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From Classrooms to Clicks: Perceptions of Technology-Mediated Summative English Testing among Vocational Students

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Abstract

The transition to technology-mediated assessment in education has reshaped testing practices globally, yet its implications for vocational students remain underexplored. This study investigates vocational learners' perceptions of summative English testing conducted through digital platforms, focusing on the perceived benefits and drawbacks. Drawing on a mixed-methods approach, data were collected through questionnaires and interviews with students from a vocational institution. The findings reveal a complex interplay between usability, fairness, and performance impact. While some students appreciated the efficiency and immediate feedback of digital tests, many expressed concerns over interface unfamiliarity, limited digital literacy, and heightened test anxiety, which they felt adversely affected their performance. These perceptions were further influenced by socioeconomic and educational backgrounds, suggesting potential inequities in assessment outcomes. The study highlights the need for more inclusive and accessible digital assessment designs tailored to the vocational context. Implications for educators and policymakers include the integration of digital literacy support and the development of student-centered testing platforms to enhance validity and fairness in language evaluation.

Keywords: *English language testing, student perception, summative testing, technology-mediated assessment, vocational education*

1. INTRODUCTION

The global shift toward technology-mediated assessment has accelerated significantly across education systems, driven by rapid digital transformation and the need for scalable, efficient evaluation tools (Flores et al., 2022). In the context of vocational education, this transition brings distinct challenges. Unlike general academic programs, vocational education primarily emphasizes hands-on, skill-based training, which does not always align with the abstract and standardized nature of digital assessment formats (Zhou & Xu, 2022). Nevertheless, digital testing platforms offer potential advantages such as immediate scoring, scalability, and adaptive testing features that can enhance efficiency (Oranje et al., 2019). However, their application in high-stakes English language assessments for vocational learners remains understudied (Deygers et al., 2018), despite the increasing global demand for English proficiency in technical and occupational fields (Kunnan & Jang, 2021).

Student perceptions have emerged as a critical factor influencing the success, fairness, and validity of technology-based assessments (Jang et al., 2021). Particularly among vocational students, these perceptions are shaped by factors such as unfamiliar digital interfaces, limited access to technological resources, gaps in digital literacy, and elevated test anxiety (Aryadoust & Raquel, 2022). The abrupt transition from traditional, paper-based testing to digital modes during the COVID-19 pandemic only intensified these issues (Bond et al., 2021). As such, it becomes imperative to understand students' perspectives on these new assessment formats in order to design systems that are both valid and equitable (Knoch & Chapelle, 2021).

This study aims to investigate vocational students' perceptions of technology-mediated summative English testing, with a focus on three main dimensions: usability, fairness, and the perceived impact on academic performance. While there has been a growing body of research on digital language assessment in academic and higher education settings (Yan et al., 2022), vocational education presents a different landscape that warrants its own

dedicated inquiry. Learners in vocational programs often come from diverse educational backgrounds and are strongly career-oriented, meaning that their needs and expectations regarding assessment may differ significantly (Alvarez-Mayo et al., 2021). Building on current developments in digital language assessment literacy (Pusparini et al., 2023), this study addresses these gaps by centering the experiences of students in vocational English learning environments.

Importantly, the research also speaks to broader concerns about equity in education. As Shohamy (2021) argues, assessment practices are never neutral—they reflect and reinforce underlying power dynamics in educational systems. For vocational students, who are frequently from socioeconomically disadvantaged backgrounds, assessment formats that assume familiarity with digital tools may unintentionally marginalize or penalize them (McNamara et al., 2019). If students' test performance is unduly influenced by technological unfamiliarity rather than language competence, the validity and fairness of the assessment are called into question. This study, therefore, contributes to ongoing conversations about the need for inclusive and just assessment designs in vocational and technical education (Saville & Gutierrez Eugenio, 2022).

Ultimately, this research seeks to offer empirically grounded insights and recommendations for improving the implementation of digital English assessments in vocational contexts. By aligning digital testing practices with learners' actual capabilities and experiences, educators and institutions can develop more accurate, equitable, and meaningful evaluation systems (East, 2022). As vocational education systems increasingly integrate digital tools across both instructional and assessment processes, adopting student-centered and context-sensitive approaches will be vital to ensuring fair and effective learning outcomes (Lanteigne & Harsch, 2021). Therefore, this study aims to analyze how vocational students perceive the benefits and drawbacks of technology-based summative English testing, with the goal of informing more inclusive and pedagogically sound assessment designs.

2. METHOD

The study employed convenience sampling, a research method that involves the selection of participants based on their proximity to the research process, with the objective of enhancing the accessibility of data collection (Galloway, 2005). The sample size of the study comprised 36 students enrolled in the Department of Computer and Network Engineering at the vocational school. The educational establishment is located in a rural area within the district of Hamparan Perak, which is situated in the province of Sumatra Utara. The students are currently in the final grade of their vocational course and are undertaking the final assessment before graduating from this level. The students were provided with the online form and invited to complete the interview anonymously, with the objective being to guarantee the authenticity and confidentiality of the responses. This approach was adopted to ensure that the students could respond to the questions without the influence of external pressures or influences.

The instrument under investigation was created comprising 10 items, which were divided into three categories of perceived usefulness (four statements), risk of cheating (three statements), and perceived self-efficacy (three statements). The aim of this categorisation was to explore the perceptions of vocational students on the digital summative English test. The statements were adopted from previous studies (Alharbi, Alhebshi & Meccawy, 2021), ensuring that the items provided are already proven through scientific research. In each statement, the researcher has also provided an open-ended response in the form of a brief explanation, with the aim of ensuring that students are able to articulate an alternative perspective on the digital summative test, should they wish to do so.

The present study was conducted using a qualitative design, with semi-structured interviews conducted in an asynchronous setting (Opdenakker, 2006; Syafrayani, et al., 2022). The study was conducted by distributing the Google Form link via the WhatsApp Group, thereby enabling the students to complete the questions independently. The questions were presented in both English and Indonesian to mitigate any potential confusion arising from variations in the students' English proficiency levels, and to ensure the reliability of the responses by avoiding random answers. The confidentiality and anonymity of the data were assured, and there was no impact on the students' test scores. Following the collection of the data, the answers were analysed by means of thematic analysis (Braun and Clarke, 2006). The generation of codes from the data was followed by a search of the themes to extract the data into three categories: perceived usefulness, perceived risk of cheating and perceived self-efficacy. These categories constituted the final research findings.

3. RESULTS

This study aimed to investigate students' perceptions, experiences, and challenges regarding digital assessment in English Language Teaching (ELT). The data were collected through a questionnaire, and the results provide insights into how students view the usefulness of online assessment, the possibility of cheating, and their emotional responses during online English tests.

The following table summarizes the student responses, categorized into three main themes: perceptions of usefulness, risks of cheating, and emotional experiences. Each item shows the frequency and percentage of students who selected each statement:

Table 1. Summary of Students' Responses on Digital Assessment in ELT

Category	Response	Frequency	Percentage (%)
Perception of Usefulness	Using online assessment is useful for language learning	15	41.67%
	Completing online assessment helps me figure out my language weaknesses	8	22.22%
	The immediate knowledge of my incorrect answers helps my performance	8	22.22%
	Using online assessment improves my exam performance	5	13.89%
Cheating Risks	I translate difficult words during English exams	27	75.00%
	I screenshot questions and share them with friends	5	13.89%
	It is easy to cheat during English tests	4	11.11%

Emotional Experience	I can remain calm when answering online assessments	16	44.44%
	I feel confident for taking Online English tests	11	30.56%
	I can perform well in online assessment	9	25.00%

The results indicate that most students (41.67%) find online assessment useful for language learning, and many appreciate how it helps them identify their weaknesses or receive immediate feedback. However, a significant number of students (75%) admit to translating words during exams, highlighting issues of academic integrity. Emotionally, nearly half of the respondents (44.44%) feel calm during online assessments, though fewer feel confident or believe they perform well in such formats. In short, there are several things that can be found through the data such as:

a. In terms of perceived usefulness, the most common response was that online assessment is useful for language learning (41.67%).
b. For cheating risks, a striking 75% of students admitted to using translation tools during English summative tests—highlighting a significant academic integrity concern.
c. Regarding emotional experiences, 44.44% of students reported that they could remain calm during online assessments, suggesting a moderate level of emotional comfort with digital platforms.

The following chart shows how the dominant responses across the three themes displays the most frequently selected item from each category.

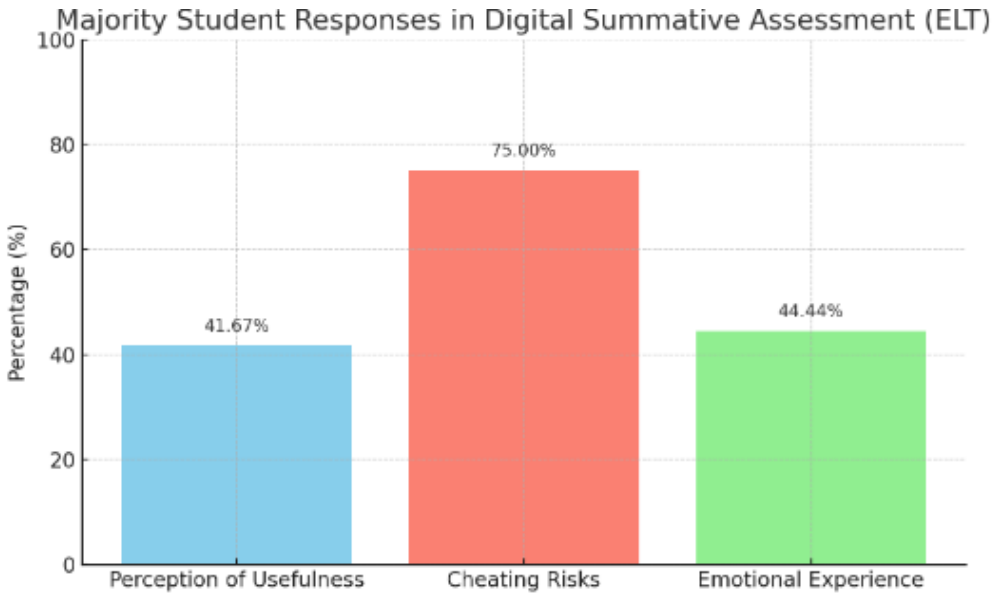

Figure 1. Majority student responses in the context of digital summative assessment in ELT

4. DISCUSSION

Perception of Usefulness

The majority of respondents (41.67%) agreed that online assessment is useful for language learning, and 22.22% said it helps them identify their weaknesses. This aligns with Alharbi, Alhebshi, and Meccawy (2021), who found that digital tests with immediate feedback enhance learners' metacognition by pinpointing specific errors. Meijer and Veldkamp's (2021) meta-analysis further showed that automated scoring can maintain reliability while offering rapid insights into learner performance, which students value for timely corrective action.

Only 13.89% felt that online assessment improved their exam scores, suggesting that students may still question its summative validity. Chapelle and Voss (2021) warn that technical disruptions and unfamiliar interfaces can introduce construct-irrelevant variance, reducing confidence in digital formats. Moreover, Pusparini, Surjono, and Wahyuni (2023) note that without adequate orientation to platform features, students may underperform simply due to interface unfamiliarity.

Although the emergency remote teaching era has ended, the rapid digital transformation triggered by COVID-19 created lasting infrastructure and skill gains. Vocational learners who experienced online testing during the pandemic likely became more comfortable with these tools, contributing to the positive perceptions seen here. As Torrance (2023) argues, when well-designed and embedded in regular instruction, technology-mediated assessments move from being crisis measures to constructive, routine components of ELT.

Cheating Risks

An overwhelming 75% admitted to using translation tools during tests, and 13.89% shared screenshots—behaviors highlighting academic-integrity challenges in unsupervised online environments. Smith, Becker, and Tan (2022) reported similar findings, showing that ease of access to online resources can tempt students into bypassing standard protocols. Chan's (2023) longitudinal study also documented a spike in such practices when remote formats lacked robust proctoring.

Yet only 11.11% agreed that cheating is "easy," indicating a shift in students' ethical framing: using digital aids may feel like a normal strategy rather than malpractice. Tsagari and Cheng (2022) found that when digital-assessment literacy is low, students aren't fully aware of integrity norms. They recommend comprehensive orientation programs to clarify what constitutes cheating in online contexts.

Moving forward, balancing flexibility with integrity is crucial. Jordan (2020) demonstrated that randomized question banks and short time windows reduce cheating opportunities without excessive surveillance. Complementing these with student training on digital-assessment ethics (Kremmel & Harding, 2023) can foster both trust and accountability in vocational ELT settings.

Emotional Experience

Although 44.44% felt calm during online tests and 30.56% felt confident, only 25% believed they performed well—pointing to lingering anxiety or uncertainty. Aryadoust and Raquel (2022) showed that unfamiliar digital interfaces can elevate test anxiety, especially when stakes are high and technical support is limited. Moreover, Meijer and Veldkamp (2021) emphasize that interruptions (e.g., connectivity issues) disrupt cognitive flow, undermining performance confidence.

Choi and Lee (2020) highlighted how reduced real-time interaction in online tests can amplify stress; when students cannot ask clarifying questions, they may second-guess their responses. Providing low-stakes practice sessions and clear guidance helps mitigate this effect. O'Sullivan (2023) demonstrated that structured pre-testing workshops significantly boost both performance and self-assurance by familiarizing learners with digital formats.

Importantly, the relatively high rates of calmness suggest growing digital resilience among vocational learners. Since the pandemic, many have acclimated to remote environments, building emotional coping strategies. To maximize this resilience, institutions should continue investing in user-friendly platforms and ongoing digital-assessment literacy programs (Zhai, Wang, & Chen, 2023), ensuring students evolve from simply coping to genuinely excelling in online assessments.

5. CONCLUSION

This study examined vocational students' perceptions of technology-mediated summative English testing across three dimensions—usefulness, cheating risk, and emotional experience—and demonstrated how the rapid digital transformation initiated during the COVID-19 emergency has become a lasting feature of ELT assessment. While many students (41.67%) appreciate the formative strengths of online tests and value immediate feedback in identifying weaknesses (22.22%), fewer believe that digital formats directly enhance high-stakes performance (13.89%). At the same time, widespread use of translation tools (75%) and occasional sharing of questions (13.89%) reveals a normalization of certain integrity breaches, even as only a minority (11.11%) describe cheating as "easy." Emotionally, although a plurality feel calm (44.44%) or confident (30.56%) when testing online, just 25% feel they truly perform well in these environments.

These findings contribute to the digital-assessment literature by moving beyond general academic settings into the vocational ELT context, where hands-on learning and varying digital literacies pose unique challenges. By quantifying both the benefits and the ethical dilemmas of online testing, this research provides concrete evidence that digital assessment designers and educators must address not only technical reliability and feedback mechanisms but also students' moral frameworks and affective readiness. In highlighting the interplay between platform familiarity, emotional resilience, and integrity norms, the study offers a holistic view of how technology-enhanced assessments function in real-world vocational classrooms—and how they might be refined to better support equity and validity.

Looking ahead, future research should evaluate targeted interventions—such as integrity-focused orientations, randomized question banks, or AI-assisted proctoring—to determine which approaches most effectively reduce dishonest practices without compromising trust or accessibility. Longitudinal studies would shed light on how perceptions and behaviors evolve as institutions embed digital-assessment literacy programs and upgrade infrastructure. Comparative investigations across different vocational specializations or proficiency levels could uncover domain-specific patterns, while experimental work on emotionally supportive design features—like built-in practice modules or adaptive feedback scaffolds—would advance understanding of how to optimize both cognitive achievement and learner well-being in technology-mediated ELT assessment.

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