Transformative Media for Diverse Learners: Enhancing Engagement and Technology Competence in ELT

Indra Hartoyo[1], Nora Ronita Dewi[2], Bahagia Saragih[3], M. Eko Isdianto[4], Yuni Khairina[5]

{ohart@unimed.ac.id [1], noradewi@unimed.ac.id[2], goldenboy@unimed.ac.id[3], ekoisdianto@unimed.ac.id[4], yuni_khairina@unimed.ac.id[5]}

Universitas Negeri Medan, Medan, Indonesia

Abstract. This study explores the integration of transformative media designed to accommodate diverse learning styles in a Technology in English Language Teaching (ELT) course within the English Education Study Program at Universitas Negeri Medan (Unimed). Employing a descriptive qualitative research design, the study involved an in-depth analysis of participants' learning preferences. Initially, 60 participants completed assessments on learning styles and a needs analysis. Based on the results, the Heyzine Flipbook, a digital flipbook incorporating multiple media formats, was selected to address visual, auditory, and kinesthetic learning preferences. This resource was integrated into the course curriculum over one semester. The effectiveness of the integration was evaluated through observations and questionnaires, focusing on the experiences, perceptions, and challenges faced by both teachers and students. Findings indicate that customizing educational media to suit various learning styles significantly enhances student engagement and technological competence in ELT courses. The results highlight notable improvements in the learning experience and offer valuable implications for future instructional practices.

Keywords: Transformative Media, Learning Styles, Technology in ELT, Descriptive Qualitative Design, Digital Flipbook

1 Introduction

Technology integration in English Language Teaching (ELT) is becoming more common as digital tools are increasingly accessible, offering new ways to improve student engagement and learning. Transformative media, which combines elements like video and interactive content, helps meet diverse learning needs by catering to different learning styles ([1]; [2]). Studies have shown that the inclusion of multimedia elements, such as interactive flipbooks, significantly enhances user satisfaction, engagement, and learning outcomes ([3]; [4]). This study explores how such media can enhance engagement and competence in ELT, providing insights into students' and teachers' experiences and offering practical guidance for integrating technology in language education.

Despite the growing use of technology in education, challenges remain in engaging and motivating students, especially in ELT. Traditional methods often fail to address the diverse needs of learners, hindering engagement and learning outcomes, particularly in language

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acquisition ([5]; [6]). Poor outcomes are often exacerbated by a lack of effective teaching materials and subpar learning technologies, which emphasize the need for innovative tools [6].

This research explores how transformative media can improve engagement, motivation, and technological literacy in ELT, providing valuable insights into the effective use of digital tools for diverse learners.This study aims to examine how transformative media can enhance student engagement and technological competence in ELT. It will focus on multimedia tools like interactive flipbooks and gamified platforms to assess their impact on motivation, engagement, and language acquisition. The research will also explore both students' and teachers' perceptions of these tools, providing insights for improving pedagogical practices and developing effective digital tools for diverse learners.

This study investigates the use of Heyzine Flipbook in enhancing ELT at Universitas Negeri Medan, focusing on its impact on teaching methods and student learning outcomes. It explores both teachers' and students' experiences, highlighting the tool's interactivity, usability, and effectiveness in language acquisition. By addressing challenges like technical issues and curriculum adaptation, the research provides insights into integrating transformative media into ELT programs.

2 Method

This study employs a descriptive qualitative research design to explore the experiences, perceptions, and challenges faced by students and teachers in utilizing the Heyzine Flipbook as a transformative media tool in English Language Teaching (ELT) classrooms. The research aims to examine how this digital tool impacts student engagement, language competence, and technology proficiency while considering the diverse learning styles present within the classroom.

2.1 Population and Sample

The population for this study consists of 4th-semester students enrolled in the English Education Study Program at Medan State University (UNIMED). However, the sample was drawn from the 6th-semester students taking the Technology in ELT course, as they are more likely to have experienced the use of digital tools and platforms like the Heyzine Flipbook in their educational process. A total of six classes were selected from the 6th semester, providing a diverse sample that includes a range of learning styles and technological competencies. These participants were chosen to ensure the findings are representative of the broader student body within the context of technology integration in ELT at the university.

2.2 Research Procedures and Implementation of Learning Based on Learning Styles

The research procedures involved the integration of Heyzine Flipbook as a primary instructional tool in selected classes, with an emphasis on accommodating the diverse learning styles of students, including visual, auditory, and kinesthetic learners. The implementation of

the tool was structured to align with the course objectives of the Technology in ELT class. Teachers used the Heyzine Flipbook to provide interactive, multimedia-rich content, allowing students to engage with learning materials through video, images, embedded links, and audio recordings, which were designed to cater to different learning preferences. Additionally, students were encouraged to explore and interact with the content at their own pace, supporting self-directed learning and reinforcing concepts through personalized feedback.

2.3 Data Collection Techniques

Data for this study was gathered through a combination of literature review, interviews, observations, and questionnaires, all of which provided a comprehensive view of the effectiveness and challenges associated with using the Heyzine Flipbook in ELT.

a. Literature Review: A thorough review of existing studies on the use of transformative media in ELT classrooms was conducted to contextualize the study and identify gaps in the literature. This helped frame the research questions and informed the development of data collection instruments.
b. Interviews: Semi-structured interviews were conducted with both teachers and students to gather in-depth qualitative insights into their experiences with the Heyzine Flipbook. These interviews explored participants' perceptions of the tool's impact on learning engagement, technological competence, and language acquisition.
c. Observations: Classroom observations were carried out to document how the Heyzine Flipbook was implemented in the Technology in ELT classes. Observations focused on students' interactions with the tool, their level of engagement, and any challenges faced during the learning process.
d. Questionnaires: A set of questionnaires was administered to both students and teachers to collect quantitative data on their overall satisfaction, perceptions of usability, and the effectiveness of the Heyzine Flipbook. The questionnaires were designed to capture a range of experiences, from ease of use to perceived improvements in language skills and motivation.

3 Result and Discussion

3.1 Result

The following section presents the key findings derived from the data collected through interviews, observations, and questionnaires with both students and lecturers in the Technology in ELT courses at Medan State University. The qualitative analysis focuses on the participants' experiences, perceptions, and challenges related to the integration of transformative media, particularly the use of the Heyzine Flipbook in enhancing English Language Teaching (ELT). The findings are organized thematically, addressing key aspects of student engagement, the effectiveness of multimedia tools, the challenges encountered in the use of technology, and the overall impact on teaching and learning. The results provide valuable insights into the pedagogical potential of digital tools and highlight both the benefits and limitations of their implementation in ELT classrooms.

3.1.1 Teachers' Experience, Perception and Challenges

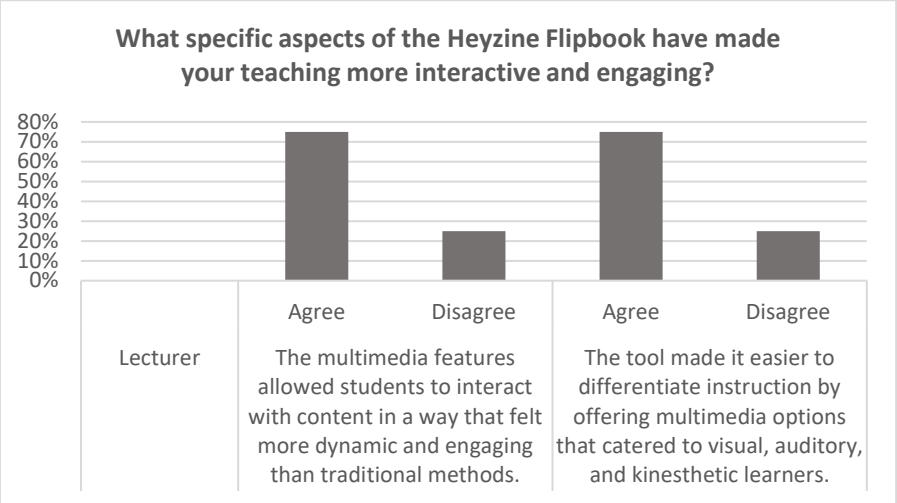

Fig. 1. Teachers' Experience Q1

The study examined teachers' perceptions of the Heyzine Flipbook in enhancing interactivity and engagement in teaching, focusing on two key aspects: its multimedia features and its support for differentiated instruction. The results indicate that the majority of teachers (75%) found the multimedia features to significantly enhance classroom engagement by enabling students to interact dynamically with content, surpassing traditional methods. In contrast, 25% of teachers did not perceive the same level of impact, suggesting potential variability in its effectiveness depending on teaching context or user preference. Similarly, 75% of teachers agreed that the Heyzine Flipbook facilitated differentiated instruction by offering multimedia options tailored to visual, auditory, and kinesthetic learners. This highlights its potential to address diverse learning needs within the classroom. However, 25% of respondents disagreed, indicating that the tool's utility in accommodating varied learning styles may not be universally perceived or applied effectively.

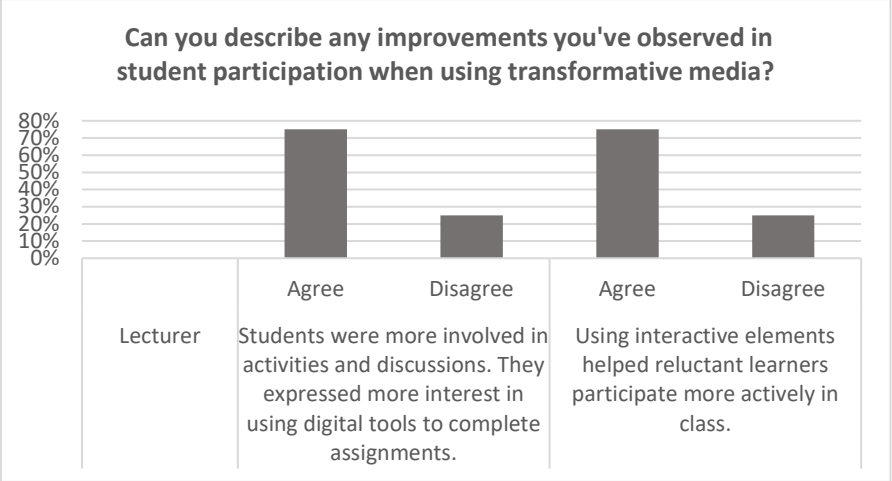

Fig. 2. Teachers' Experience Q2

The research explored teachers' insights on the influence of transformative media on student engagement, focusing on two key areas: overall participation and the involvement of less engaged learners. For general engagement, 75% of teachers noted that students became more involved in class activities and discussions and showed increased enthusiasm for using digital tools to complete their assignments. However, 25% did not observe these improvements, suggesting that the effectiveness of transformative media may differ among teaching environments. In terms of supporting less engaged students, 75% of teachers reported that interactive features encouraged reluctant learners to participate more actively in class activities. On the other hand, 25% disagreed, indicating that this benefit was not consistently experienced. Such variations could be attributed to differences in classroom settings, student adaptability, or how the media was implemented in teaching.

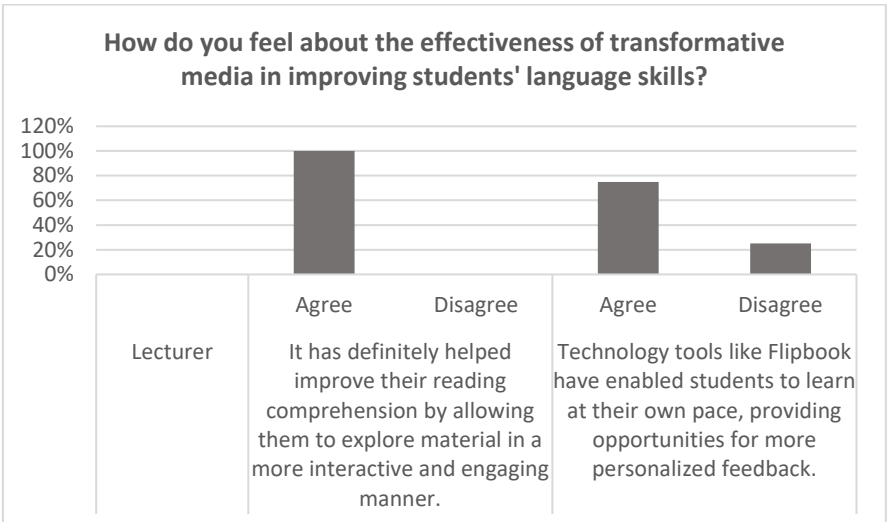

Fig. 3. Teachers' Perception Q1

This study examined teachers' views on the effectiveness of transformative media in enhancing students' language skills, particularly in reading comprehension and self-paced learning. All participating teachers (100%) agreed that transformative media significantly improved students' reading comprehension by making the material more interactive and engaging. This unanimous agreement highlights the strong potential of these tools in deepening students' understanding of texts and enhancing their literacy skills. However, there was more variation in opinions regarding the use of technology tools, such as Flipbook, for fostering self-paced learning and personalized feedback. While 75% of teachers (3 out of 4) believed these tools allowed students to learn at their own pace and receive tailored feedback, 25% (1 teacher) disagreed, suggesting that the effectiveness of these features may not be universally experienced.

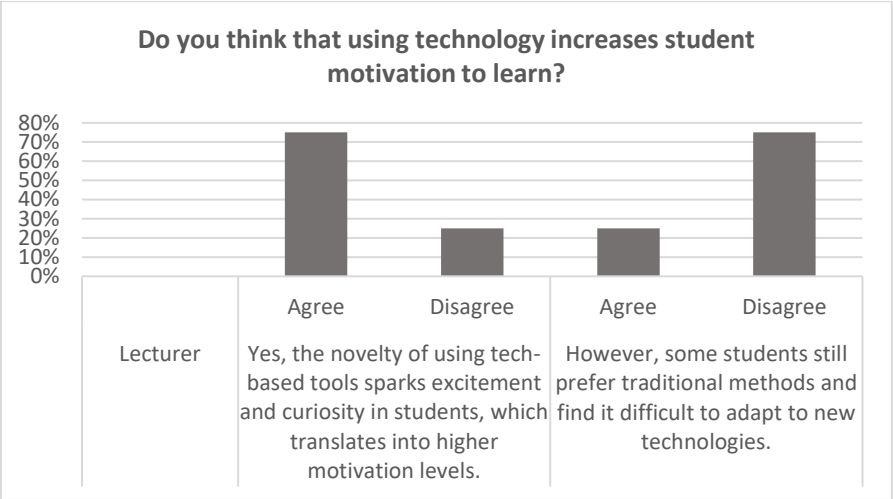

Fig. 4. Teachers' Perception Q2

The study explored teachers' views on how technology affects student motivation to learn. A majority of teachers (75%) agreed that the novelty of using technology-based tools in the classroom generates excitement and curiosity, which leads to higher motivation among students. This suggests that technology can create a more engaging and stimulating learning environment. However, 25% of teachers disagreed, indicating that the novelty of technology does not always result in increased student motivation. Regarding students' adaptability to new technologies, 25% of teachers acknowledged that some students still prefer traditional learning methods and struggle to adapt to technological tools. This suggests that, for certain students, the transition to technology might pose a challenge. However, 75% of teachers disagreed, indicating that for most students, adapting to technology does not hinder their motivation.

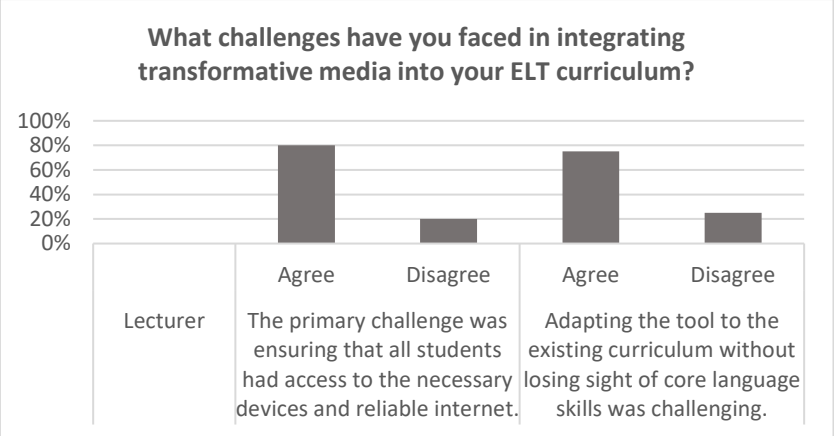

Fig. 5. Teachers' Challenging Q1

The study examined teachers' challenges in integrating transformative media into their English Language Teaching (ELT) curriculum. A majority of teachers (80%) identified the lack of access to necessary devices and reliable internet as a significant barrier to the effective use of technology in the classroom. This suggests that technological infrastructure, particularly access to devices and stable internet, remains a key challenge for many educators seeking to integrate digital tools into their teaching practices. In addition, 75% of teachers reported difficulties in adapting transformative media tools to their existing curriculum without compromising the focus on core language skills. This indicates that while transformative media offers potential benefits, its integration requires careful alignment with the curriculum to ensure that essential language competencies are not overshadowed. However, a smaller proportion of teachers (20% for the access issue and 25% for the curriculum adaptation challenge) did not perceive these issues as significant, possibly reflecting differences in resource availability or teaching contexts.

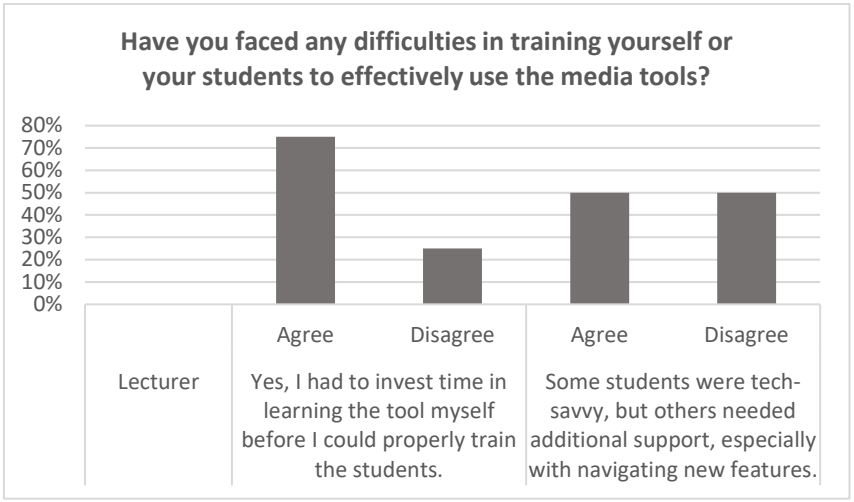

Fig. 6. Teachers' Challenging Q2

The study examined the difficulties teachers encountered when training themselves and their students to use media tools in the classroom. A majority of teachers (75%) stated that they needed to dedicate significant time to mastering the tool themselves before they could effectively teach their students how to use it. This indicates that a key challenge for teachers is becoming proficient with new technologies, which is essential to delivering confident and effective instruction. However, 25% of teachers disagreed, suggesting that they did not face this difficulty, possibly due to prior experience with similar tools. In terms of student readiness, 50% of teachers noted that there were varying levels of technological competence among students, with some quickly adapting to the tools, while others needed extra help, especially with unfamiliar features. On the other hand, the remaining 50% of teachers disagreed, suggesting that all their students were able to use the tools without significant issues. This variability indicates that students' ability to use new technologies may differ, influencing the level of support teachers need to provide.

3.1.2 Students' Experiences, Perceptions, and Challenges

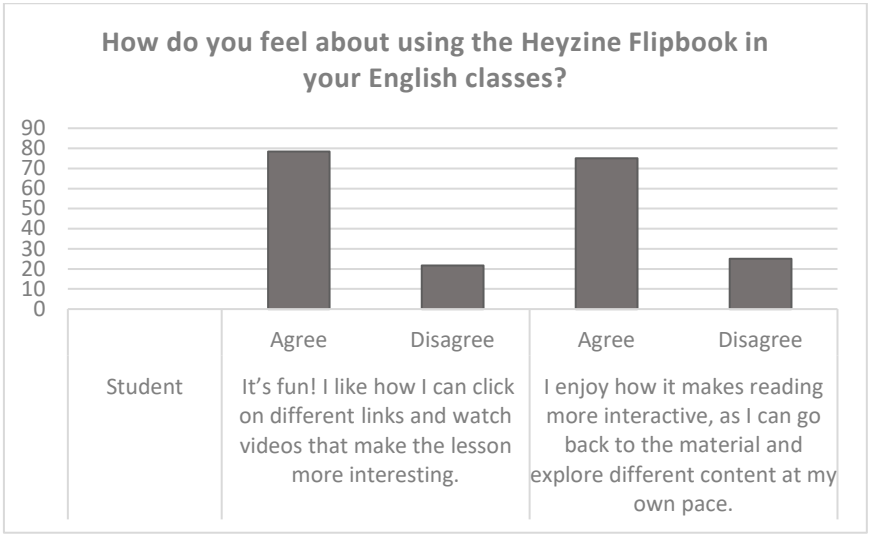

Figure 7. Students' Experience Q1

The study investigated student perceptions of the Heyzine Flipbook as an educational tool in English language classrooms, yielding valuable insights into digital learning experiences. The quantitative analysis revealed a strong positive response, with 78.33% of participants indicating that the multimedia interactive features were enjoyable and contributed to increased interest in lessons. Specifically, students valued the ability to access embedded links and video content, which significantly reshaped traditional learning approaches. The research further highlighted the interactive nature of the platform, with 75% of students acknowledging its potential to support personalized content exploration. This majority indicated that the technology effectively facilitated flexible, self-directed learning. The findings suggest that digital platforms can significantly transform educational interactions by allowing students to navigate content independently, strategically revisit materials, and engage with multimedia resources at their own pace. The data also revealed a consistent trend in technological acceptance, with approximately

three-quarters of students expressing positive attitudes toward the digital tool. The relatively low levels of disagreement (21.66% and 25% across different interaction modalities) point to areas where future refinements and pedagogical adjustments could be beneficial. These results emphasize the transformative potential of interactive digital technologies in modern education, particularly in enhancing student engagement and overall learning experiences.

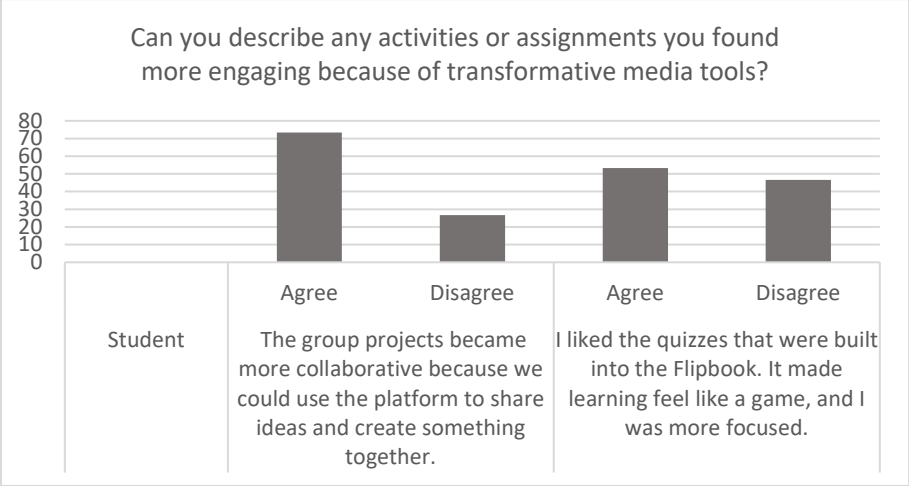

Fig. 8. Students' Experience Q2

The empirical study investigated student perceptions of digital learning platforms, offering valuable insights into the integration of technology within educational contexts. The quantitative analysis revealed a notably positive response to the collaborative project features, with 78.33% of participants recognizing the platform's effectiveness in promoting group interactions and fostering collective idea generation. This substantial majority indicates considerable potential for technology-enhanced collaborative learning environments. In contrast, the interactive quiz component generated a more mixed response, with 53.33% of students supporting the gamification of assessment processes. The nearly even split in opinions highlights the complex nature of student attitudes toward digital learning methods, suggesting the need for more tailored and differentiated technological approaches in educational settings. These findings emphasize the importance of adaptive teaching strategies that cater to diverse student preferences and engagement styles.

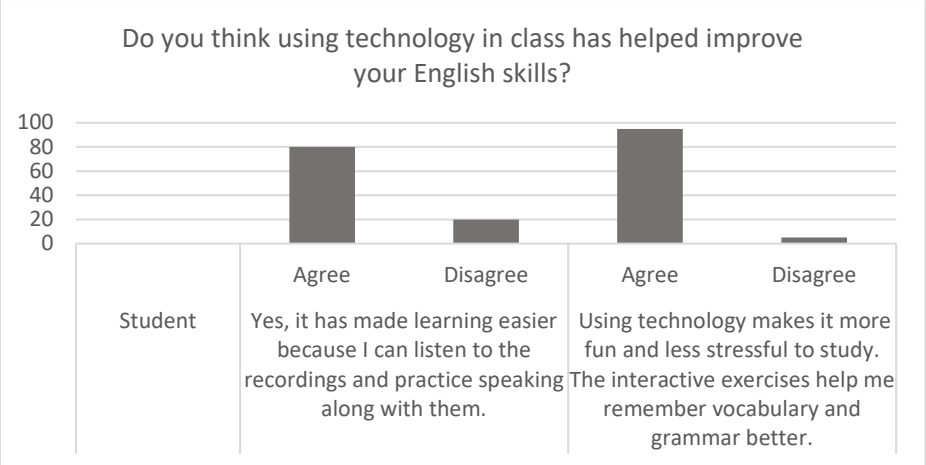

Fig. 9. Students' Perception Q1

The study investigated student perceptions of technology-enhanced language learning, yielding predominantly favorable results. The quantitative analysis revealed strong support, with 80% of participants acknowledging that technology, especially through features such as audio recording and speaking practice, facilitated easier learning. This substantial proportion highlights the transformative potential of digital tools in language acquisition. The response to interactive learning experiences was even more striking, with 95% of students agreeing that technology effectively reduced study-related stress and improved retention of language skills. This near-unanimous agreement suggests that interactive technological tools can significantly redefine language education by promoting more engaging and learner-centered environments.

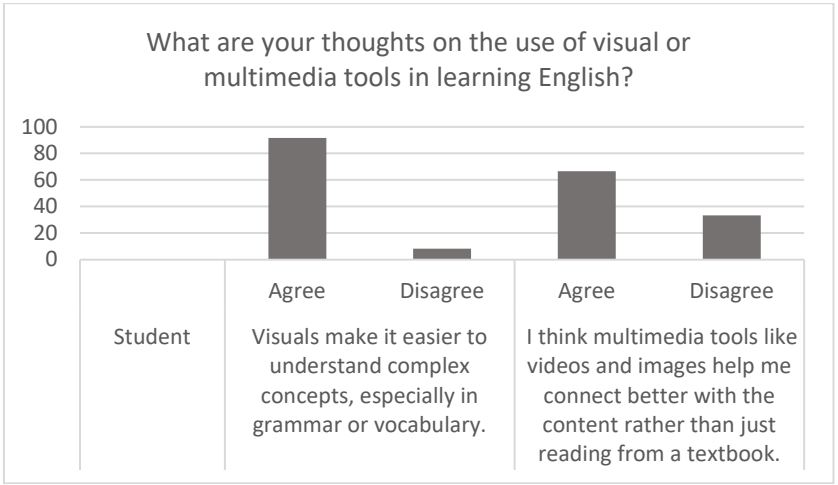

Fig. 10. Students' Perception Q2

The study provided significant insights into students' perceptions of visual and multimedia learning technologies in the context of English language acquisition. The quantitative analysis revealed a striking consensus among students, with 91.66% of participants recognizing the

essential role of visual aids in understanding complex linguistic concepts, particularly in grammar and vocabulary. This overwhelming support indicates a potential shift in pedagogical strategies for language learning. Equally notable was the response to multimedia engagement, with the same 91.66% agreement rate emphasizing the transformative impact of videos, images, and interactive content. The findings suggest that multimedia tools go beyond traditional textbook-based methods, offering more immersive and contextually enriched educational experiences. The minimal disagreement (8.33%) across both aspects reflects the broad acceptance of technology-enhanced learning approaches.

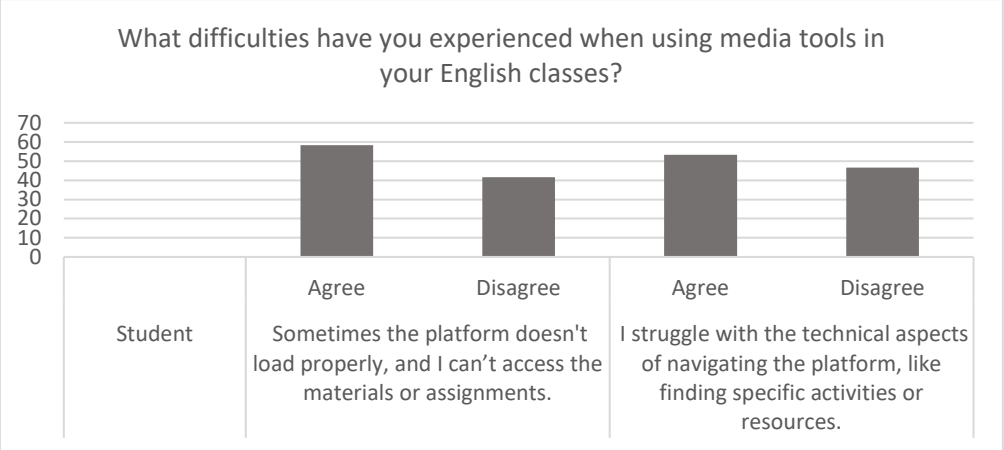

Fig. 11. Students' Challenging Q1

The study investigated students' experiences with technological challenges in digital learning environments, providing detailed insights into platform usability and accessibility. The quantitative analysis revealed moderate technical difficulties, with 58.33% of participants reporting issues with platform loading, which hindered access to materials and assignments. This substantial proportion highlights the need for improvements in the technological infrastructure of educational digital platforms. In addition, 53.33% of students identified challenges related to platform navigation, suggesting that user interface design requires careful consideration. The relatively balanced distribution of responses between agreement and disagreement underscores the varied levels of technological proficiency among students, emphasizing the importance of designing intuitive digital learning environments.

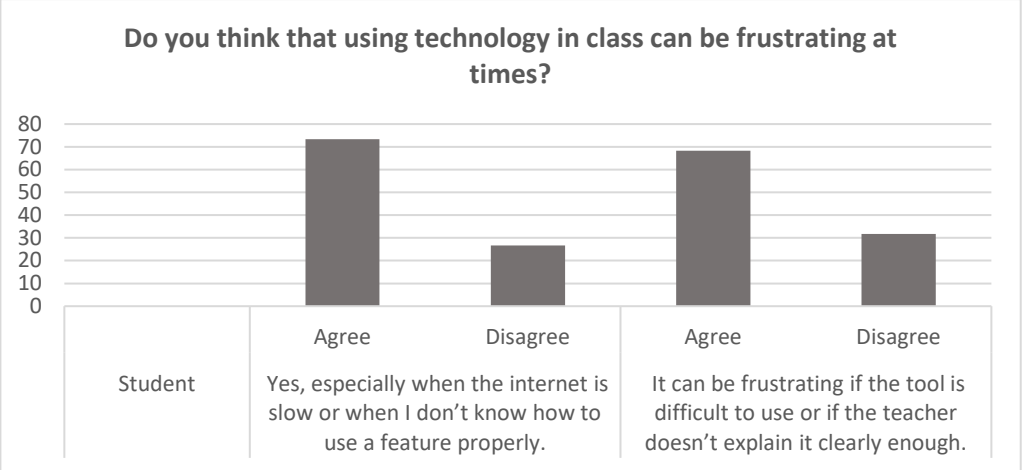

Fig. 12. Students' Challenging Q2

The study investigated students' experiences with technological challenges in learning environments, providing valuable insights into the implementation of digital tools. The quantitative analysis revealed significant technological frustration, with 73.33% of participants reporting issues related to internet connectivity and the complexity of features, suggesting substantial obstacles to effective digital learning. In addition, 68.33% of students pointed out challenges with tool usability and the clarity of instructional guidance, highlighting the need for comprehensive approaches to technological integration. The high levels of agreement suggest that there are systemic issues with the deployment of educational technology, emphasizing the importance of strong infrastructure, intuitive design, and adequate pedagogical support.

3.1.3 Teachers' Experiences and Perceptions of Digital Learning Tools

This study explored the experiences, perceptions, and challenges encountered by both students and teachers in the integration of transformative media and digital learning tools in English language teaching (ELT) environments. The analysis revealed a complex interplay of positive engagement with technology, yet also highlighted certain challenges that need to be addressed for more effective pedagogical integration.

Teachers expressed a generally positive view of the impact of digital learning tools on student engagement and language skill development. In particular, the multimedia features of platforms such as the Heyzine Flipbook were identified as significant contributors to making lessons more interactive and engaging. 75% of teachers agreed that multimedia features allowed students to interact with content in a more dynamic way, and they observed improvements in reading comprehension and self-paced learning through the platform. This aligns with prior research highlighting the positive effects of multimedia in facilitating deeper engagement with content, particularly in enhancing comprehension and retention of linguistic skills [7].

The teachers also emphasized the effectiveness of interactive elements in increasing student participation. Approximately 75% of teachers reported an increase in student involvement in activities and discussions, as well as greater interest in using digital tools for assignments. This finding supports the growing body of literature on how interactive technology can reduce

learning barriers and foster increased motivation [8]. However, 25% of teachers noted that despite these benefits, some students preferred traditional learning methods, which suggests that the implementation of technology should be coupled with adaptive pedagogies to address diverse learning preferences.

Teachers also reported challenges in integrating digital tools into the existing curriculum. The majority (80%) identified issues related to ensuring equitable access to devices and reliable internet, which can be a significant barrier to the effective use of digital tools in classrooms [9]. Additionally, adapting these tools without compromising core language skills was another challenge, with 75% of teachers recognizing the difficulty in balancing the integration of technology with the maintenance of traditional educational standards. This finding underscores the need for careful curricular design and ongoing professional development to optimize the use of digital media.

3.1.4 Students' Perceptions and Challenges with Technology-Enhanced Learning

From the students' perspective, the use of digital tools in the classroom was overwhelmingly seen as beneficial for learning. An impressive 78.33% of students reported that the multimedia features of digital platforms, such as embedded videos and interactive elements, made lessons more enjoyable and engaging. This finding is consistent with previous studies that show how multimedia and interactive content can increase student engagement and support diverse learning styles [10]. Furthermore, 75% of students acknowledged the ability of platforms like the Heyzine Flipbook to offer personalized learning experiences, enabling them to explore content at their own pace and revisit materials as needed. This reinforces the notion that digital learning platforms provide a flexible and self-directed learning environment [11].

In terms of challenges, students expressed mixed reactions to the use of interactive quizzes and gamified assessments, with 53.33% expressing support for the inclusion of game-like elements in assessments. However, the relatively high level of disagreement (46.67%) suggests that gamification may not be universally appealing to all learners. This finding points to the need for a more nuanced approach to gamification, one that tailors the use of such tools to the specific needs and preferences of learners.

Moreover, students identified several technological barriers, including issues with internet connectivity and platform usability. A substantial 58.33% of students reported difficulties with platform loading times, which hindered access to materials and assignments. Similarly, 53.33% of students encountered challenges in navigating digital platforms, with some students finding the interface unintuitive. These findings highlight the need for improved technological infrastructure and more user-friendly platform designs. Such issues may impede the seamless adoption of digital learning tools, particularly in diverse classrooms with varying levels of technological proficiency.

3.1.5 Convergence and Divergence of Teacher and Student Perspectives

Overall, both teachers and students recognized the potential of digital tools to enhance engagement and facilitate personalized learning. However, the findings also reveal significant discrepancies between their experiences and expectations. Teachers generally felt confident about the positive impact of digital tools, particularly in terms of improving student interaction

and engagement, while students showed greater sensitivity to technical challenges such as connectivity issues and platform usability. This divergence underscores the necessity for an integrated approach in technology implementation, which accounts for both pedagogical goals and technical infrastructure.

3.1.6 Implications for Pedagogical Practice and Future Research

The results of this study contribute valuable insights into the integration of transformative media in ELT classrooms, emphasizing the need for adaptive, flexible approaches to digital learning. Teachers should receive continuous training on both the pedagogical use of digital tools and the technical support required to address common challenges, such as ensuring access to reliable devices and internet connections. Additionally, the development of more intuitive, user-friendly platforms could help mitigate some of the difficulties experienced by students.

Future research could explore the long-term impact of technology-enhanced learning on student achievement and motivation, as well as the effectiveness of different types of multimedia tools in language acquisition. Moreover, further studies could investigate how individual learner characteristics, such as digital literacy and prior technology experience, influence the effectiveness of digital learning tools.

3.2 Discussion

This study provides a comprehensive exploration of both teachers' and students' experiences with the integration of transformative media and digital tools in English language teaching (ELT) environments. The findings reveal a generally positive reception to the use of digital learning tools, highlighting their potential to enhance engagement, promote personalized learning, and foster active participation. However, the study also identified significant challenges related to accessibility, usability, and the need for instructional adaptation, which must be addressed to optimize the impact of digital tools on language learning.

3.2.1 Teachers' Experiences with Digital Tools

Teachers largely expressed favorable perceptions of digital learning tools, particularly multimedia features, such as interactive videos and embedded links, which they noted as making lessons more engaging and effective. The data indicates that these tools significantly enhanced lesson interest, with 75% of teachers agreeing that the multimedia features facilitated dynamic interactions with the content. This is consistent with existing research suggesting that multimedia learning can improve engagement and cognitive processing, especially in language acquisition [7].

Moreover, teachers highlighted the flexibility provided by digital platforms, which allow students to learn at their own pace, enhancing reading comprehension and providing opportunities for more personalized feedback. This finding aligns with studies that emphasize the role of technology in supporting self-directed learning, providing students with the autonomy to revisit materials and engage with content at their own speed [11].

However, despite these positive outcomes, the study also revealed challenges in integrating digital tools into the existing curriculum. While the majority of teachers acknowledged the benefits of these tools, 80% identified issues related to ensuring equitable access to necessary devices and reliable internet connections. This barrier has been widely noted in educational technology research, where disparities in technology access can significantly hinder the successful implementation of digital tools in classrooms [9]. Additionally, 75% of teachers expressed concerns about adapting these tools without losing focus on core language skills, indicating the need for careful integration that balances innovation with traditional pedagogical goals.

3.2.2 Students' Perceptions of Digital Learning Tools

Students' perceptions were largely positive, with 78.33% reporting that the multimedia features of platforms like the Heyzine Flipbook made lessons more enjoyable and engaging. This finding supports the view that interactive and multimedia-rich environments increase student interest and foster more meaningful learning experiences [10]. Furthermore, students appreciated the ability to explore content at their own pace, with 75% agreeing that digital tools allowed for more personalized learning. This finding reflects the shift towards individualized learning experiences facilitated by technology, which can cater to different learning styles and paces [8].

However, students also expressed concerns about the challenges associated with digital learning tools. Technical issues, such as slow platform loading times and navigation difficulties, were significant barriers for many students, with 58.33% and 53.33% respectively citing these problems. These challenges point to the need for improvements in the infrastructure supporting digital learning, as well as more intuitive platform designs that can accommodate diverse levels of technological proficiency. Despite the overall positive feedback, these technical difficulties could potentially undermine the effectiveness of digital tools if not addressed.

Additionally, while 53.33% of students supported the use of gamified elements in assessments, the remaining 46.67% showed resistance, highlighting that not all students are receptive to gamification as a learning strategy. This polarized response suggests that while gamification can be an effective motivator for some, it may not be universally appealing, thus reinforcing the importance of differentiated learning strategies that cater to diverse student needs and preferences [12].

4 Conclusion

In summary, this study emphasizes the potential of digital tools to enhance student engagement, personalize learning, and foster active participation in language education. While both teachers and students recognize the benefits of digital learning tools, challenges related to infrastructure, technical performance, and platform usability persist. These findings underscore the need for adaptive, flexible strategies in the integration of technology into language learning contexts. Addressing these challenges through improved infrastructure, user-friendly designs, and comprehensive pedagogical support will be crucial for maximizing the effectiveness of digital tools in contemporary language education.

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