learning activities, from primary to tertiary education, to be conducted from home through distance learning systems. This sudden, non-linear transition from conventional classroom instruction to fully online delivery was not merely a change of medium; it constituted what has been termed "emergency remote teaching," a temporary and rapid shift of instructional delivery to an alternate mode due to crisis circumstances. This context is critically distinct from carefully planned and designed online learning experiences, as it lacked the systematic pedagogical infrastructure, faculty training, and learner preparation normally required for effective digital education (Al Shlowiy et al., 2021; Kostas et al., 2023; Šinko et al., 2024).

Under these emergent conditions, the function of platforms like Schoology was radically redefined, evolving from a supplementary classroom management tool into the primary and often sole medium for all teaching, learning, and assessment interactions. Universitas Muhammadiyah Surakarta, in alignment with national directives, immediately issued a circular mandating the maximization of online lecture activities through Schoology, extending its use to the administration of mid-term and final semester examinations (SE UMS, 2020). The decision to conduct high-stakes assessments online represented a critical inflection point, as examinations serve not only to measure individual student achievement but also to maintain institutional academic standards and certify learning outcomes. The swift pivot to using a platform like Schoology for examinations, therefore, introduced a set of complex,

multidimensional challenges, pedagogical, technical, and psychosocial, that had not been systematically investigated.

Previous scholarly inquiries into Schoology have primarily concentrated on its effectiveness and user satisfaction within the context of regular teaching and learning activities. A significant body of research has demonstrated the platform's capacity to improve learning outcomes, enhance student motivation, and foster positive attitudes compared to traditional teaching (Hilyana & Hakim, 2018; Simatupanga & Sarib, 2019). Studies focusing on teacher professional development have indicated that structured training can increase educators' pedagogical engagement with the platform (Abdeen et al., 2026; Gracyalny & Hurtienne, 2023), while other studies have reported high levels of teacher and student satisfaction with Schoology's capacity for content delivery and progress tracking (Hilyana & Hakim, 2018; Nguyen & Nguyen, 2022; Simatupanga & Sarib, 2019). Factor analysis has further identified key perceptual dimensions, such as its utility for facilitating learning both inside and outside the classroom (Nguyen & Nguyen, 2022). However, these investigations uniformly treat Schoology as a pedagogical support tool, not as an examination platform.

A critical gap in the literature, therefore, lies in understanding how students perceive the use of Schoology when it is leveraged for the high-stakes context of formal, summative examinations, particularly during a global health crisis. The psychological stakes, the pressure of timed performance, and the imperative of academic integrity in an unsupervised environment create a fundamentally different user experience compared to routine online assignments or discussions. Students' perceptions are a critical dimension of educational technology evaluation because they directly influence technology acceptance, engagement levels, and ultimate learning outcomes (Alsarayreh, 2025; Martins & Sequeira, 2026; Mehrvarz et al., 2025). If students perceive the examination platform as unfair, unreliable, or stress-inducing, the validity of the assessment itself becomes questionable, potentially leading to disengagement, negative emotional outcomes, and a systemic erosion of trust in the educational process.

To address this gap, the present study adopts a qualitative, in-depth approach to investigate the nuanced, lived experiences of students who have undergone online mid-term testing via Schoology. It focuses specifically on students in the Department of English Education at Universitas Muhammadiyah Surakarta, a context where Schoology had been integrated into departmental practices prior to the pandemic but was never the primary mode for high-stakes examinations. This situated context is important, as the specific institutional culture, digital infrastructure, and student demographics shape the perception of any technology. By exploring both the affirmatively perceived benefits and the difficulties encountered, this study aims to provide a holistic, balanced account that can directly inform institutional policy and faculty-level assessment design. Thus, the research is guided by two central questions: (1) How do students perceive the use of the Schoology web application as an online mid-term examination platform? (2) What difficulties do students encounter when using the Schoology web application for online mid-term examinations?

Method

This study employed a descriptive qualitative research design, a methodological choice driven by the need to understand a complex human phenomenon, students' perceptions, within its natural, real-world context, prioritizing the depth of meaning over the breadth of generalizable measurement. As articulated by Creswell & Creswell (2017), descriptive qualitative research is the appropriate vehicle for examining the status of a group of individuals concerning a specific object, condition, or event as it unfolds.

The research was conducted within the Department of English Education at Universitas Muhammadiyah Surakarta, an institutional context where Schoology had undergone a formal rollout for e-learning support, but its full-spectrum use for examinations was a novel condition imposed by the pandemic. The participants were recruited using purposive sampling, a non-probability strategy essential for identifying individuals who possess specific knowledge and experience relevant to the research focus. The primary inclusion criterion was direct, first-hand experience of having completed at least one full set of online mid-term examinations via the Schoology platform during the period of emergency remote teaching mandated by the university. A total of eight eighth-semester students were selected; this cohort was targeted as their advanced standing and broad institutional experience allowed them to provide rich, comparative reflections on the shift from traditional to online assessment modalities. The relatively small sample size is consistent with phenomenological inquiry, where the goal is depth and saturation of meaning from a few cases, rather than statistical representativeness.

Data collection was carried out between July and September 2020, a period characterized by sustained social distancing measures. In adherence to these public health protocols, all communication and data gathering were conducted remotely. The primary data collection technique was the semi-structured interview, chosen for its unique ability to access the participant's subjective perspective in a focused yet flexible conversational format. An interview guide, developed from the research questions and theoretical framework, was used to ensure that key experiential domains were systematically explored, including the process of logging in, navigating the test, submitting answers, and overall emotional-cognitive states. The format allowed the researcher to employ probing questions, such as "Can you describe a specific moment when that happened?" or "What did that feel like for you?", to elicit richer, more concrete experiential narratives. Each interview was conducted via WhatsApp call, audio-recorded with explicit informed consent, and transcribed verbatim to produce a complete textual record. The use of observations, drawn from the researcher's general familiarity with the platform's examination interface, served as a secondary sensitizing resource to inform the interview probes.

The data analysis process was systematic, iterative, and guided by the interactive model proposed by Miles et al. (2018), which conceptualizes analysis as three concurrent streams of activity: data condensation, data display, and conclusion drawing/verification. The first stage, data condensation, involved an intensive process of reading and re-reading the interview transcripts to achieve a holistic sense of the data (a phenomenological "dwelling"), followed by open coding to select, focus, and

simplify the raw text into initial thematic units. The second stage, data display, required organizing these condensed units into structured thematic matrices and narrative summaries, allowing the researcher to discern relationships, contrasts, and patterns across participant accounts. This visible, organized representation is what permits valid qualitative conclusions to be drawn.

The third stage, conclusion drawing and verification, involved interpreting the patterns in the displays to formulate emergent themes that answered the research questions. Thematic statements were generated for each theme, directly anchored in participant quotations as evidence. The analysis then moved beyond mere description to a more interpretive, hermeneutic level, exploring the latent meanings implied by the thematic structures (e.g., interpreting "loading time" not just as a technical glitch but as a moment of existential anxiety during an assessment). To ensure the credibility and trustworthiness of these interpretive conclusions, a rigorous member-checking procedure was implemented. The identified themes, along with de-identified supporting excerpts and interpretive commentary, were returned to the participants for validation. Participants were asked to confirm whether the thematic descriptions and deeper interpretations authentically resonated with their lived experience or if modifications were needed, thereby ensuring that the final account represented a co-constructed understanding between researcher and participants.

Results

The thematic analysis of verbatim interview transcripts yielded two overarching thematic categories corresponding to the research questions: (1) Positive Perceptions of Schoology as an Online Mid-Term Test Platform, and (2) Difficulties Encountered in Using Schoology. Within each category, two primary themes were identified, each elaborated with detailed experiential descriptions from participant narratives.

Positive Perceptions of Schoology as an Online Mid-Term Test Platform

The positive perceptions were organized around two salient themes representing the functional and economic efficiencies afforded by the platform.

a. Multimodal and Flexible Submission of Examination Answers

The first prominent theme centers on the platform's capacity to accommodate diverse answer formats. Participants consistently described how Schoology's built-in functionalities liberated them from the constraints of paper-based, handwritten submissions, which are standard in conventional on-campus examinations. They reported that the platform's assignment and test/quiz features allowed them to complete their work in digital documents and upload them in file or video formats. This capability was particularly salient for certain course assessments that required spoken performance, such as micro-teaching examinations, which students could record and submit as video files. One participant articulated this experience clearly, stating,

"I can submit the answer in the form of a file and upload it to the features in Schoology. So, I didn't need to print sheets or travel to campus. For speaking tests, I just recorded a video and uploaded it."

This finding illustrates that the platform transformed the examination submission from a physical hand-in to a seamless, paperless digital transaction, which



participants perceived as modern, efficient, and less anxiety-inducing than traditional submission methods.

This theme also encompasses the perceived improvement in the quality and presentation of the submitted work. Participants highlighted that typing answers minimized the risk of illegible handwriting and eliminated messy corrections typical of pen-and-paper exams, resulting in submissions that felt more polished and professional. The ease of editing text before final submission provided a sense of control and confidence that was less present in handwritten exams, where errors required crossing out text and creating disorder. One participant explained,

"If online, you just type the answer and just delete it if wrong. It makes the writing tidier and much easier for the lecturer to read."

This suggests that the digital medium itself, when harnessed through Schoology, was perceived as enhancing not only the submission process but also the fundamental quality of the students' own academic output. The platform thus functioned in students' perception as a tool that allowed them to present their best possible work, free from the mechanical constraints of handwriting.

b. Significant Savings in Time and Economic Costs

A second dominant positive perception was the considerable logistical and financial relief provided by the online mid-term test format. Participants reported that the elimination of daily commutes to campus during the two-week staggered mid-term examination period produced substantial savings in transportation expenses and pocket money otherwise spent on food and incidentals outside the home. The reduction in out-of-pocket costs was a significant and immediate benefit repeatedly emphasized across interviews. One participant quantified this relief, stating,

"My transport fee is completely saved... I don't go to campus and don't buy any snacks there. My pocket money remains intact for the whole mid-term period. That's a big saving."

This tangible economic advantage made the online examination format particularly appealing and was linked to reduced financial stress on students and their families during the pandemic's broader economic uncertainty.

Beyond immediate fiscal savings, participants also identified economies in consumable resources and, more subtly, in cognitive and temporal resources. The need for stationery was greatly minimized, as the examination was taken entirely on a digital device, thus reducing the material preparation and the anxiety associated with running out of ink or having pen malfunctions. Participants also assessed that the internet data quota consumed during the short-duration mid-term tests was "relatively small" and within manageable limits, particularly given the university's policy of providing internet subsidy. A representative quote highlighted this holistic efficiency:

"I can save so much. The transport fee, the money for snacks, my stationery... I just used one pen for anticipation, but that's all. Compared to normal, the internet quota I used was still normal and worth the expense."

This combination of financial, material, and time savings constitutes a powerful, multidimensional positive perception, where Schoology was seen not just as an exam tool but as an instrument of resource optimization in a time of crisis.

Difficulties Encountered in Using Schoology for Online Examinations

The thematic analysis also revealed significant challenges, organized under two themes that represent the technical and behavioral difficulties in the online examination environment.

a. The Problem of Unreliable Internet Connectivity

The most pervasive and emotionally charged difficulty described by all participants was the instability of internet connections, which emerged as the primary technical barrier to a fair and smooth examination experience. Participants detailed moments of acute frustration when trying to navigate between questions or submit their final work, only to have the screen freeze and display a loading icon for an indeterminate period. This technical friction was not a minor inconvenience but a direct threat to their performance, as it consumed limited examination time and induced a state of heightened distress that made it difficult to focus on cognitively demanding tasks. The temporal dimension of the exam made connectivity problems particularly acute and damaging. One participant vividly described the experience:

"When I wanted to move to the next question, the page kept loading. It wasted so much time, and I became panicked because the time was running. I was afraid I couldn't finish."

This experience was not uniform; participants implicitly recognized that the reliability of an internet connection is a function of socioeconomic geography and the choice of provider, creating a landscape of unequal testing conditions. Those in areas with weaker signal or with limited data plans experienced a fundamentally different, and more disadvantageous, exam environment than their peers with robust connections. This finding underscores that the shift to online assessment via Schoology inadvertently transformed a pre-existing digital divide into what can be termed an "assessment divide," where assessment validity was mediated by the quality of one's internet access. The server-side performance of the Schoology platform was not explicitly isolated from local network issues by participants, but the composite experience was that the system, as a whole, was unreliable and unpredictable during the high-stakes scenario, leading to a deep-seated anxiety about connectivity that preceded each online test session.

b. Loss of Concentration, Distraction, and the Propensity for Academic Dishonesty

A second critical difficulty transcended the purely technical and penetrated the psychological and behavioral dimensions of the online test-taking experience. Participants consistently reported that the isolated, unsupervised home environment, while comfortable, was filled with distractions, ranging from family activities to smartphone notifications, that severely fragmented their attention. This chronic loss of concentration was described as qualitatively different from the focused, collective silence of an examination hall, which the physical presence of an invigilator and peers paradoxically enforces. The home environment, by contrast, lacked these normative

behavioral cues, making sustained cognitive focus a continuous internal struggle. One participant articulated the psychological consequence:

"I couldn't concentrate like in a real exam room. At home, it's too easy to lose focus. When you lose focus, you start to get confused with the questions."

This mental fragmentation was identified as the direct antecedent to a specific form of digitally enabled academic dishonesty. When concentration wavered and confusion set in, the immediate availability of alternative digital communication channels, instant messaging applications like WhatsApp, presented a low-friction, high-temptation avenue for seeking answers from peers. Participants revealed that this cheating behavior was often not a calculated, premeditated decision, but a spontaneous reaction to the anxiety of being stuck and the annoyance of losing focus, exacerbated by unsolicited messages from classmates also seeking answers. A revealing narrative captured the sequence:

"I felt annoyed because some friends were chatting and asking for the answers. It disturbed my concentration completely. And honestly, I also felt tempted to open other tabs to find the answer when I was stuck because no one was watching."

This suggests that the online examination design, when replicating a closed-book format in an open-web environment, inadvertently created a perfect storm for academic integrity violations. The Schoology platform, devoid of proctoring features that were not in use, became a stage upon which a quiet, peer-mediated, and stress-induced drama of academic dishonesty unfolded.

Discussion

The findings of this study uncover a profound duality at the heart of the students' experience of using Schoology for high-stakes online assessment, revealing a tense and contradictory relationship between operational efficiency and assessment validity. The positive perceptions of Schoology, centered on flexible multiformat submission and significant cost-time savings, affirm the platform's established utility as a learning management solution. The finding that students valued the ability to submit video and document files replicates and extends prior research by Napitupulu et al. (2020) and Nguyen and Nguyen (2022), which characterized Schoology as a facilitator of paperless educational environments. However, this study demonstrates that this functionality, when applied to examinations, is not merely convenient but actively transformative, allowing for multimodal assessment formats like recorded micro-teaching, which would be impossible to conduct in a traditional sit-down examination. The data on economic and time savings directly corroborates earlier studies that found e-learning to offer significant cost-efficiency for students, particularly in terms of transportation and accommodation expenses (Alsarayreh, 2025; Dahal et al., 2023; Edwar, 2025). In this study, this economic relief was amplified by the pandemic context, where family financial pressures were heightened.

Yet, these positive logistical aspects are fundamentally overshadowed when viewed through the lens of the difficulties that emerged. The problem of unstable internet connectivity, while predictable, is profoundly consequential. It aligns with Hidayat

(2022) and Hidayat et al. (2023a) conclusion regarding the inadequacy of infrastructure for internet-based education. This study deepens that conclusion by revealing the existential, rather than merely technical, nature of this failure. For a student in a high-stakes mid-term examination, a "loading" page is not a simple delay; it is a rupture in the flow of performance that triggers intense anxiety, directly corrupts the standardized condition of time that all summative assessments require, and erodes the student's belief in the fairness of the system. The differential reliability of internet access across participants means this was an inequitable stressor, fundamentally challenging the psychometric principle of standardized test administration and transforming the assessment into a partial measure of a student's connectivity quality. The dialectic between the positive perception of convenience and the negative experience of academic dishonesty is the most pedagogically complex finding. The students' narrative of lost concentration reframes cheating not purely as a moral deficit but as a systemic outcome of a mismatched assessment design. The isolated, unsupervised home environment lacks what social cognitive theorists would term the "environmental cues" for focused, honest test-taking behavior. When these cues are absent, and the cognitive demand is high, the immediate digital affordances for communication become powerful distractors and tools for maladaptive coping. This interpretation moves beyond Haryanto's (2018) observation that Schoology's features can be misused, by positing that the design of the assessment itself, a conventional, closed-book exam directly transposed into a networked, un-proctored digital space, is the primary culprit. It creates an "integrity paradox," where the institution expects individual, closed-book performance within a technological and physical environment that makes such behavior psychologically difficult to sustain and practically impossible to enforce.

From a practical standpoint, the findings suggest that institutional interventions must operate on two fronts. First, there is an absolute imperative to address the digital divide as a matter of assessment equity. The provision of internet quota subsidies is necessary, but insufficient. Institutions and governments must collaborate to improve core telecommunications infrastructure and explore offline-capable examination submission technologies for asynchronous use. Second, and perhaps more urgently for educators, there must be a wholesale paradigm shift in summative assessment design. Engaging in what Sambell et al. (2012) call assessment for learning in a digital age means abandoning the direct replication of closed-book time-limited tests online, as this design is fundamentally incompatible with the open-book, networked nature of the home environment. The authentic solution lies in creating open-book, complex, scenario-based assessments that test higher-order cognitive processes, analysis, evaluation, and creation, where the act of looking up information is not a threat to validity but an expected part of the problem-solving process.

Conclusion

This study leads to the conclusion that student perceptions of Schoology as an online mid-term examination platform are defined by a fundamental and unresolved dualism. The platform can effectively serve functional and humane ends by enabling flexible digital submissions and yielding meaningful savings in time, money, and

material resources, which reduce the logistical burden of assessment. However, these benefits are severely undermined when the same platform becomes a vector for inequity and compromised integrity. The reliance on an unstable internet infrastructure creates an assessment divide that directly harms the fairness of the examination process. Simultaneously, the transposition of closed-book exam models into unsupervised digital settings fosters a loss of concentration that not only degrades the quality of the performance but also, counterintuitively, stimulates the conditions for academic dishonesty among students.

The findings must be interpreted in light of several limitations. First, the study was conducted with a small, homogenous sample of eight students from a single department at one private university in Indonesia, which fundamentally limits the transferability of the findings to other institutional, cultural, or infrastructural contexts. Second, data were collected during the acute emergency phase of the COVID-19 pandemic, an anomalous period of heightened collective stress that may amplify negative perceptions, making them context-specific rather than indicative of online examination perception under normal conditions. Third, the sole reliance on student self-report in interviews, while appropriate for a phenomenological study, introduces the possibility of recall and social desirability bias; students may have underreported or over reported certain behaviors, such as the extent of cheating, to align with perceived researcher expectations. Fourth, the study lacked observational or log-file data from the platform itself, which could have triangulated self-reported technical difficulties. Future research should therefore employ a mixed-methods design with a significantly larger and more heterogeneous sample, incorporate objective platform analytics, and be conducted under post-pandemic stable conditions to disentangle the transient effects of crisis from the enduring challenges of online high-stakes assessment.

Conflict of interests

The authors declare that they have no conflict of interest.

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