



Jurnal Eduscience (JES)

Volume 11, No.3

Desember, Year 2024

Submit : 01 November 2024

Accepted : 10 Desember 2024

EVALUATING THE EFFICACY OF DISCORD-BASED BLENDED LEARNING ON ENGLISH SPEAKING SKILLS AND STUDENT ENGAGEMENT

Ahmad Zaki Munibi¹, Endry Boeriswati², Novi Anoeграjekti³, Aceng Rahmat⁴

^{1,2,3,4}Linguistik Terapan, Pascasarjana, Universitas Negeri Jakarta
ahmad.zaki.munibi@mhs.unj.ac.id¹
085244270118

Abstract

In the midst of the growing prominence of educational technology, Discord emerges as a promising platform for facilitating language learning. Nevertheless, its role in blended learning models aimed at improving English speaking skills and student engagement, particularly among middle school students, remains insufficiently examined. This study explores the application of Discord, a social communication tool, within a blended learning framework to enhance English speaking skills among middle school learners. Using a qualitative case study method, the research involves 23 purposively sampled students representing diverse levels of English proficiency. Data is gathered through classroom observations, teacher interviews, and document analysis. The literature underscores the critical role of fluent speaking skills in language education, highlighting various influencing factors, such as speaking conditions, attitudes, listening skills, and feedback. Discord's distinctive features such as voice channels and instant messaging facilitate real-time communication and collaborative learning opportunities. While prior studies have predominantly concentrated on traditional educational technologies, they often overlook the potential of emerging platforms like Discord. The findings indicate that Discord significantly enhances interactivity, collaboration, and multimedia integration in learning activities. Educators utilize Discord's functionalities to host engaging discussions, deliver diverse learning materials, and conduct both formative and summative assessments effectively. Students report enhanced collaboration, active participation, and improved language proficiency through the platform's use. Integrating Discord into a blended learning approach offers an innovative and effective solution for language education, addressing the shortcomings of conventional methods and fostering a more engaging learning atmosphere. This research contributes valuable empirical insights into Discord's effectiveness in improving English speaking skills and promoting student engagement, while providing actionable recommendations for educators aiming to integrate advanced technologies into language teaching.

INTRODUCTION

The rapid evolution of technology has profoundly reshaped the field of education, providing innovative opportunities to enhance learning experiences. One of these innovations is blended learning, a widely recognized educational method that integrates traditional in-person teaching with online components, offering a more adaptable and individualized approach to education (Simonova et al., 2023). Blended learning merges the advantages of online platforms, structured face-to-face interactions, and practical real-world applications (Zamri & Narasuman, 2023). This approach combines digital education, classroom-based activities, and hands-on experiences, allowing students to gain comprehensive, multidimensional learning opportunities (Cai et al., 2022). By utilizing a variety of informational tools and



media, blended learning fosters a rich educational environment, enabling students to access diverse resources that enhance their learning process (Korson, 2023). The framework of blended learning includes essential elements such as live sessions, digital content, collaborative activities, assessments, and reference materials (C. Wang et al., 2023). This research explores the application of blended learning for developing English speaking skills among middle school students, employing Discord, a widely used communication platform, as a central tool.

Although blended learning is widely acknowledged for its potential, its targeted implementation in enhancing English speaking skills among middle school students remains underexplored (C. Wang, 2021). Conventional approaches to language teaching, which heavily depend on in-class speaking activities and limited interaction, often fall short in offering the extensive practice required for developing speaking proficiency (Wahyuniati et al., 2020). This challenge is exacerbated by the scarcity of innovative and interactive platforms capable of effectively engaging students in honing their speaking skills (Hwang et al., 2024). Over time, scholars have examined a variety of technological tools to support English language acquisition. For instance, Talpur et al. (2021) investigated the role of language labs and computer-assisted language learning (CALL) systems in creating structured and interactive settings for practicing language. Similarly, Hidayati et al. (2021) analyzed the use of mobile applications and online platforms, such as Skype, for synchronous language learning activities. Cheung (2021) further examined how factors like teachers' pedagogical beliefs, educational contexts, and professional training influenced the degree of technology integration in Zoom-based language classes. Tools such as CALL, Skype, and Zoom have demonstrated potential in enhancing student engagement and expanding practice opportunities.

However, the educational potential of social communication platforms, such as Discord, remains underexplored. Known primarily for its use within the gaming community, Discord provides distinctive features like voice channels, instant messaging, and tools for community building Dubrovskaya & Yuskaeva (2022). These attributes enable real-time communication and foster collaborative learning, positioning Discord as a promising resource for language education (Soyoof et al., 2023). While commonly utilized for informal exchanges, its structured integration into educational settings—particularly for teaching English speaking skills has been insufficiently examined (Heinrich et al., 2022). According to Zevgolatakou et al. (2023), proficient speaking skills require a combination of verbal communication abilities, expressiveness, vocabulary, grammar, and effective language processing, including interactions with informational content. Additionally, factors influencing English speaking proficiency include the context in which students speak, their attitudes toward speaking, listening abilities, and the feedback received during practice (Lebkuecher et al., 2021; Sun, 2022). These findings highlight the need to investigate innovative platforms like Discord to enhance language learning by addressing both the knowledge and cognitive dimensions of speaking skills (Tavakoli et al., 2020; Uchihara & Clenton, 2023).

The limited use of Discord within formal educational contexts highlights a critical research gap. Most existing studies have concentrated on conventional and well-established educational technologies, often neglecting the potential of newer, more dynamic platforms. With its ability to foster immersive and interactive learning experiences and its widespread accessibility, Discord represents a valuable tool for advancing language learning (Robinson, 2023). This study addresses the gap by systematically exploring the application of Discord in a blended learning framework for teaching English speaking skills. By capitalizing on



Discord's real-time communication features, the research aims to offer students more frequent and meaningful opportunities for speaking practice, effectively addressing the shortcomings of traditional language teaching methods. Furthermore, this study presents an innovative approach to language education by integrating Discord into a blended learning model for middle school learners. The focus is on utilizing Discord's voice and text communication tools to establish a supportive and engaging platform for practicing English speaking skills. This method is anticipated to enhance student interaction, boost motivation, and improve overall language skills.

The uniqueness of this study lies in its utilization of a non-conventional educational platform within a structured learning framework. Although Discord has been widely employed for social interactions and informal communication, its application as a medium for formal language education remains relatively underexplored. By examining its effectiveness in a systematic manner, this research seeks to uncover fresh perspectives and practical approaches for integrating Discord into educational practices. The primary aim is to analyze the impact of Discord-based blended learning on improving English speaking skills and fostering engagement among junior high school students. Early findings suggest that students are more inclined to actively participate and enhance their speaking abilities in interactive and enjoyable settings. Consequently, this study will also investigate students' subjective experiences with Discord and how these experiences shape their learning outcomes.

This study aims to contribute significantly to the field of language education by presenting empirical evidence on the effectiveness of utilizing Discord within a blended learning environment. The results are expected to offer actionable insights for educators interested in integrating innovative technologies into their teaching methodologies. Additionally, the research seeks to emphasize the broader applicability of social communication platforms in education, inspiring further investigation and adoption of such tools to enhance learning experiences across various disciplines and educational levels. The integration of Discord into a blended learning model for teaching English speaking skills introduces a novel and promising strategy for language instruction. By addressing the shortcomings of traditional teaching approaches and leveraging Discord's unique functionalities, this study aspires to create a more dynamic and effective learning experience for middle school students. The findings will not only deepen understanding of blended learning and educational technology but also provide essential perspectives for enhancing language education in diverse academic settings.

METHOD

This study employs a qualitative case study design to investigate the use of Discord in implementing blended learning for developing English speaking skills among middle school students. The qualitative case study method is selected as it facilitates a comprehensive exploration of the participants' specific contexts and experiences (Creswell & Creswell, 2017). The research involves 23 middle school students, chosen through purposive sampling to ensure a diverse range of English skills levels, which is essential for examining the varied responses to the blended learning approach. These participants were chosen based on their prior experience, having been engaged in a blended learning program for at least one semester and actively using Discord as a learning tool, making them particularly suited to providing insights into the program's impact on language learning.



Data are gathered using various approaches to ensure a thorough exploration of the research question. The methods employed include observations, interviews, and document analysis. Observations within the classroom are carried out to examine the dynamics of blended learning sessions and to analyze how Discord supports speaking activities. The observational notes concentrate on aspects such as student engagement, interaction patterns, and the integration of digital and traditional learning strategies (Yin, 2009). To gain insights into the use of Discord for enhancing English speaking skills, interviews were conducted with two English teachers by their initial name RA and YSF and one student by his initial name SW selected based on specific criteria. The teachers were chosen for their experience in integrating digital tools into language instruction, while the student was selected for active participation in Discord-based learning activities. While the sample size was limited to three participants, their diverse roles and experiences were deemed sufficient to provide initial, exploratory perspectives on this emerging educational approach. The interview protocol is developed following the guidelines provided by Kvale & Brinkmann (2009). Furthermore, pertinent materials, including lesson plans, students' speaking task submissions, and teacher feedback, are examined to gain insight into the instructional design and the real-world application of blended learning using Discord.

The analysis of the data employs a thematic method to identify and interpret recurring patterns and themes within the qualitative data (Braun & Clarke, 2006). This process unfolds in several phases: initial familiarization with the data, coding, theme development, and triangulation. The first step involves reading through the data to gain a thorough understanding, followed by coding using Atlas.Ti software. The coding process is inductively driven, supported by the theoretical framework of blended learning (Miles et al., 2014). To ensure reliability, two separate coders are involved in the coding procedure. The resulting codes are then categorized into broader themes that reflect the key elements of implementing blended learning through Discord, with the themes further refined through ongoing discussions within the research team.

Credibility and validity are further enhanced through the triangulation of multiple data sources, including observations, interviews, and documents. Triangulation success is measured by achieving consistency across these sources, with criteria emphasizing the alignment of key themes and the absence of significant contradictions (Patton et al., 2015). Additionally, member checking is employed to validate the findings, where preliminary results and themes are shared with participants for their review. Participant feedback is integrated into the analysis to ensure accuracy and alignment with their perspectives. This rigorous methodological framework strengthens the study's reliability and ensures robust and trustworthy findings.

RESULTS

Observation Result

Table 1. Observation Result

No	Observational Aspects	Observational Findings
----	-----------------------	------------------------



1	Brief Description of the Taught Material	The teacher provided material on Recount Text, linking it to personal life stories shared by both the teacher and the students.
2	Learning Objectives	Students were expected to talk about past personal experiences, identify specific information related to personal experiences, and write the main events of their own experiences.
3	Teaching Methods	a. The teacher employed a blended learning approach, integrating online and offline methods. b. Students participated in in-person classes while also utilizing technology, such as computers and Discord, for accessing learning materials, engaging in discussions, completing assignments online, and interacting with peers and the teacher virtually.
4	Use of Discord in Learning Activities	a. Lessons began with teacher-student interactions via voice channels, including greetings, sharing recent experiences in English, student-led prayers, attendance through Discord polls, and summaries of prior lessons. b. Core activities involved reading recount texts, discussions, role-playing, information search games, and completing worksheets. c. Closing sessions included summaries, reflections, and announcements for upcoming lessons through text channels, ending with prayers and gratitude in English.
5	Teacher's Introduction of Discord	The teacher provided minimal instructions on Discord's use as most students were already familiar with the platform due to prior educational and gaming experiences. Key guidance focused on server joining, utilizing text and voice channels, and ensuring ethical behavior. The students responded enthusiastically, with two requiring additional support, which the teacher provided, ensuring an interactive learning atmosphere.
6	Facilitation of Interaction via Discord	The teacher created dedicated channels for topic-specific discussions, encouraging students to share ideas, exchange information, and collaborate. Real-time voice discussions were utilized for active participation, supported by polls and bots to stimulate interaction. Rules and etiquette ensured productive exchanges, with the teacher monitoring and moderating interactions while providing feedback and maintaining focus on learning objectives.
7	Feedback Mechanism	Feedback was delivered through text channels, private messages, and voice channels. Discord's features, such as polls and bots, were utilized for formative assessments, providing instant feedback. The teacher's feedback was relevant and constructive, fostering student progress, while students responded through various channels, including private messages and group discussions.



8	Student Participation in Discord Activities	Students actively engaged in group discussions, although some appeared less enthusiastic during teacher-led explanations. Most students confidently participated in English conversations, showcasing vocabulary expansion and improved speaking skills.
9	Student Interaction	Students communicated through voice channels for real-time discussions and text channels for written exchanges, including sharing information, answering questions, and discussing topics. Interactive features, such as polls and bots, were used for activities like voting and quizzes, enhancing engagement.
10	Improvements in English Speaking Skills	Almost all students confidently interacted in English through Discord, displaying progress in fluency, vocabulary usage, and overall communication.
11	Student Response to Discord as a Learning Medium	Students responded positively to Discord as a learning medium, though some occasionally used unrelated forums like gaming channels within Discord.
12	Additional Observations	Student participation in English conversations via Discord was remarkable, with increased confidence, vocabulary growth, and advanced language use. The teacher provided timely and responsive feedback, contributing to students' speaking skill development. Collaboration among students during interactions on the platform was consistent and conducive to effective learning.

Interview Result

Table 2. Interview Result

Categories	Participants	Statements
Teaching and Learning Methods	YSF	<i>"My teaching method prioritizes differentiation to ensure every student succeeds in learning English."</i>
		<i>"I ensure students can apply grammar and vocabulary effectively in real-life contexts."</i>
		<i>"An empowering environment encourages active participation in learning."</i>
	RA	<i>"I continuously explore innovative teaching approaches using tools like Discord to enhance blended learning."</i>
		<i>"Involve students in planning to maximize Discord's functionality."</i>
		<i>"Try holding a collaboration with colleagues or a community to exchange ideas and resources."</i>
		<i>"Students take part in conversation simulations...designed to practice their skills."</i>



		<p><i>"Provide learning material in various formats, from audio text to video."</i></p> <p>SW <i>"Active engagement from teachers in the use of Discord can improve the overall learning experience."</i></p> <p><i>"More intensive training on how to use Discord effectively for learning could be very beneficial."</i></p> <p><i>"Using Discord is able to present material in a more interesting and interactive way compared to conventional methods."</i></p> <p><i>"Through the voice chat and video call features, we can directly communicate in English with teachers and classmates."</i></p>
Discord-Based Blended Learning Implementation	YSF	<p><i>"Blended Learning through the Discord application provides various significant benefits."</i></p> <p><i>"Students can access materials and participate in learning activities anytime and anywhere, as long as they are connected to the internet."</i></p> <p><i>"One of the main challenges is managing learning time and schedules effectively."</i></p>
	RA	<p><i>"Evaluate the use of Discord in learning to speak English regularly, identify what has been successful, what has been achieved, so that it can be improved later."</i></p> <p><i>"Include English games and collaborative projects to spark creativity and maintain students' interest."</i></p> <p><i>"Challenges faced include internet connectivity issues, especially for students in remote areas."</i></p>
Student Engagement and Participation	YSF	<p><i>"Using various features and strategies in Discord, along with providing appropriate support and feedback to students on a regular basis."</i></p> <p><i>"I also provide constructive feedback to students regularly and support them in achieving their learning goals."</i></p>
	RA	<p><i>"Discord supports collaboration and interaction and provides various media options including text, audio, and video, which are beneficial for English learning."</i></p> <p><i>"This has made my students enthusiastic about learning; the more we use Discord, the more engaged they become."</i></p>
	SW	<p><i>"In a more relaxed environment like Discord, I feel freer to express my opinions without fear of judgment."</i></p> <p><i>"Using Discord has improved my interactions and collaboration with teachers and classmates. I feel more comfortable participating in discussions and have seen increased collaboration in achieving our learning goals."</i></p>

Strategies for Improvement and Effectiveness	YSF	<p><i>"Active involvement in activities signifies meaningful learning,"</i></p> <p><i>"Evaluating pronunciation, vocabulary, and fluency is critical,"</i></p> <p><i>"Importance of constructive feedback in encouraging collaboration and improving performance."</i></p>
	RA	<p><i>"Discord's interactive features facilitate collaboration and media-rich interactions."</i></p> <p><i>"Discord's notable impact on students' spoken English capabilities."</i></p> <p><i>"Discord's versatility in supporting multimedia resources,"</i></p> <p><i>"Maximizing the platform's potential to build digital literacy,"</i></p> <p><i>"Establishing a fixed schedule,"</i></p> <p><i>"Leveraging this to connect learners with fluent English speakers,"</i></p> <p><i>"Importance of engaging parents to communicate Discord's benefits,"</i></p>
	SW	<p><i>"The value of practicing with peers and teachers."</i></p> <p><i>"Further diversifying materials."</i></p> <p><i>"Direct guidance on specific language areas such as pronunciation and grammar."</i></p> <p><i>"Targeted training for students."</i></p> <p><i>"Enhance organizational roles and channel management."</i></p> <p><i>"Comprehensive training programs,"</i></p>

Documentation Result





Figure 1. Using Discord in English Language Teaching Learning Process

Based on the data result of observation, interview, and documentation, the researcher tried to analyze the key themes that emerged from them. The following network view is key themes appeared by the data:

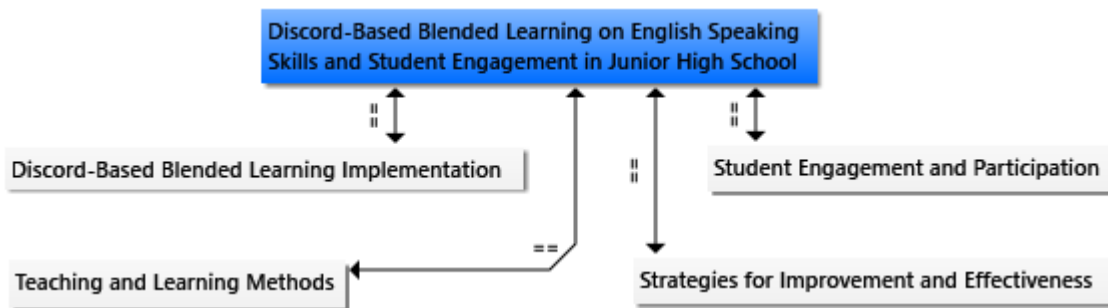


Figure 2. Network view of Key Themes

From the key themes identified, several subthemes emerged, including teaching and learning methods, Discord-based blended learning implementation, student engagement and participation, and strategies for improvement and effectiveness. The subsequent network views illustrate the subthemes associated with the identified key themes:

Subthemes 1: Teaching and Learning Methods

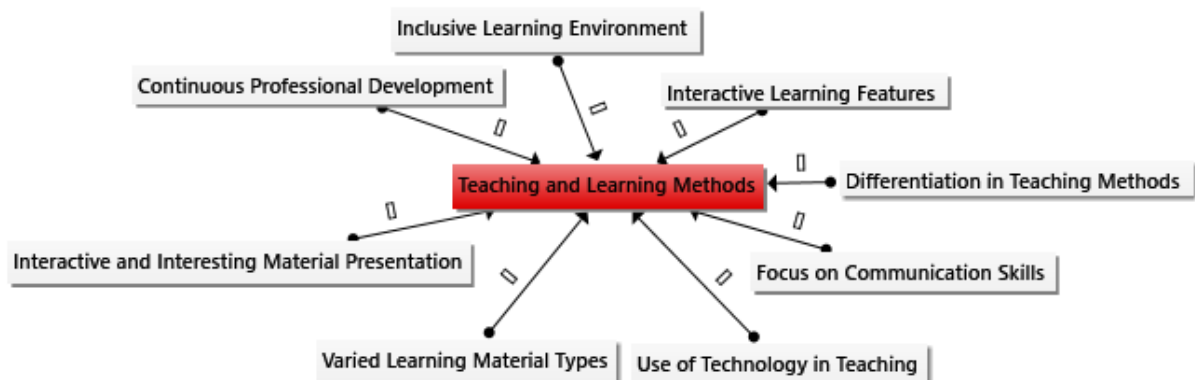


Figure 3. Network view of Subthemes 1

Teaching and learning methods, as illustrated in Figure 3, encompass a holistic framework designed to enhance educational effectiveness and engagement through several interconnected elements. An inclusive learning environment ensures equitable access for all students, while interactive features foster active participation and deeper comprehension. Differentiated teaching approaches are critical for addressing diverse learner needs, supported by the engaging presentation of varied material types that captivate students' interest. Additionally, a strong emphasis on developing communication skills aligns with global demands for collaboration and professional interaction. The integration of technology further enriches the learning experience by offering innovative tools and dynamic content delivery. To sustain these efforts, continuous professional development equips educators with updated knowledge and strategies to refine their practices. Together, these components create a comprehensive approach to teaching and learning, ensuring relevance, adaptability, and effectiveness in meeting current and future educational challenges.

Subthemes 2: Discord-Based Blended Learning Implementation

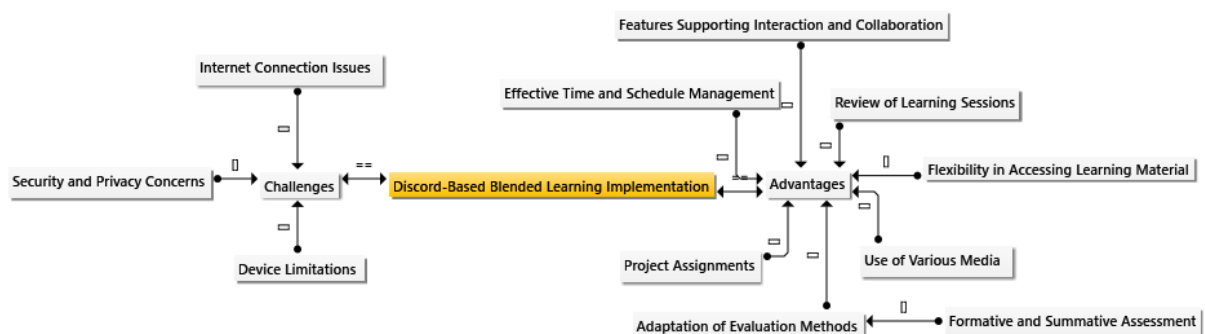


Figure 4. Network View of Subthemes 2

The implementation of Discord-based blended learning offers numerous advantages while presenting certain challenges that require strategic consideration. As a platform, illustrated in Figure 4, it provides features that support interaction and collaboration, enables flexible access to learning materials, and facilitates effective time and schedule management. Additional benefits include the ability to review recorded sessions, utilize diverse media, incorporate project-based assignments, and adapt evaluation methods through formative and summative assessments. However, several challenges persist, including internet connection issues, device limitations, and concerns about security and privacy. These obstacles can hinder equitable participation and the overall effectiveness of the learning process. Despite these limitations,

Discord-based blended learning demonstrates significant potential for enhancing modern education by fostering flexibility and interactivity. Addressing these challenges through improved digital infrastructure, device accessibility, and strengthened privacy measures can further optimize its application and effectiveness in diverse educational contexts.

Subthemes 3: Student Engagement and Participation



Figure 5. Network view of Subthemes 3

Student engagement and participation are fundamental to achieving effective learning outcomes. As highlighted in Figure 5, they foster enthusiasm, interaction, and a sense of belonging within the learning environment. Building and maintaining engagement requires strategies that sustain students' motivation and interest, supported by an inclusive and supportive atmosphere that ensures every learner feels valued and confident to participate. Comfort in participation is essential, enabling students to express their opinions freely while promoting critical thinking and collaborative learning. Direct feedback from teachers further enhances engagement by addressing individual needs and guiding progress effectively. Additionally, an interactive learning environment encourages active involvement, facilitating deeper understanding and skill development. These interconnected factors underscore the importance of creating pedagogical approaches that not only enhance academic achievement but also promote emotional and social growth, ultimately shaping a more dynamic and participatory educational experience.

Subthemes 4: Strategies for Improvement and Effectiveness

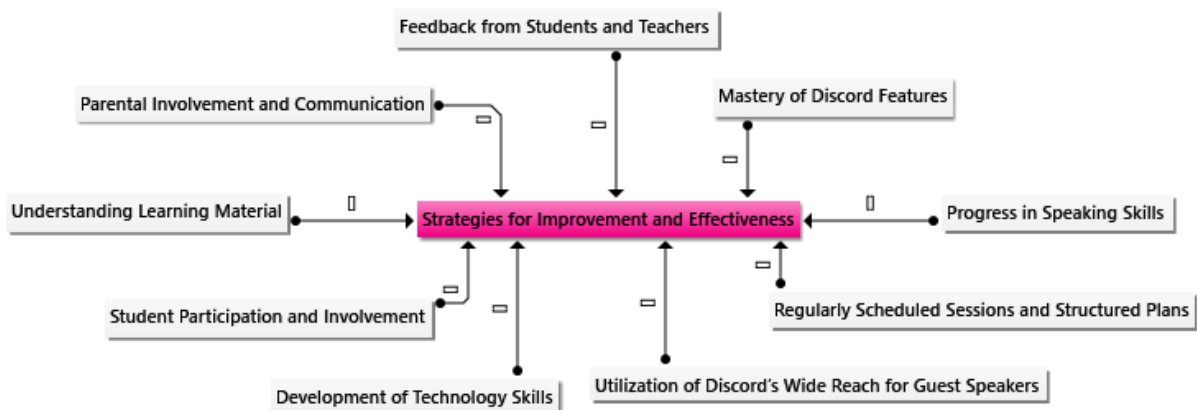


Figure 6. Network view of Subthemes 4



The Figure 6 illustrates a comprehensive approach to enhancing educational effectiveness through various interconnected strategies. Central to this framework is the integration of feedback from students and teachers, mastery of digital platforms like Discord, and the advancement of speaking skills. Regularly scheduled sessions and structured plans ensure consistency, while the utilization of Discord's wide reach for guest speakers enriches the learning experience. Additionally, the development of technology skills and active student participation are emphasized, alongside ensuring a deep understanding of learning materials. Parental involvement and communication further support this holistic strategy, fostering a collaborative environment that adapts to the evolving educational landscape. This multifaceted approach not only addresses academic needs but also cultivates essential social and technological skills, preparing students for the demands of the digital age.

DISCUSSION

1. Teaching and Learning Methods

To strengthen the academic quality and clarity of the discussion, the findings from interviews, observations, and documentation are examined and framed within the broader context of relevant research. Illustrated in Figure 3, the use of Discord for blended learning highlights a transformative shift in teaching practices, illustrating how digital tools can adapt to the evolving needs of both educators and students. The integration of such platforms aligns with the growing emphasis on differentiated instruction, which is crucial in addressing the diverse learning styles of students. This theme is not only reinforced by the perspectives of the educators interviewed, but also supported by existing literature. For instance, Halil et al. (2024) assert that differentiated instruction can significantly enhance student engagement and achievement, as it tailors learning experiences to individual needs, something that was also evident in the interviews conducted. In particular, YSF's focus on ensuring each student succeeds in learning English through differentiated activities underscores the role of flexibility in modern teaching methods.

The research also aligns with Dhingra (2021), who highlights how platforms like Discord foster inclusivity by allowing educators to craft activities that accommodate various learning preferences. However, García Zare et al. (2023) raise concerns about the digital divide, an issue that could marginalize students who lack reliable internet access. This challenge reflects the need for educators to be mindful of the socio-economic disparities that may affect students' ability to fully engage with digital learning platforms. Although the observations suggested that Discord's accessibility and versatility were instrumental in promoting inclusivity, this cautionary note on equity remains an important consideration for the broader implementation of technology in education.

Communication skills, a prominent theme in the study, were found to be significantly enhanced through the use of Discord, a result consistent with Vygotsky's sociocultural theory of language acquisition. By facilitating interaction through chat, voice, and video features, Discord provides a platform for authentic communication practice, as noted by RA and SW. Their insights emphasize the need for structured activities that focus on practical communication, which is critical for real-world language application. However, as highlighted by Choi & Chung (2021), while these online platforms enable language practice, they cannot entirely replicate the immediacy and spontaneous interaction found in face-to-face communication. This



difference necessitates the development of strategies that ensure online engagement remains dynamic and interactive, which was also underscored in the classroom observations.

The creation of an inclusive and empowering learning environment was another central finding of the study, with participants emphasizing the importance of fostering a safe space for all students. As highlighted by YSF, an empowering environment encourages active participation, a sentiment echoed by RA's emphasis on teacher supervision to maintain productivity and safety in digital spaces. These perspectives were corroborated by observations, which revealed that students were more likely to engage in learning when they felt supported and valued within the digital platform. Studies such as those by Adlington et al. (2024) further substantiate this finding, showing that teacher-guided activities in digital environments promote a sense of belonging, which is essential for student success. Nonetheless, concerns raised by Hardie et al. (2022) about the potential for online harassment and unregulated behavior on digital platforms highlight the importance of clear usage guidelines and constant supervision to maintain a safe learning environment.

The role of technology in transforming traditional teaching practices was a recurring theme across the interviews. YSF, RA, and SW all emphasized the ongoing exploration of innovative teaching methods using digital tools like Discord, underlining the necessity of leveraging such platforms to enhance blended learning. The dynamic features of Discord, including voice channels, text chats, and interactive bots, were recognized as tools that facilitate seamless access to learning materials and foster engaging discussions. Observations from the study further reinforced this, showing that students actively utilized these features to collaborate on assignments and projects. This shift from traditional teaching methods to more interactive, technology-enhanced practices aligns with the evolving demands of contemporary education.

The effectiveness of presenting interactive and engaging materials on Discord was also highlighted as an important factor in enhancing the learning experience. RA and SW both advocated for collaboration among educators to design diverse and engaging resources, which could include role-playing, information scavenger hunts, and other dynamic activities. This aligns with Alwashmi et al. (2024), who argue that varied and interactive materials are key to improving student retention and engagement by catering to different sensory modalities. However, Faber et al. (2024) caution that without careful curation and scaffolding, there is a risk of overwhelming students with excessive information. This underscores the importance of balancing the diversity of materials with clarity and focus to maximize learning outcomes.

Moreover, the incorporation of diverse learning materials in multiple formats, as emphasized by RA and SW, proved to be an effective strategy for catering to different learning preferences. The use of audio, video, and text-based resources enabled students to engage with content in varied ways, which aligns with Mayer (2024) principles of multimedia learning. These findings demonstrate that technology not only supports the learning process but also enhances it by providing students with a range of resources that cater to their individual learning styles. Still, as Tillquist (2023) suggests, it is crucial to strike a balance between diversity and simplicity to avoid cognitive overload, a consideration that educators must take into account when designing digital learning experiences.

The study reveals the significant potential of platforms like Discord to transform teaching and learning practices. The use of such digital tools facilitates a more flexible, inclusive, and engaging learning environment, addressing diverse student needs and enhancing communication skills. However, as



highlighted throughout the discussion, challenges such as the digital divide, online safety, and the need for thoughtful material design must be addressed to ensure the equitable and effective use of technology in education. Future research should focus on further exploring the impact of such platforms on student outcomes, particularly in terms of participation and academic performance, to provide a deeper understanding of their effectiveness in modern educational settings.

2. Discord-Based Blended Learning Implementation

The study explores the benefits and challenges of utilizing Discord as a platform for blended learning in English language education. The findings, illustrated in Figure 4, derived from interviews and classroom observations, reveal important insights into the platform's flexibility, interactivity, and collaborative potential, as well as the need for refined evaluation methods. The discussion that follows seeks to interpret these findings in relation to existing research and to highlight both the unique contributions and implications of the study.

Discord's ability to enhance student engagement and communication is a central finding. Previous studies, such as those by Heinrich et al. (2022), emphasize that platforms like Discord can foster real-time communication and active participation, which is consistent with the findings in this study. YSF noted the significant advantages of blended learning through Discord, particularly its ability to provide a flexible and accessible learning environment. This aligns with Chen et al. (2023), who also found that platforms like Discord promote a student-centered learning experience. The active student participation observed in this study through discussions, role-playing, and collaborative tasks further supports the claim that Discord creates a dynamic space for learning.

The flexibility that Discord offers, allowing students to access materials and participate in activities at their convenience, is another significant benefit. As YSF pointed out, students can engage with learning materials at any time, provided they have internet access. This convenience resonates with findings from Hung et al. (2024), which highlight the advantages of both asynchronous and synchronous learning options in digital platforms. Moreover, RA's emphasis on using diverse formats—such as text, audio, and video—further reinforces the importance of multimodal learning, as supported by Mayer (2024) multimedia learning theory. The ability to cater to different learning preferences through such formats makes Discord an effective tool for diverse student needs.

Another key theme emerging from the data is Discord's potential to foster interactivity and collaboration. YSF and RA highlighted the importance of voice and text channels for facilitating meaningful discussions and speaking practice, which aligns with the findings of Sabaté-Dalmau & Moncada-Comas, (2023), who noted that such features promote communicative competence. Observations from this study show that students actively engaged with interactive tools like bots and voting, demonstrating the platform's effectiveness in fostering collaboration and engagement. This suggests that Discord not only provides a space for communication but also encourages collaborative problem-solving, which is vital in language learning.

However, the study also identifies several challenges that need to be addressed for effective use of Discord. Time and schedule management emerged as significant obstacles, with YSF noting that balancing synchronous and asynchronous learning activities can be challenging. This is consistent with the challenges observed by Hung et al. (2024), who discussed the complexities of managing blended learning environments.



The findings suggest that more structured time management strategies need to be developed to ensure students can fully benefit from the platform's flexibility.

The adaptation of evaluation methods is another critical area highlighted in the study. RA stressed the importance of periodic assessments to refine learning strategies, a viewpoint shared by Alt et al. (2023), who emphasized the value of formative feedback in enhancing student outcomes. Although Discord's features, such as polls and automated bots, facilitate immediate feedback, the study found that a more detailed and comprehensive assessment framework is necessary. The need for regular evaluation, as advocated by RA, underlines the importance of continuous improvement in blended learning settings.

Furthermore, the study identified barriers related to internet connectivity and device limitations, particularly for students in remote areas. These challenges echo concerns raised by RA and SW about the impact of unstable connections on learning experiences. Addressing these issues is crucial for ensuring equitable access to blended learning opportunities. Additionally, security and privacy concerns emerged as recurring themes. RA recommended safeguarding students through appropriate platform settings, a recommendation supported by Akacha & Awad (2023), who stressed the importance of robust security protocols in educational technologies. This study reinforces the need for vigilant moderation by teachers to maintain a safe and secure learning environment.

While Discord offers considerable potential as a flexible and interactive platform for blended learning in English language education, challenges related to time management, internet connectivity, and security must be addressed. The study suggests that refining evaluation methods and incorporating specific success metrics would help to optimize its use. Additionally, comparisons with other platforms could provide valuable insights into how Discord measures up in terms of its effectiveness and potential for fostering student engagement and learning outcomes. These findings contribute to a growing body of research on the use of digital platforms in education, offering important implications for the future development of blended learning environments.

3. Student Engagement and Participation

This section analyzes the dynamics of student engagement and participation in English learning facilitated through Discord, drawing from triangulated data from interviews, classroom observations, and documentation. The network view in Figure 5 highlights subthemes under the central theme of "Building and Maintaining Student Engagement," illustrating how Discord's features contribute to an interactive and supportive learning environment. Educators utilize these features to enhance student engagement. For instance, YSF emphasizes the importance of employing diverse strategies on Discord, along with regular support and feedback for students. Similarly, RA highlights the flexibility of Discord, which fosters collaboration through multiple media formats, including text, audio, and video, all of which are beneficial for language learning.

Classroom observations support these perspectives, revealing increased student confidence and active participation in English conversations. Teachers' real-time feedback plays a significant role in improving language proficiency and vocabulary expansion. However, while these overlapping insights underscore Discord's effectiveness, the discussion could benefit from focusing more on its impact on engagement rather than reiterating previous points. This aligns with the work of Kahu et al. (2022), who argue that interactive



platforms like Discord promote a sense of community and enhance student engagement by facilitating real-time interaction and peer collaboration.

Interviews also indicate a noticeable increase in student enthusiasm and participation. RA notes that Discord's engaging nature has sparked more interest among students, leading to greater involvement in learning activities. SW underscores the importance of using varied activities, such as quiz games and project presentations, to keep students interested. Classroom observations confirm this, showing high levels of participation in discussions and collaborative tasks. Nevertheless, some distractions—such as gaming forums—remain a challenge, highlighting the need for strategies to maintain focus. This observation aligns with the findings of Liao & Wu (2022), who found that while some students engage deeply with digital tools, others may become distracted, particularly when these tools are used without structured guidance. These distractions can hinder learning, emphasizing the need for structured engagement strategies.

The concept of a relaxed, judgment-free environment is also crucial in fostering student participation. SW notes that Discord's informal setting allows students to express their opinions freely, without the fear of judgment. Observations confirm this, although varying levels of engagement during teacher-led sessions suggest the need for strategies to maintain attention across different session types. This supports the conclusions of Li & Heydarnejad (2024), who emphasize the importance of judgment-free spaces for language learners, where students can participate without fear of ridicule.

Discord's interactive features—such as voice channels, multimedia options, and real-time feedback—are essential to its effectiveness in encouraging collaboration. YSF points out the importance of providing constructive feedback to students regularly and supporting them in achieving their learning goals. However, the study would benefit from further examining how consistent feedback correlates with learning outcomes. Additional details on feedback practices could clarify its role in language development and engagement.

Furthermore, Discord fosters a culture of inclusivity, allowing students to express themselves openly and collaborate across different levels of proficiency. SW reflects on how Discord has improved interactions and collaboration with teachers and peers, noting that it has made students more comfortable participating in discussions and has increased collaboration in achieving learning goals. While this observation highlights Discord's potential, a comparative analysis with other tools could provide a more comprehensive view of its strengths and limitations. Johnson & Salter (2022) conducted such a comparative analysis, finding that while Discord offers flexibility and social interaction, it may lack the structure found in other platforms, which could offer more control and consistency in learning.

Although the study acknowledges the benefits of Discord, addressing issues like connectivity and security would enhance its practical implications. Introducing measures to mitigate distractions and ensure privacy would help create a more focused and secure learning environment. As Anwar (2021) points out, effective moderation and privacy settings are crucial to prevent platforms like Discord from becoming chaotic or unsafe for students. Additionally, establishing specific criteria for assessing the platform's impact on learning outcomes and comparing Discord with other educational technologies would add depth to the analysis.

This study highlights Discord's potential to improve student engagement and participation in English learning. The qualitative insights gathered support its effectiveness in creating an interactive and supportive



environment. To further deepen understanding, future research could incorporate quantitative data, evaluate security measures, and provide comparative analyses with other educational technologies. Such steps would offer a more comprehensive perspective on Discord's role in educational settings.

4. Strategies for Improvement and Effectiveness

To enhance the use of Discord as a learning platform, several strategic approaches, derived from interview insights and classroom observations (Figure 6, subthemes 4), have been identified. These strategies focus on student engagement, skill development, material diversity, feedback mechanisms, and platform optimization.

Student participation and engagement are key factors for effective learning. YSF emphasized that active involvement in activities signifies meaningful learning, while RA pointed out that Discord's interactive features facilitate collaboration and media-rich interactions. Classroom observations support these claims, with students frequently engaging in collaborative tasks that enhance their English proficiency. These insights align with prior studies suggesting that active student involvement in digital learning environments fosters deeper understanding and retention (Tran et al., 2024). To better capture engagement, quantifiable metrics such as participation rates and group activity contributions could be used to assess the extent of student involvement and track progress over time.

Another significant outcome observed was the improvement of speaking skills. YSF stressed the importance of evaluating pronunciation, vocabulary, and fluency, while RA highlighted Discord's notable impact on students' spoken English capabilities. SW added that practicing with peers and teachers is crucial for improvement. These observations mirror previous research findings (Tran et al., 2024), which suggest that virtual platforms promote conversational skills through frequent, context-based interactions. To further measure speaking skill development, incorporating pre- and post-activity assessments or fluency evaluations would provide a more structured approach to tracking progress.

The variety of learning materials also played a critical role in student comprehension. RA acknowledged the versatility of Discord in supporting multimedia resources, while SW emphasized the need to further diversify materials. Classroom observations suggest that students actively engage when learning materials are personalized and relevant to their experiences. This aligns with Villegas-Ch et al. (2024), who found that learners benefit from personalized learning resources. To optimize material diversity, periodic evaluations of material relevance, along with a structured timeline for updates, would be beneficial.

Feedback mechanisms emerged as an essential component of student growth. Both YSF and RA highlighted the importance of constructive feedback in encouraging collaboration and improving performance, while SW valued direct guidance on specific language areas such as pronunciation and grammar. Teachers effectively utilize text and private message channels for tailored feedback. As H. Wang & Lehman (2021) point out, timely, personalized feedback enhances motivation and learning outcomes in digital environments. Structuring feedback delivery, along with tracking improvements through test scores or self-reported learner confidence, could further strengthen this process.

Technological skill development, facilitated by Discord's features, was also identified as a significant factor in student growth. RA noted the importance of maximizing the platform's potential to build digital literacy, while SW proposed targeted training for students. Observations indicate that students have improved their technological competence, aligning with Kaplan-Berkley (2022), who emphasized the role of



digital tools in fostering tech-savvy learners. To measure technological skill development, digital skill assessments and technology-focused assignments could be introduced, providing concrete evidence of progress.

Incorporating structured and consistent sessions was another key recommendation. RA suggested establishing a fixed schedule, while SW proposed enhancing organizational roles and channel management. These insights reflect the importance of blended learning approaches, combining synchronous and asynchronous activities, as noted by Hung et al. (2024). Clear scheduling, along with adherence tracking, is essential to ensure a consistent learning experience for students.

Mastering Discord's features was another significant consideration. Both RA and SW advocated for comprehensive training programs, and classroom observations revealed effective teacher guidance in this area. Periodic evaluations of feature utilization and competency levels can ensure that both students and educators are proficient in using the platform, maximizing its potential for learning.

Discord's expansive reach also provides opportunities to invite guest speakers, offering students exposure to diverse perspectives. RA recommended leveraging this to connect learners with fluent English speakers, a strategy that was validated by classroom observations of high engagement during such sessions. The impact of these guest speaker interactions could be measured through engagement metrics and comprehension assessments, further emphasizing the value of these activities.

Parental involvement was highlighted as a complementary support system. RA stressed the importance of engaging parents to communicate Discord's benefits, while classroom observations suggested a supportive home learning environment. Strengthening this connection through regular parent-teacher meetings or feedback surveys, as recommended by Xian et al. (2023), could enhance the learning experience.

These strategic approaches highlight the importance of focusing on key areas such as student participation, speaking skill development, and feedback mechanisms. Supporting elements like structured planning and platform mastery serve as foundational strategies. Based on the insights from interviews, classroom observations, and existing research, the priority should be placed on fostering student engagement and collaboration, as these areas have the most direct impact on language acquisition and proficiency. Additionally, incorporating personalized materials, timely feedback, and technological skill development will further enhance the learning experience, making Discord a powerful tool for language education.

CONCLUSION

According to a study examining the use of Discord in a blended learning model to enhance English speaking skills and student engagement among junior high school students, it can be inferred that incorporating social communication platforms like Discord holds significant promise in enhancing students' learning experiences. The findings reveal that Discord use notably boosts interaction, collaboration, and the incorporation of diverse media formats in learning activities. Educators can utilize Discord's features to facilitate engaging discussions, offer a wide range of learning materials, and effectively administer both formative and summative assessments. Furthermore, students reported improved collaboration, participation, and language skills with the use of Discord. The platform allows students to communicate in



real-time, engage in immersive learning activities, and broaden their English language skills. By using Discord, students feel more connected and motivated during the learning process, which can contribute to the improvement of their speaking skills. Consequently, integrating Discord into English learning at the middle school level represents an innovative approach to enhancing student engagement and language skills. This study offers valuable insights and actionable strategies for educators seeking to incorporate modern technology into their teaching practices. It also emphasizes the wider potential of social communication platforms in education, prompting further investigation into their role in advancing learning outcomes.

REFERENCES

- Adlington, R., O'Neill, K., Volpe, C. R., & Harrington, I. (2024). Promoting a sense of belonging in university online learning: How and why initial teacher education students experience an increased sense of belonging. *Australasian Journal of Educational Technology, SE-Articles*. <https://doi.org/10.14742/ajet.9487>
- Akacha, S. A., & Awad, A. I. (2023). Enhancing Security and Sustainability of e-Learning Software Systems: A Comprehensive Vulnerability Analysis and Recommendations for Stakeholders. In *Sustainability* (Vol. 15, Issue 19). <https://doi.org/10.3390/su151914132>
- Alt, D., Naamati-Schneider, L., & Weishut, D. J. N. (2023). Competency-based learning and formative assessment feedback as precursors of college students' soft skills acquisition. *Studies in Higher Education, 48*(12), 1901–1917. <https://doi.org/10.1080/03075079.2023.2217203>
- Alwashmi, K., Meyer, G., Rowe, F., & Ward, R. (2024). Enhancing learning outcomes through multisensory integration: A fMRI study of audio-visual training in virtual reality. *NeuroImage, 285*, 120483. <https://doi.org/https://doi.org/10.1016/j.neuroimage.2023.120483>
- Anwar, M. (2021). Supporting Privacy, Trust, and Personalization in Online Learning. *International Journal of Artificial Intelligence in Education, 31*(4), 769–783. <https://doi.org/10.1007/s40593-020-00216-0>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.
- Cai, Y., Pan, Z., Han, S., Shao, P., & Liu, M. (2022). The Impact of Multimodal Communication on Learners' Experience in a Synchronous Online Environment: A Mixed-Methods Study. *Online Learning Journal, 26*(4), 118–145. <https://doi.org/10.24059/olj.v26i4.3448>
- Chen, H., Zhou, J., Long, X., Zhuo, F., Liu, Y., Zhao, Y., Xie, J., Duan, H., & Fu, Y. (2023). Fibrous mats based skin sensor with ultra-sensitivity and anti-overshooting dynamic stability enhanced with artificial intelligence. *Chemical Engineering Journal, 473*. <https://doi.org/10.1016/j.cej.2023.145054>
- Cheung, A. (2021). Language Teaching during a Pandemic: A Case Study of Zoom Use by a Secondary ESL Teacher in Hong Kong. *RELC Journal, 54*(1), 55–70. <https://doi.org/10.1177/0033688220981784>
- Choi, L., & Chung, S. (2021). Navigating Online Language Teaching in Uncertain Times: Challenges and Strategies of EFL Educators in Creating a Sustainable Technology-Mediated Language Learning Environment. In *Sustainability* (Vol. 13, Issue 14). <https://doi.org/10.3390/su13147664>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Dhingra, K. (2021). Fostering inclusion for all students in online social learning networks. *Educational Technology Research and Development, 69*(1), 227–230. <https://doi.org/10.1007/s11423-020-09877-z>
- Dubrovskaya, T. V., & Yuskaeva, E. I. (2022). Language aggression in virtual professional communities. *Training, Language and Culture, 6*(4), 62–72. <https://doi.org/10.22363/2521-442X-2022-6-4-62-72>



- Faber, T. J. E., Dankbaar, M. E. W., van den Broek, W. W., Bruinink, L. J., Hogeveen, M., & van Merriënboer, J. J. G. (2024). Effects of adaptive scaffolding on performance, cognitive load and engagement in game-based learning: a randomized controlled trial. *BMC Medical Education*, 24(1), 943. <https://doi.org/10.1186/s12909-024-05698-3>
- García Zare, E. J., Soto Abanto, S. E., Rodriguez Paredes, N. P., Merino Salazar, T. D., Pagador Flores, S. E., Baldárrago Baldárrago, J. L., Salas-Ruiz, J. A., & Mejía Pardo, P. I. (2023). Technological Devices and Digital Competences: A Look into the Digital Divides for University Continuity during the COVID-19 Pandemic. In *Sustainability* (Vol. 15, Issue 11). <https://doi.org/10.3390/su15118494>
- Halil, N. I., Yawan, H., Hasanah, A. N., Syam, H., Andas, N. H., & Marhamah. (2024). A New Program to Foster Inclusion: Unraveling Language Teachers' Pedagogical Practices to Differentiated Instruction. *International Journal of Language Education*, 8(2), 370–383. <https://doi.org/10.26858/ijole.v8i2.64997>
- Hardie, P., O'Donovan, R., Jarvis, S., & Redmond, C. (2022). Key tips to providing a psychologically safe learning environment in the clinical setting. *BMC Medical Education*, 22(1), 816. <https://doi.org/10.1186/s12909-022-03892-9>
- Heinrich, E., Thomas, H., & Kahu, E. R. (2022). An exploration of course and cohort communication spaces in Discord, Teams, and Moodle. *Australasian Journal of Educational Technology*, 38(6), 107–120. <https://doi.org/10.14742/ajet.7633>
- Hidayati, A. N., Ramalia, T., & Abdullah, F. (2021). Leveraging Skype-based Webinars as an English Language Learning Platform. *AL-ISHLAH: Jurnal Pendidikan*, 13(1), 10–20. <https://doi.org/10.35445/alishlah.v13i1.420>
- Hung, C.-T., Wu, S.-E., Chen, Y.-H., Soong, C.-Y., Chiang, C., & Wang, W. (2024). The evaluation of synchronous and asynchronous online learning: student experience, learning outcomes, and cognitive load. *BMC Medical Education*, 24(1), 326. <https://doi.org/10.1186/s12909-024-05311-7>
- Hwang, G.-J., Rahimi, M., & Fathi, J. (2024). Enhancing EFL learners' speaking skills, foreign language enjoyment, and language-specific grit utilising the affordances of a MALL app: A microgenetic perspective. *Computers & Education*, 214, 105015. <https://doi.org/https://doi.org/10.1016/j.compedu.2024.105015>
- Johnson, E. K., & Salter, A. (2022). Embracing discord? The rhetorical consequences of gaming platforms as classrooms. *Computers and Composition*, 65, 102729. <https://doi.org/https://doi.org/10.1016/j.compcom.2022.102729>
- Kahu, E. R., Thomas, H. G., & Heinrich, E. (2022). 'A sense of community and camaraderie': Increasing student engagement by supplementing an LMS with a Learning Commons Communication Tool. *Active Learning in Higher Education*, 25(2), 303–316. <https://doi.org/10.1177/14697874221127691>
- Kaplan-Berkley, S. (2022). Digital Tools and Streaming Media Converge to Inspire Social Interactions of Generation Alpha. *International Journal of Early Childhood*, 54(2), 185–201. <https://doi.org/10.1007/s13158-021-00301-y>
- Korson, C. (2023). A place-based approach to blended learning. *Journal of Geography in Higher Education*, 47(4), 569–588. <https://doi.org/10.1080/03098265.2022.2122032>
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. sage.
- Lebkuecher, A. L., Chiaravalloti, N. D., & Strober, L. B. (2021). The role of language ability in verbal fluency of individuals with multiple sclerosis. *Multiple Sclerosis and Related Disorders*, 50(April 2020), 102846. <https://doi.org/10.1016/j.msard.2021.102846>
- Li, L., & Heydarnejad, T. (2024). May I come in? A probe into the contributions of self-esteem, teacher support, and critical thinking to anxiety and shyness in language classes. *BMC Psychology*, 12(1), 7.



- <https://doi.org/10.1186/s40359-023-01501-y>
- Liao, C.-H., & Wu, J.-Y. (2022). Deploying multimodal learning analytics models to explore the impact of digital distraction and peer learning on student performance. *Computers & Education*, *190*, 104599. <https://doi.org/https://doi.org/10.1016/j.compedu.2022.104599>
- Mayer, R. E. (2024). The Past, Present, and Future of the Cognitive Theory of Multimedia Learning. *Educational Psychology Review*, *36*(1), 8. <https://doi.org/10.1007/s10648-023-09842-1>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Fundamentals of Qualitative Data Analysis In Qualitative Data Analysis: A Methods Sourcebook* (pp. 69–104). Thousand Oaks, CA: Sage Publications.[Google Scholar].
- Patton, C., Sawicki, D., & Clark, J. (2015). *Basic methods of policy analysis and planning--pearson etext*. Routledge.
- Robinson, B. (2023). Governance on, with, behind, and beyond the Discord platform: a study of platform practices in an informal learning context. *Learning, Media and Technology*, *48*(1), 81–94. <https://doi.org/10.1080/17439884.2022.2052312>
- Sabaté-Dalmau, M., & Moncada-Comas, B. (2023). Exploring the affordances of multimodal competence, multichannel awareness and plurilingual lecturing in EMI. *System*, *118*, 103161. <https://doi.org/https://doi.org/10.1016/j.system.2023.103161>
- Simonova, I., Faltynkova, L., & Kostolanyova, K. (2023). New Blended Learning Enriched after the COVID-19 Experience? Students' Opinions. *Sustainability (Switzerland)*, *15*(6). <https://doi.org/10.3390/su15065093>
- Soyoof, A., Reynolds, B. L., Chan, K. K., Tseng, W.-T., & McLay, K. (n.d.). Massive online multiplayer games as an environment for English learning among Iranian EFL students. *Computer Assisted Language Learning*, 1–44. <https://doi.org/10.1080/09588221.2023.2171065>
- Sun, P. P. (2022). Strategic Self-Regulation for Speaking English as a Foreign Language: Scale Development and Validation. *TESOL Quarterly*, *56*(4), 1369–1383. <https://doi.org/https://doi.org/10.1002/tesq.3132>
- Talpur, N., Kalwar, T., & Talpur, M. J. (2021). Computer-assisted Language Learning in Pakistani Context During COVID-19 Pandemic. *REILA : Journal of Research and Innovation in Language*, *3*(3), 210–225. <https://doi.org/10.31849/reila.v3i3.6908>
- Tavakoli, P., Nakatsuhara, F., & Hunter, A. –M. (2020). Aspects of Fluency Across Assessed Levels of Speaking Proficiency. *Modern Language Journal*, *104*(1), 169–191. <https://doi.org/10.1111/modl.12620>
- Tillquist, N. M. (2023). 59 A Student Perspective on the Importance of Inclusive Pedagogy. *Journal of Animal Science*, *101*(Supplement_3), 71. <https://doi.org/10.1093/jas/skad281.085>
- Tran, N., Hoang, D. T. N., Gillespie, R., Yen, T. T. H., & Phung, H. (n.d.). Enhancing EFL learners' speaking and listening skills through authentic online conversations with video conferencing tools. *Innovation in Language Learning and Teaching*, 1–11. <https://doi.org/10.1080/17501229.2024.2334809>
- Uchihara, T., & Clenton, J. (2023). The role of spoken vocabulary knowledge in second language speaking proficiency. *The Language Learning Journal*, *51*(3), 376–393. <https://doi.org/10.1080/09571736.2022.2080856>
- Villegas-Ch, W., García-Ortiz, J., & Sánchez-Viteri, S. (2024). Personalization of Learning: Machine Learning Models for Adapting Educational Content to Individual Learning Styles. *IEEE Access*, *12*, 121114–121130. <https://doi.org/10.1109/ACCESS.2024.3452592>
- Wahyuniati, Maulidiyah, N., & Qolbia, M. (2020). *Improving Speaking Skill Through Speaking Club Viewed from Students' Perception*. *434*(Iconelt 2019), 130–134. <https://doi.org/10.2991/assehr.k.200427.026>
- Wang, C. (2021). Employing blended learning to enhance learners' English conversation: A preliminary study



- of teaching with Hitutor. *Education and Information Technologies*, 26(2), 2407–2425. <https://doi.org/10.1007/s10639-020-10363-5>
- Wang, C., Omar Dev, R. D., Soh, K. G., Mohd Nasiruddin, N. J., Yuan, Y., & Ji, X. (2023). Blended learning in physical education: A systematic review. *Frontiers in Public Health*, 11(1). <https://doi.org/10.3389/fpubh.2023.1073423>
- Wang, H., & Lehman, J. D. (2021). Using achievement goal-based personalized motivational feedback to enhance online learning. *Educational Technology Research and Development*, 69(2), 553–581. <https://doi.org/10.1007/s11423-021-09940-3>
- Xian, X., Zhang, Y., Bai, A., Zhai, X., Hu, H., Zhang, J., & Ye, M. (2023). Association between Family Support, Stress, and Sleep Quality among College Students during the COVID-19 Online Learning Period. In *International Journal of Environmental Research and Public Health* (Vol. 20, Issue 1). <https://doi.org/10.3390/ijerph20010248>
- Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). sage.
- Zamri, Z. M., & Narasuman, S. (2023). The effect of blended learning models on esl students' self-efficacy and proficiency. *3L: Language, Linguistics, Literature*, 29(1), 139–153. <https://doi.org/10.17576/3L-2023-2901-10>
- Zevgolatakou, E., Thye, M., & Mirman, D. (2023). Behavioural and neural structure of fluent speech production deficits in aphasia. *Brain Communications*, 5(1), fcac327. <https://doi.org/10.1093/braincomms/fcac327>