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Embedding Mobile Learning in Vocational Classrooms: Insights from Educator and Learner Experiences

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ABSTRACT

The expansion of mobile technologies has intensified interest in how digital devices shape language learning beyond initial phases of innovation. Responding to calls for research on sustained implementation, this study investigates learners' and a teacher's perceptions of tablet use in an Indonesian vocational high school where one-to-one provision is embedded in everyday practice. Using a descriptive survey design, data were collected from 150 students through Likert-scale and open-ended questionnaires and complemented by a semi-structured teacher interview. Results showed consistently strong agreement that tablets supported access to materials, communication, and assessment procedures. Thematic analysis identified four dominant dimensions: digital familiarity, expanded resource availability, facilitation of interaction, and institutional efficiency. While most participants reported confidence in using the devices, some indicated uncertainty about optimising learning strategies. Interpreted alongside current debates, the findings suggest that positive perceptions are closely associated with pedagogical structuring and system coherence. When digital workflows are clearly organised, tablets may be experienced as dependable academic infrastructures rather than distractions. By presenting evidence from an underrepresented vocational context, the study contributes to understanding how mobile learning can be normalised and sustained.

Keywords: Digital pedagogy, MALL, learner perception, vocational education

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Introduction

Digital technologies are now woven into the fabric of education, and mobile devices in particular play a central role in how learners access information and communicate. In language learning, the rise of Mobile Assisted Language Learning (MALL) has generated enthusiasm about flexible access to resources and extended practice beyond the classroom (Burston, 2019; Kukulska-Hulme, 2020). A recent meta-analysis of 253 studies confirms that mobile learning yields large learning gains across diverse settings. However, experts caution that such gains depend heavily on how technology is used. Outcomes are shaped by instructional design, teacher mediation, and learners' digital skills (Hafner & Ho, 2020; Stockwell & Reinders, 2019). Indeed, studies note that while mobiles can boost engagement and autonomy, they can also introduce distraction and uneven participation (Nguyen et al., 2021).

These insights have shifted the research focus from whether mobile tools can help to how they help. Scholars argue that the key lies in embedding devices within coherent pedagogical routines. Crompton and Burke (2018) point out that mobile integration is a socio-pedagogical process: teachers set expectations, select platforms, and guide student use. Consistent with this, Burke et al (2025) found that when teachers implemented innovative mobile pedagogies (personalised, authentic tasks), they perceived clear improvements in student learning. Likewise, Tan et al (2024) report that students believe effective learning through apps requires teacher guidance. Their study of Chinese university students found that learners valued instructor recommendations and felt they needed help choosing suitable mobile learning apps. In short, technology by itself is not enough — alignment between teachers and learners, and clear academic purposes, appear crucial.

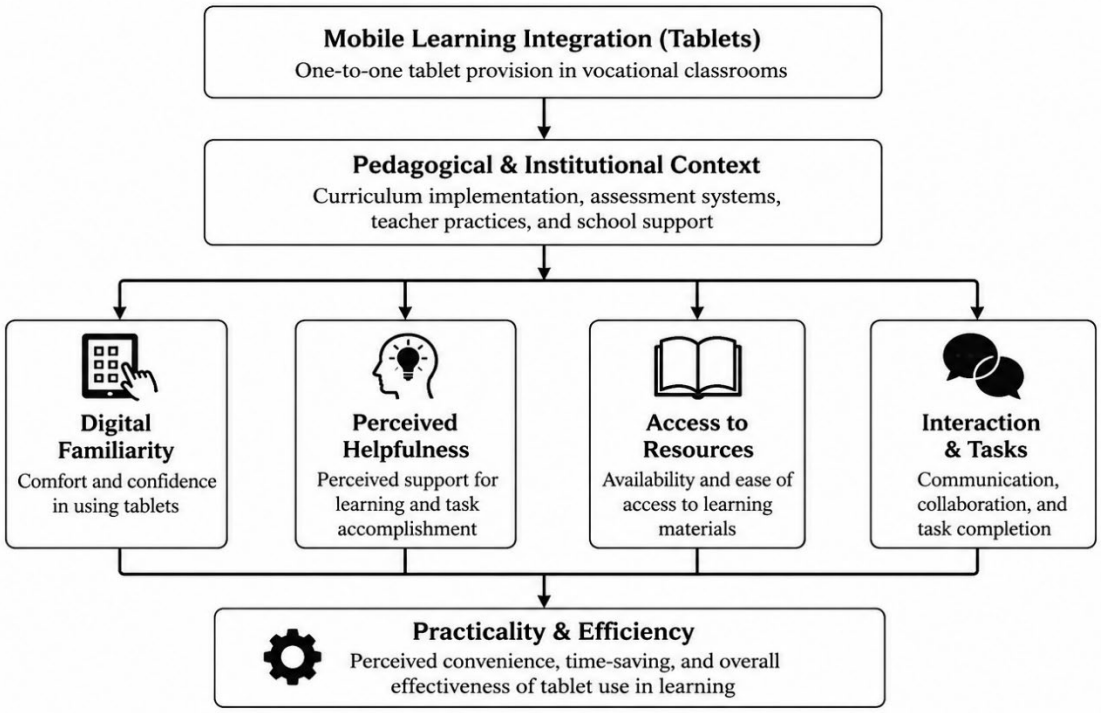
Despite much research, important gaps remain. Most studies involve short-term pilots or higher-education contexts, leaving secondary vocational settings underexplored. Few investigations document long-term, school-wide one-to-one programs, especially in non-Western regions. This gap matters: institutional support, policies, and cultural factors can greatly influence how mobile learning plays out. For example, Kuo et al (2025) examined a Taiwanese primary school with government-backed one-to-one tablets. They found that integrating peer assessment via tablets significantly improved students' motivation and performance, suggesting that when digital tools are embedded in structured activities, outcomes rise. Learner perceptions also need closer attention. Positive attitudes toward devices may encourage exploration, but without structure, they may not translate to learning. Aratusa, et al (2022) surveyed students using MALL for pronunciation practice and found generally positive views. Yet these students also reported technical issues (e.g. phone performance limits) and distractions. This duality echoes Liu and Zhang's (2025) warning: novel technology can mask pedagogical weaknesses. They argue that mobile-assisted lessons must be deliberately designed (collaborative, interactive) to truly improve learning.

The present study addresses these questions by examining how learners and a teacher perceive tablet use in English classes at a vocational high school in Indonesia. In this school, every student has a tablet, and digital platforms are embedded in daily instruction, assignments, and assessment. Rather than treating tablets as temporary novelties, we investigate how participants evaluate their benefits once technology is normalised. By focusing on a sustained, one-to-one environment, the study contributes to debates on normalisation in MALL. It seeks to understand

whether shared infrastructure and aligned practices help turn mobile devices into reliable educational tools or if challenges persist.

Departing from the background, this study, therefore, is guided by the research question: What are the perceptions of learners and the teacher toward the benefits of using tablets as a supporting learning medium in the process of teaching and learning English?

Figure 1. Conceptual Framework of Tablet Use in Vocational English Learning



Note: The framework illustrates how mobile learning integration within a supportive pedagogical and institutional context shapes students' perceptions across key dimensions, culminating in their views on the practicality and efficiency of tablet use.

Methods

This study adopted a descriptive survey design to examine how students and their teacher perceive the benefits of tablet use in English language learning. A descriptive survey is appropriate for documenting existing attitudes, beliefs, and practices within natural educational settings without manipulating variables. Because tablets were already embedded in everyday instructional routines at the research site, the study aimed to capture participants' perspectives under conditions of established implementation rather than experimental intervention. The research was conducted at SMK PGRI 3 Malang, a vocational secondary school in Indonesia that has implemented a one-to-one tablet policy. Participants consisted of 150 students from the tenth and twelfth grades and the single English teacher responsible for instructing them. The teacher taught seven classes across multiple vocational majors, including Electronics, Industrial Electronics, Motor Generator, and Audio-Video. All students in these classes were included, resulting in a census of the relevant population rather than a sampled subset. This approach ensured comprehensive representation of learners who routinely used tablets in English lessons.

Data were collected using two complementary instruments: a student questionnaire and a teacher interview. The questionnaire comprised both closed-ended and open-ended sections. The closed-ended items employed a five-point Likert scale ranging from strongly disagree to strongly agree to measure students' perceptions of tablet-related benefits, such as access to learning materials, efficiency, interaction, and task completion. Then, the questionnaire was validated by an expert in that field before it was administered to the participants. Furthermore, prior to the main data collection, the questionnaire was also pilot tested with a smaller group who shared similar characteristics with the target participants in the same research site. The pilot testing aimed to identify unclear items, confirm the appropriateness of the Likert-scale format, and ensure that the questionnaire could be completed within a reasonable time. Feedback from the pilot resulted in minor linguistic refinements to enhance readability. The internal consistency of the Likert-scale items was assessed using Cronbach's Alpha. Since the available dataset was recorded in aggregated frequency form, the responses were reconstructed to approximate individual-level data for analysis. The reliability analysis yielded a Cronbach's Alpha coefficient of $\alpha = 0.94$, indicating excellent internal consistency among the items. This result suggests that the questionnaire reliably measures students' perceptions of tablet use in English learning.

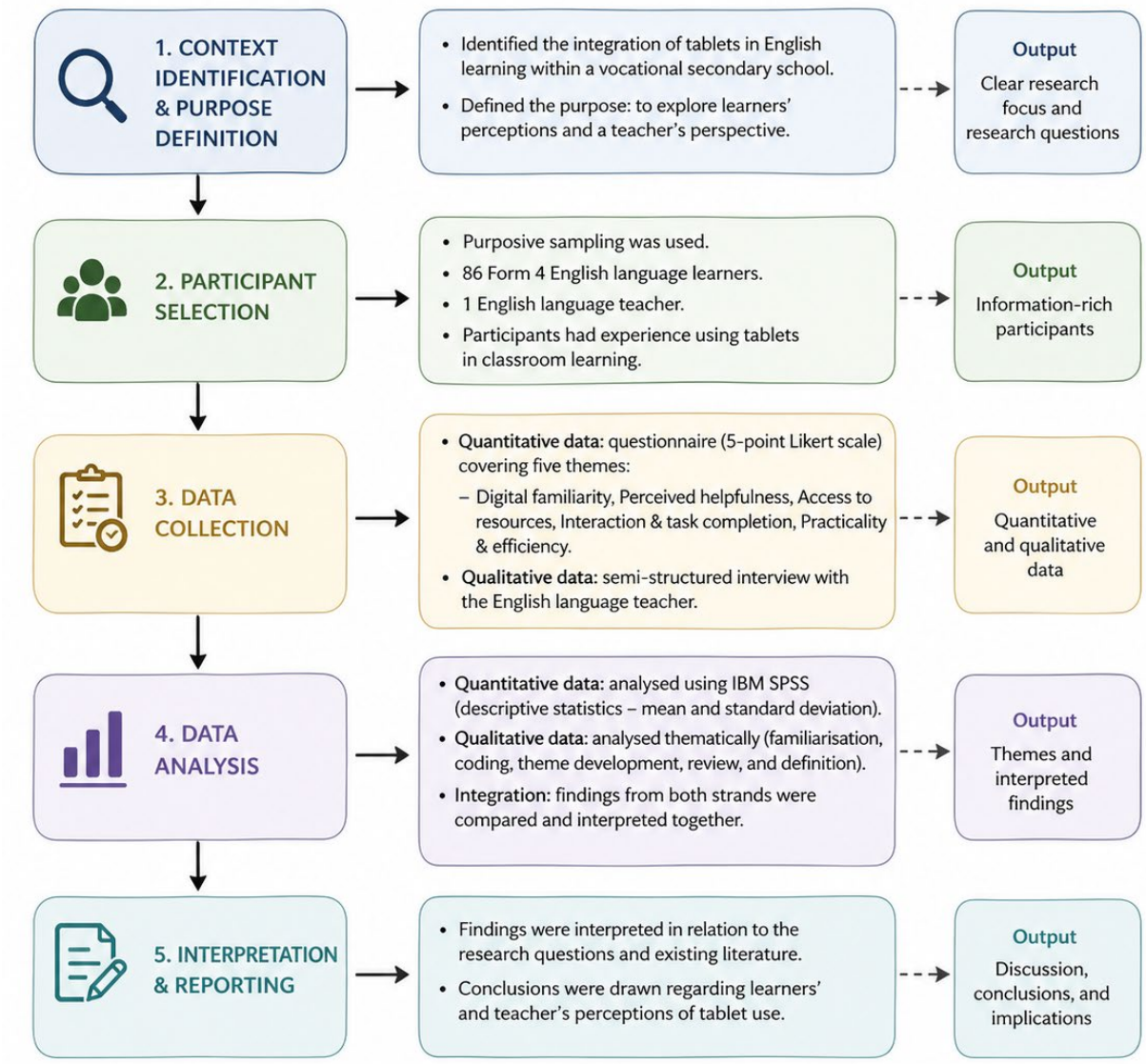
Meanwhile, the open-ended section invited students to elaborate on their experiences and describe how tablets supported or challenged their learning. Before distribution, the questionnaire items were reviewed to ensure clarity and alignment with the research question. In addition to the questionnaire, a semi-structured interview was conducted with the English teacher to gain deeper insight into instructional practices and perceived advantages of tablet integration. The interview guide was organised around themes parallel to those in the student questionnaire, allowing for comparability while also providing flexibility for probing and elaboration. This format enabled the researcher to explore nuanced perspectives on how tablets influenced classroom management, assessment procedures, and student engagement.

Questionnaire data were collected through an online form administered during school hours to ensure a high response rate and consistent participation conditions. The teacher interview was conducted individually, audio-recorded with consent, and transcribed for analysis. All participants were informed of the study's purpose and assured that their responses would remain confidential and used solely for academic purposes. Participation was voluntary, and institutional approval was obtained prior to data collection. Quantitative data from the Likert-scale items were analysed using descriptive statistics to identify overall trends in agreement and patterns of perception. Qualitative responses from open-ended questions and the teacher interview were analysed thematically. The analysis involved repeated reading of the data, identification of recurring concepts, and grouping of these concepts into broader categories related to perceived benefits and implementation practices. Themes were refined through comparison across data sources to ensure consistency and credibility. By integrating quantitative patterns with qualitative insights, the study aimed to provide a comprehensive account of how tablet use was experienced within a stable vocational school context.

Figure 2 presents the overall process of the study using a qualitative research model to provide a clear overview of each stage from context identification to data interpretation.

Figure 2

Research Process of the Study



Note: This model diagram illustrates the sequential and iterative process followed in this study, adapted from Miles, Huberman, and Saldana (2014).

Results

This section presents the findings of the study concerning learners' and the teacher's perceptions of the benefits of tablet use in English language learning at SMK PGRI 3 Malang. The findings are organized into two major parts: quantitative results derived from the closed-ended questionnaire and qualitative results obtained from the open-ended questionnaire and semi-structured teacher interview. The results are presented objectively without interpretation.

Students' Perceptions of Tablet Use

Descriptive statistics were calculated for all ten Likert-scale items (1 = Strongly Disagree to 5 = Strongly Agree). The results are grouped into thematic categories: Digital Familiarity,

Perceived Helpfulness and Optimization, Access to Learning Resources, Interaction and Task Completion, and Practicality and Efficiency.

Table 1
Descriptive Statistics of Students' Perceptions of Tablet Use in English Learning (N = 150)

Theme	Indicator	M	SD
Digital Familiarity	Familiar with technology as learning media	4.83	0.38
	Use technology to support learning	4.35	0.54
	Capable of operating tablet	4.27	0.53
Perceived Helpfulness & Optimization	Tablet use is helpful and beneficial	4.85	0.36
	Able to optimize tablet functions	3.95	0.52
Access to Learning Resources	Easy access to learning applications	4.87	0.33
	Obtain various English materials	4.83	0.37
Interaction & Task Completion	Use tablet to interact with peers/teacher	4.21	0.55
	Use tablet to complete exercises	4.06	0.74
Practicality & Efficiency	Tablet use is practical and efficient	4.51	0.50

Note. Scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

Digital Familiarity

The results indicate a high level of technological familiarity among students. The mean score for familiarity with technology as a learning medium was 4.83 (SD = 0.38), reflecting near-unanimous agreement. Similarly, students reported frequent use of technology to support learning both inside and outside school (M = 4.35, SD = 0.54). Their perceived capability in operating tablets for English learning was also high (M = 4.27, SD = 0.53). These findings show consistently strong agreement regarding students' familiarity and operational competence in using tablets for educational purposes.

Perceived Helpfulness and Optimisation

Students reported that tablet usage in English learning was highly beneficial (M = 4.85, SD = 0.36), representing one of the highest mean scores across all items. Regarding the ability to optimize tablet functions for learning English, the mean score was slightly lower (M = 3.95, SD = 0.52), although still within the agreement range. The higher standard deviation for this item suggests greater variability compared to other items.

Access to Learning Resources

Students reported very high levels of agreement regarding access to applications and materials. The mean score for ease of accessing learning applications was 4.87 (SD = 0.33), the highest recorded among all items. Similarly, the ability to obtain various English learning materials through tablets yielded a mean score of 4.83 (SD = 0.37). These results indicate strong consensus regarding the accessibility of learning resources through tablet use.

Interaction and Task Completion

Students reported positive perceptions regarding interaction through tablets (M = 4.21, SD = 0.55). The use of tablets to complete English exercises also received agreement (M = 4.06, SD = 0.74). The relatively higher standard deviation for this item indicates more variation in responses compared to other categories.

Practicality and Efficiency

Tablet use as practical and efficient received a high mean score of 4.51 (SD = 0.50). All respondents selected either Strongly Agree or Agree for this item, reflecting uniform agreement regarding efficiency. Overall, quantitative findings show consistently high agreement across all measured dimensions of tablet use in English language learning.

Students' Open-Ended Responses

Analysis of open-ended responses revealed several recurring themes concerning perceived benefits of tablet use.

Tablets as Substitutes for Printed Books

Many students stated that tablets could replace textbooks as primary learning resources. Responses indicated that one device could store multiple materials, including e-books, notes, presentations, and additional references. Students reported that materials could be accessed anytime and anywhere. Several students mentioned that they no longer needed to carry multiple physical books because all materials were available digitally within the tablet.

Practicality and Portability

Students frequently described tablets as practical and easy to carry. The portability of the device was mentioned as a major advantage, particularly in reducing physical load and organising materials efficiently. Students emphasised that one device could accommodate various applications and files necessary for English learning.

Listening Practice and Translation Support

Students reported that tablets were useful for listening activities through videos and audio materials. Translation applications and online dictionaries were also mentioned as beneficial tools for understanding vocabulary and grammar.

Access to Assignments and Learning Materials

Students stated that tablets allowed them to access assignments, teacher-uploaded files, and additional learning resources both in school and at home. They noted that materials could be reviewed repeatedly.

Perceived Improvement in Language Skills

Several students indicated that tablet use supported improvement in English skills when utilised for reviewing lessons and practising exercises. Some responses emphasised that effectiveness depended on how well the device was used for academic purposes. A small number of students suggested that tablet usage should remain focused on learning activities to maintain academic effectiveness.

Teacher's Perceptions of Tablet Use

Data from a semi-structured interview with one English teacher revealed several perceived benefits of tablet integration in classroom practice. Although the insights are drawn from a single participant and therefore should be interpreted as context-specific, they provide a detailed account of how tablet use is operationalised within a sustained one-to-one learning environment. The teacher's responses highlight three interconnected areas: assessment management, access to learning materials, and instructional practicality.

Examination and Assessment Management

A central theme emerging from the interview is the role of tablets in facilitating assessment processes. The teacher reported that tablets were routinely used to administer examinations, distribute assignments, and monitor student performance through an integrated digital platform. As the teacher explained:

> "The use of tablets in the learning process can give benefits, such as conducting examinations and giving assignments online, for sending files of learning materials to the students, and students are also allowed to check their grades through the use of tablets via the OCS application."

This suggests that tablet integration extends beyond content delivery to encompass assessment and feedback mechanisms. The ability for students to access their grades directly indicates a level of transparency and immediacy that may influence learner engagement and accountability. Furthermore, the teacher noted that remedial tests could be conducted through the same system, indicating that tablets support flexible and continuous assessment practices. In this context, tablets function as an organisational infrastructure that streamlines evaluation processes rather than merely as instructional tools.

Access to Learning Materials

Another prominent theme concerns the role of tablets in enabling access to learning materials. The teacher indicated that instructional resources, including presentations, videos, and supplementary materials, were distributed digitally via the tablet platform. He stated:

> "Students prefer to do exercises or tests using a tablet via the OCS application as it is more practical for them to accomplish… Besides, the use of tablets enables students to access learning materials given by the teacher at home."

This reflects the extension of learning beyond classroom boundaries, allowing students to revisit materials outside scheduled instructional time. The teacher's observation that students prefer tablet-based activities suggests a perceived alignment between the technology and learners' working habits. At the same time, this preference appears to be linked to practicality and ease of access rather than novelty. These findings indicate that tablets contribute to the continuity and organisation of learning resources within this setting.

Instructional Practicality

The teacher also emphasised the practicality of tablet use in managing teaching and learning activities. Tablets were described as supporting both instructional delivery and classroom organisation. He further stated:

> "Tablet utilisation is extremely helpful for the process of teaching and learning English, either at classrooms or at home."

The teacher recommended the continued use of tablets to support instructional practices.

This perspective suggests that tablets are integrated into routine pedagogical practices rather than functioning as supplementary tools. The emphasis on practicality aligns with the broader pattern observed in the student data, where efficiency and ease of use are central to positive perceptions. The teacher's recommendation for continued use further indicates that tablets are viewed as a stable and beneficial component of the instructional system.

Both quantitative and qualitative findings indicate consistently positive perceptions of tablet use among students and teachers. High levels of agreement were observed across dimensions of familiarity, accessibility, interaction, and efficiency. Open-ended responses and interview data further described tablets as practical tools for accessing materials, conducting assessments, and supporting English language learning activities. While these findings provide valuable insight into how tablet integration is experienced from a teacher's perspective, it is important to note that they are based on a single participant. As such, they should be understood as illustrative of one institutional context rather than representative of wider teaching practices. Nevertheless, the consistency between the teacher's account and students' responses strengthens the credibility of the observed patterns within this setting.

Discussion

This study explored how students and a teacher perceive the use of tablets in English language learning within a vocational secondary school where devices are fully integrated into everyday practice. Overall, both groups expressed strongly positive views, particularly in relation to access to materials, ease of use, and classroom efficiency. However, these positive perceptions are best understood not as evidence of the inherent value of tablets, but as a reflection of how the technology is organised and used within a stable instructional system. The discussion is organised according to the thematic structure presented in the Results section: Digital Familiarity, Perceived Helpfulness and Optimisation, Access to Learning Resources, Interaction and Task Completion, and Practicality and Efficiency.

Digital Familiarity: From Operational Competence to Normalisation

One of the clearest findings is the high level of digital familiarity among students. Tablets appear to be treated as ordinary learning tools rather than new or disruptive technologies, supporting arguments that sustained use leads to the normalisation of mobile devices in educational settings (Kukulska-Hulme, 2020; Trust & Whalen, 2020). Unlike earlier studies that reported technological anxiety during initial implementation, learners in this context operate within an environment where digital tools are institutionally embedded and expected. However, familiarity does not necessarily imply sophisticated or strategic use. The slightly lower ratings for optimisation suggest that, while students feel comfortable using tablets, they may not always be able to maximise their learning potential. This reflects a well-established distinction in the literature between operational competence and deeper forms of digital literacy (Hafner & Ho, 2020), indicating that sustained exposure alone does not automatically lead to more effective learning practices.

Perceived Helpfulness and Optimisation: Positive Orientation with Nuanced Variability

Students also reported that tablets are highly helpful for learning, which is consistent with earlier studies showing generally positive attitudes toward mobile learning (Burston, 2019; Aratusa et al., 2022). What is interesting here, however, is the relatively limited attention to possible drawbacks. Previous research often highlights issues such as distraction, multitasking,

or superficial engagement (Nguyen et al., 2021), yet these were not strongly reflected in students' responses. One possible explanation is the structured nature of tablet use in this context. Because devices are closely tied to assignments, assessments, and classroom routines, students may experience them primarily as academic tools rather than as sources of distraction. Still, this does not mean that such issues are absent. It is equally possible that students do not always recognise or report off-task behaviour, or that these challenges have become less visible over time.

Access to Learning Resources: Expanding the Material Ecology of Learning

The findings on access to learning resources reinforce a key strength of mobile learning: the ability to reach materials easily and at any time. Students described tablets as replacing textbooks and enabling them to revisit lessons outside the classroom, which aligns with established understandings of MALL as flexible and portable (Kukulska-Hulme & Viberg, 2018). At the same time, the way students talk about this access is telling. Rather than emphasising independence or self-directed learning, they tend to frame tablets in terms of practicality and convenience. This suggests that access alone does not necessarily transform learning practices. Even in a one-to-one device environment, differences in students' skills, habits, or home conditions may shape how effectively those resources are used. In other words, availability does not automatically lead to meaningful engagement.

Interaction and Task Completion: Structured Engagement Rather than Distraction

A similar pattern can be seen in students' views on interaction and task completion. Tablets were generally perceived as supporting communication and helping students complete their work efficiently. This contrasts with concerns in the literature about mobile devices encouraging fragmented attention (Nguyen et al., 2021). Again, the structured use of tablets in this school may help explain this difference. When tasks, assessments, and communication are all channelled through the same system, students are more likely to remain focused on academic activities. However, the potential for distraction or misuse cannot be entirely ruled out. Mobile devices still provide access to non-academic content, and without ongoing guidance and self-regulation, these risks remain present, even if they are not prominently reported.

Practicality and Efficiency: Tablets as Academic Infrastructure

Both students and the teacher described tablets as practical tools for organising materials, submitting assignments, and conducting examinations. Rather than emphasising innovation or novelty, participants framed tablet use in terms of efficiency, organisation, and accessibility. This perspective resonates with recent discussions of normalisation in digital education, which argue that mature integration shifts attention from excitement to reliability (Selwyn et al., 2020). Unlike studies conducted during early adoption stages, where technical challenges dominate narratives, the current findings indicate stable functionality. Tablets function as an academic infrastructure rather than experimental technology.

Teacher's Perspective: Institutional Mediation and Assessment Integration

The teacher's interview responses reinforce student-reported benefits. The teacher emphasised online examination management, assignment distribution, grade monitoring, and remedial testing as key advantages. These functions illustrate how tablet integration is not limited to resource access but extends to assessment and administrative coordination. This institutional dimension strengthens the alignment between teacher mediation and learner perception. As suggested in prior research, coherent system design and teacher guidance are

central to sustainable mobile learning implementation (Hsu, 2021). The convergence between teacher and student perceptions observed in this study suggests a shared understanding of the academic purpose of tablet use.

Integrated Interpretation Across Themes

Taken together, the findings suggest that the positive perceptions reported in this study are closely tied to the stability and organisation of the learning environment. Tablets appear to work well not simply because they are available, but because they are integrated into structured routines that guide how they are used. At the same time, a more critical reading of the results highlights those familiar challenges—such as uneven digital skills, potential distraction, and technical constraints—have not disappeared. Rather, they may be less visible in a context where technology has become normalised. In this sense, the study contributes to ongoing discussions in MALL by showing that the value of mobile technologies lies less in their features than in the systems that support them. When institutional structures, teaching practices, and student use are aligned, tablets can function as dependable tools for language learning. However, this alignment does not remove underlying tensions, and these remain important areas for future investigation.

Conclusions

This study examined learners' and a teacher's perceptions of tablet use in English language learning within a vocational secondary school characterised by sustained one-to-one device provision. Across quantitative and qualitative data, participants consistently described tablets as accessible, practical, and supportive tools embedded in everyday instructional routines. Rather than emphasising novelty or technological sophistication, both students and the teacher framed tablet use in terms of reliability, efficiency, and integration within established academic workflows. The findings contribute to ongoing debates in Mobile Assisted Language Learning by providing evidence from a context in which digital devices are no longer experimental but normalized. In contrast to research highlighting distraction, fragmentation, or short-term enthusiasm, this study demonstrates how structured institutional coordination and teacher mediation can shape stable and widely accepted technology use. High levels of perceived helpfulness and access to learning resources suggest that when tablets are embedded within assessment systems, communication channels, and material distribution platforms, they function as academic infrastructure rather than peripheral tools. At the same time, variability in students' perceived ability to optimise tablet functions indicates that operational familiarity does not automatically translate into strategic digital literacy. This nuance underscores the continuing importance of pedagogical guidance even in technology-rich environments. The alignment between teacher and learner perceptions further suggests that coherent implementation practices may foster shared understandings of academic purpose.

By foregrounding a vocational secondary context in Southeast Asia, this study extends existing scholarship that has largely concentrated on higher education or short-term interventions. It provides empirical insight into how mobile learning can be sustained beyond initial adoption phases and how digital integration may become routinised within institutional structures. Overall, the study suggests that the educational value of tablets lies not merely in their technical affordances but in the systems that organize their use. When infrastructure, instructional practice, and learner readiness converge, mobile devices may become dependable components of language education rather than sources of disruption. Future research may build on these findings by examining longitudinal learning outcomes, classroom observations, and

comparative institutional models to further explore the conditions under which mobile technologies support sustainable language development.

Declarations

1.1 Study Limitations

none

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none.

1.4 Competing Interests

The authors declare that there are no competing interests regarding the publication of this paper.

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