

EXPLORING UNDERGRADUATE STUDENTS' PERCEPTIONS ON THE USE OF BLENDED LEARNING METHOD FOR THE DEVELOPMENT OF THEIR ACADEMIC SKILLS

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ABSTRACT

This study explores undergraduate students' perceptions regarding the effectiveness of blended learning in enhancing their academic skills at a private university in Karachi, Pakistan. A quantitative research approach was adopted, utilizing a survey to collect data on students' experiences with blended learning in their academic English courses. The findings reveal that students perceived significant improvements in receptive skills such as vocabulary (72%), reading (70%), and grammar (68%), with moderate gains in speaking (58%) and pronunciation (55%). Although the majority of students indicated favorable results, a minority (10%) reported no enhancement, suggesting possible obstacles such as restricted access to technology or insufficient involvement. The research underscores the significance of course design, wherein multimodal input and organized practice enhance the efficacy of blended learning. The findings are examined via the lenses of Cognitive Load Theory, Self-Regulated Learning Theory, and Constructivist Learning Theory, highlighting the significance of interactive and self-directed learning. The findings indicate that well-structured blended learning can significantly improve academic skills, especially in receptive areas, however it may necessitate supplementary synchronous exercises and individualized feedback to increase speaking and pronunciation results. Enhancements to blended learning models should prioritize synchronous contact and provide targeted assistance for students encountering engagement obstacles.

Key Words: Blended Learning, Academic skills, Cognitive Load Theory, Self-Regulated Learning Theory, Students' perceptions,

INTRODUCTION

Background of the Study

Information and communication technology, or ICT, has become an essential part of teaching and learning in recent years, especially in higher education. Educational institutions are becoming more aware of the critical role that technology plays in reshaping the educational landscape as they work to improve students' learning outcomes and prepare them for future roles in society (Senanayake & Sandanayake, 2024). Students today have a high degree of technological competence, which allows them to access information online at any time of day. Their learning strategy has changed in response to the quickly evolving technological landscape, where digital tools are becoming more and more essential to their academic success. In order to meet students' intellectual needs and raise their level of engagement, educational institutions are thus placing a greater emphasis on integrating technology (Abbas et al., 2024). A revolutionary approach to education, blended learning combines traditional classroom instruction with online resources. Technological developments and the growing ubiquity of digitalization are responsible for this phenomenon's widespread appeal (Ossiannilsson, 2019). Both students and teachers benefit greatly from this teaching method's flexibility and convenience, which allows for individualized learning experiences that suit different learning

preferences and styles (Jones, 2019; Ossiannilsson, 2019). Students are positioned as "prosumers" who take charge of their own learning in terms of time, space, setting, path, and pace, radically altering the roles that are traditionally associated with education (Ossiannilsson, 2019). Through the use of computer-assisted instruction and direct teacher-student interaction, blended learning systems enable educators to choose the most effective teaching strategies based on the unique learning preferences of each student (Ganciu & Militaru, 2020; Yudhana, 2021). Both teachers and students can now overcome the constraints of rigid curricula and traditional classrooms thanks to technological advancements. The innovations have the potential to completely transform education by making it more adaptable and suited to students' Various needs.

The use of mobile-assisted language learning in classrooms is expanding significantly in Pakistan, as it is in many other countries. The national curriculum frameworks and education policies clearly reflect this development (Khan & Panhwar, 2025). Despite significant efforts by government agencies and institutions to promote digital integration, there hasn't been much practical implementation at the university level (Zamir & Mahmood, 2025). Studies consistently show that incorporating technology into the classroom not only helps students perform better academically but also motivates them to interact with the materials more deeply (Senanayake & Sandanayake, 2024; Zaitseva et al., 2022).

By combining the benefits of in-person interaction with the accessibility and convenience of digital resources, blended learning offers a fresh solution to this problem. This could significantly enhance the growth of academic abilities such as self-control, problem-solving, and critical thinking. Even though blended learning has a lot of promise, more research is needed to understand how students view its impact on their academic development. This study looks at how blended learning is being used as a teaching strategy in a private university setting in Karachi. Students' opinions about the value of blended learning in developing critical thinking, problem-solving, and self-regulated learning are examined in this study. An adaptive questionnaire will be used to collect data, and simple descriptive statistics will be used to analyze the findings.

Research Question

How do undergraduate students of a private University in Karachi perceive blended learning as a tool to develop their academic skills?

LITERATURE REVIEW

Blended learning refers to an online-plus-face-to-face kind of instruction in a learning environment that has proven to be an effective pedagogical strategy for higher learning institutions. It has provided flexible accessibility and increased student engagement. Blended learning involves digital technologies integrated with more traditional forms of teaching-learning toward a dynamic interactive environment that develops skills and encourages both the critical thinking and collaborative aspect of learning. Students generally view blended learning as positive especially for those well-designed and appropriately blended in terms of the digital and the old-fashioned "face-to-face" contact (Chekour, 2024; De Bruijn, 2024; Morton et al., 2016).

Multimodal Input Theory supports the effectiveness of blended learning, as it allows students to engage with content through various modes, such as video, text, and interactive online activities. These diverse forms of input reinforce learning by catering to different learning styles and enhancing students' ability to internalize the material through multiple channels (Giannakos & Cukurova, 2023). This aligns with the findings of Chekour (2024), where students in a blended physics module appreciated the combination of digital and face-to-face instruction, resulting in a richer learning experience and better skill acquisition. Similarly, in the medical field, De Bruijn (2024 and Morton et al. (2016) found that students' satisfaction

with a blended neuropharmacology module was linked to the well-structured integration of online resources and face-to-face tutorials. These findings suggest that the multimodal nature of blended learning contributes significantly to student engagement and academic success, confirming the value of diverse input in fostering deeper learning.

Empirical studies further support the notion that blended learning enhances academic performance, self-directed learning, and student engagement. Han (2024) demonstrated that student engagement plays a mediating role between blended learning and academic achievement, with engagement leading to enhanced learning outcomes. Self-regulated learning theory (Kitsantas et al., 2025; Zimmerman, 2002) explains this by emphasizing the role of students' ability to plan, monitor, and assess their learning processes. Blended learning environments provide opportunities for students to engage in self-paced, independent learning, which is essential for self-regulation. This is evident in Han's (2024) study, where increased student engagement through blended learning led to improved performance, highlighting the connection between student autonomy and academic success.

In language learning contexts, Luo (2025) showed that blended teaching fosters higher-order thinking skills such as critical thinking, creativity, and problem-solving. These skills are developed through the interactive and collaborative learning environment that blended learning promotes. Constructivist learning theory, as outlined by Vygotsky and Piaget, supports this by emphasizing that learners build knowledge through active engagement with the content and their peers (Vygotsky, 1978; Piaget, 1973). Blended learning environments provide opportunities for students to engage collaboratively with peers and instructors, encouraging the construction of knowledge through social interaction and practical application, which enhances critical thinking and problem-solving skills.

Furthermore, Tong et al. (2022) conducted a quasi-experimental study and found that students in blended learning environments outperformed those in traditional settings, with significant improvements in self-directed learning and positive attitudes toward their studies. This supports Deliberate Practice Theory (Macanmara & Maitra, 2019; Ericsson et al., 1993), which posits that improvement in skills is achieved through purposeful, structured practice. Blended learning environments that offer continuous practice opportunities, such as online assignments, peer reviews, and interactive content, enable students to engage in deliberate practice, which results in improved learning outcomes over time.

The effectiveness of blended learning is also linked to course design, student motivation, and the level of interaction between tutors and students. Armellini et al. (2021) highlighted the importance of active blended learning models that emphasize regular interaction, employability-focused activities, and holistic support. Social Learning Theory (Bandura, 1977) emphasizes that learning is enhanced through social interaction and observation, and blended learning environments encourage this by providing students with opportunities to collaborate in both face-to-face and online settings. The regular interaction and feedback present in well-designed blended learning courses are crucial for reinforcing learning and motivating students to stay engaged.

In line with this, Krasnova and Vanushin (2016) identified challenges such as the digital divide, which can create inequities in access to technology and digital literacy, as significant barriers to the effective implementation of blended learning. Sociocultural learning theories, particularly Vygotsky's (1978) emphasis on the social nature of learning, explain that students' ability to benefit from blended learning is heavily influenced by their access to both technological tools and collaborative learning environments. These challenges, particularly in less resource-rich contexts like Pakistan, can limit the effectiveness of blended learning if they are not addressed adequately.

Additionally, concerns about "social loafing"—where students contribute less to group work—can also limit the benefits of collaborative learning in blended environments (Caruso & Kvavik, 2005). Community of Inquiry (CoI) Framework (Garrison, Anderson, & Archer, 2001) emphasizes the importance of cognitive, social, and teaching presence in a blended environment. Inadequate levels of social presence, such as limited group interaction and peer engagement, can contribute to social loafing. Addressing these issues by fostering a supportive and collaborative community is key to maximizing the benefits of blended learning.

In Pakistan, blended learning is gaining momentum as higher education institutions seek to overcome challenges such as overcrowded classrooms and limited resources. Studies show that combining digital resources with face-to-face instruction enhances student engagement and academic performance. Research by Kanwal, Zahid, and Afzal (2023), along with Gillani, Khan, and Salahuddin (2025), supports the effectiveness of blended learning in fostering greater student participation and improved academic outcomes. However, despite its promise, significant barriers to widespread adoption remain. Rizvi and Gulzar (2017) identify key challenges, including inadequate infrastructure, lack of faculty training, and resistance to technological change. These issues highlight the urgent need for strategic planning, infrastructure investment, and professional development to ensure the successful integration of blended learning.

While there is generally positive feedback from both teachers and students, as noted by Mushtaq et al. (2021) and Irum (2020), the implementation of blended learning remains inconsistent. Teachers show enthusiasm, but many universities are still in the early stages of adopting blended learning practices (Imtiaz, 2018). Ali and Bin (2023) developed a blended learning model for public universities, receiving positive responses, yet areas for improvement remain. Overall, while blended learning holds promise for enhancing educational experiences, its success depends on overcoming infrastructural and pedagogical challenges, as well as providing the necessary training and support for both educators and students.

The conventional teaching method, which has been the dominant pedagogical approach for decades, focuses on teacher-centered instruction, where the teacher plays a central role in delivering knowledge, and students are largely passive recipients (Richards, 2005). This model emphasizes the detailed analysis of written language through reading comprehension, translation exercises, and written imitation of texts. However, the limitations of this approach—especially in terms of its failure to meet the diverse needs of today's students—have become increasingly evident (Zaitseva et al., 2022). Blended learning, in contrast, offers a more flexible and interactive learning environment that aligns with the evolving demands of contemporary education. By integrating both digital and traditional elements, blended learning allows students to engage with learning materials in more personalized and meaningful ways, encouraging active participation and the development of critical academic skills (Yudhana, 2021). This is in line with the principles of constructivism, which emphasizes that knowledge is best constructed through active participation and reflection (Piaget, 1973).

Blended learning models also align well with the constructivist paradigm, which emphasizes the active role of students in constructing their own knowledge. According to Wang and Wang (2024), constructivist learning theories stress the importance of experiential learning and collaborative knowledge-building, which is inherent in blended learning environments. In contrast to the passive learning environment of traditional classrooms, blended learning encourages students to engage actively with content, collaborate with peers, and apply their knowledge to real-world contexts. This active engagement fosters deeper learning and the development of critical thinking, problem-solving, and self-regulation skills, which are essential for academic success (Wang & Wang, 2024).

Vygotsky's sociocultural theory emphasizes that learning and cognitive development occur through social interactions within cultural contexts rather than as isolated individual processes (Silva et al., 2024). Blended learning environments, which encourage both individual study and collaborative learning, align well with these theories, creating opportunities for students to learn from their instructors as well as their peers (Wang & Wang, 2024). This collaborative nature of blended learning fosters a more dynamic and holistic learning experience that is deeply rooted in social and cultural contexts, supporting the development of both academic and interpersonal skills (Zaitseva et al., 2022).

While the conventional teaching method has been the dominant model for many years, the increasing adoption of blended learning represents a significant shift in educational practices. Blended learning, when designed effectively, offers a promising approach to enhancing academic skills, fostering student engagement, and preparing students for the demands of the 21st century. However, the successful implementation of blended learning requires careful consideration of course design, infrastructure, digital literacy, and faculty training. In Pakistan and other educational systems, overcoming these challenges will be key to maximizing the benefits of blended learning and ensuring that it becomes an integral part of modern education. The integration of multimodal input and deliberate practice theories, combined with constructivist and sociocultural perspectives, further reinforces the potential of blended learning to enhance academic outcomes and skill development, provided that it is designed and implemented thoughtfully and inclusively.

METHODOLOGY

Methodology

This study was conducted in the Social Science Department of a private sector university in Karachi, Pakistan, aiming to explore undergraduate students' perceptions of blended learning. The research used a quantitative approach to systematically gather and analyze data on the students' attitudes and experiences with blended learning in their academic English courses. Quantitative research is widely recognized for its ability to provide robust, generalizable insights into educational phenomena, making it ideal for large-scale studies such as this one (Weyant, 2022).

Sampling Technique

The research utilized a purposive sampling technique, commonly employed in educational studies when participants must fulfill particular criteria, specifically students instructed in academic English through the blended learning approach. Purposive sampling is a non-probability sampling technique in which participants are chosen based on particular characteristics pertinent to the research aims (Andrade, 2020; Campbell et al., 2020). The researcher chose 250 students from five different academic English classes at the private sector university. This sample size is suitable for a quantitative study designed to discern trends in student perceptions.

Data Collection

The adapted questionnaire (Sheerah, 2018), having a 0.79 Cronbach Alpha, was administered to the selected participants to gather data about their perceptions of blended learning. The questionnaire consisted of 5-point Likert scale questions (strongly agree (1) to strongly disagree (5)) to offer options for responses to the questions. In line with best practices, the study was conducted in classrooms equipped with the necessary technological tools to implement blended learning. The university's Learning Management System (LMS) facilitated the simultaneous engagement of students in both physical and online settings, allowing for a seamless integration of digital and traditional learning components.

Classroom Structure and Implementation

The classrooms were divided into two groups: one group attended classes physically on campus, while the other group participated in the same sessions remotely via online platforms. This setup mirrors a dual-mode delivery system, where physical and online learners have equal access to learning materials, fostering greater flexibility and interaction. The LMS allowed instructors to engage both groups simultaneously, with real-time video streaming and digital resources, ensuring that the learning experience was consistent across both modalities. Such an approach has been found to increase student engagement and improve academic performance by providing diverse avenues for interaction (Simelane-Mnisi, 2023).

Data Analysis

Descriptive statistics are essential instruments in educational research for condensing and analyzing extensive datasets, facilitating the identification of patterns and trends. Research indicates a broad acknowledgement of the crucial role of fundamental statistics in educational research, especially concerning research execution, methodology selection, decision-making, and outcome assessment (Felix et al., 2024). The data were examined to ascertain students' overall satisfaction with the blended learning model, their perceived academic advancement, and the disparities in experiences between the physical and online student cohorts. Using descriptive statistics is a common practice in quantitative research, where the main goal is to describe the data and find connections between important variables (Felix et al., 2024).

Ethical Considerations

In accordance with ethical research standards, informed consent was obtained from all participants, ensuring that they understood the nature of the study, the voluntary nature of participation, and the confidentiality of their responses. All procedures followed the ethical guidelines set forth by the university's research ethics board, ensuring the integrity of the study and the protection of participants' rights (Grant, 2019).

Limitations

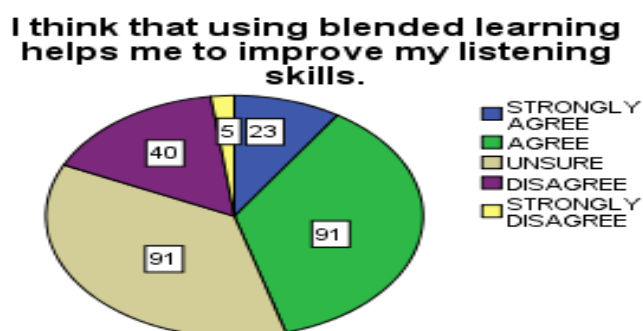
Despite its strengths, this study has limitations. The purposive sampling technique means that the results may not be generalizable beyond the specific context of this university or the students who participated. Additionally, since the data were self-reported, there is a possibility of response bias, where students may have provided answers they believed were more socially acceptable or favourable. Future studies could include a larger sample size across different universities to increase the external validity of the findings.

DATA ANALYSIS

The data analysis focuses on the perceptions of students regarding their improvement in various academic skills after engaging with the blended learning method. Below, the breakdown of each skill's perceived improvement, neutral stance, and lack of benefit is provided in detail, along with a deeper interpretation of the results.

Simple descriptive statistics were used to analyze the data.

1. Students' Perceptions of Blended Learning on Their Listening Skills



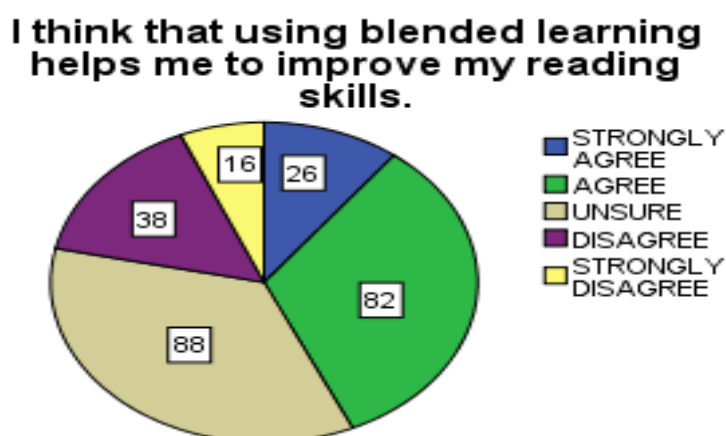
The pie chart shows that 65% of students believe blended learning has improved their listening skills, 25% reported no noticeable change, and 10% felt it had no positive effect. This high level of agreement suggests that the integration of multimedia listening activities, such as recorded lectures, podcasts, and video lessons, provides students with repeated exposure to spoken language, enhancing comprehension. The 25% neutrality may reflect students who either already possessed strong listening skills prior to blended learning or who did not fully utilize online listening resources. The 10% negative response points to possible issues such as audio quality, background distractions, or a lack of real-time interaction.

2. Students' Perceptions on Speaking Skills



Regarding speaking, 58% of students indicated improvement due to blended learning, 30% felt no significant change, and 12% believed it was not beneficial. While a majority reported positive outcomes, the improvement rate for speaking is notably lower compared to listening. This suggests that while blended learning offers opportunities for online discussions, voice recordings, and oral presentations, face-to-face speaking practice may still be more effective for some learners. The substantial neutral response indicates that many students may not have had adequate synchronous speaking activities in their blended courses.

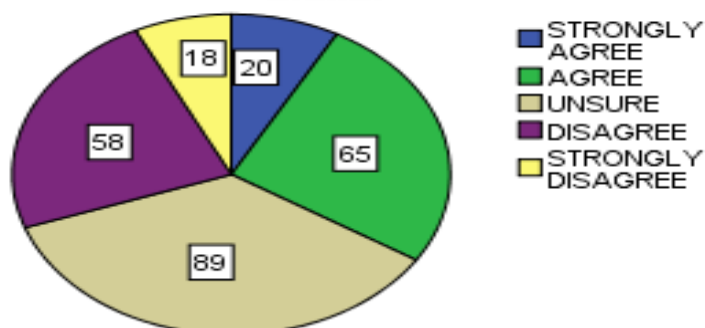
3. Students' Perceptions on Writing Skills



For writing skills, 62% of students reported that blended learning had a positive effect, 28% were neutral, and 10% felt it had no impact. The positive perception could be linked to online writing assignments, peer reviews, and the availability of grammar-checking tools. The relatively lower negative percentage indicates that most students benefit from the time flexibility and drafting opportunities provided by online platforms. However, the 28% neutrality suggests that some students may require more structured instructor feedback to see measurable improvements.

4. Students' Perceptions on Reading Skills

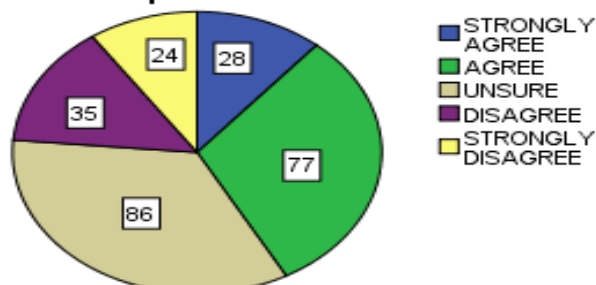
I think that using blended learning helps me to improve my writing skills.



The analysis shows that 70% of respondents agreed that blended learning improved their reading skills, 20% were neutral, and 10% disagreed. The high positive percentage can be attributed to the easy access to digital reading materials, e-books, and articles, allowing repeated reading and deeper comprehension. The smaller negative portion may result from students who find digital reading less engaging than printed texts, possibly due to eye strain or difficulty in annotating online materials.

5. Students' Perceptions on Pronunciation

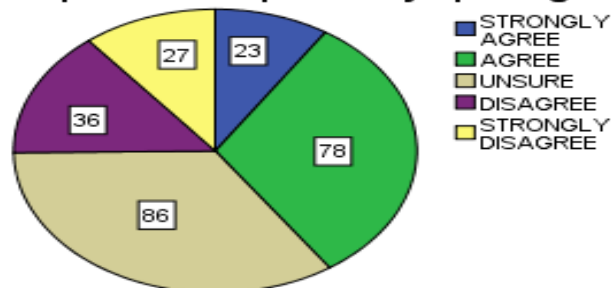
I think that using blended learning helps me to improve my pronunciation.



Regarding pronunciation, 55% of students reported improvement, 35% saw no change, and 10% felt no benefit. This relatively lower percentage of positive responses compared to other skills suggests that pronunciation development may still rely heavily on face-to-face instruction and immediate corrective feedback. Although some online tools and applications provide pronunciation practice, the lack of real-time monitoring in blended environments may explain the large neutral percentage.

6. Students' Perceptions on Spelling

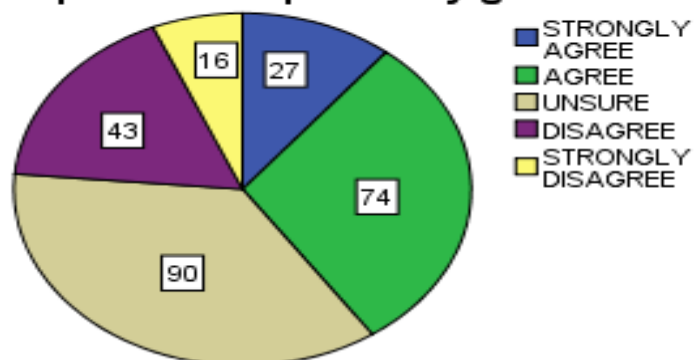
I think that using blended learning helps me to improve my spelling.



In terms of spelling, 60% of students agreed that blended learning enhanced their abilities, 30% were neutral, and 10% disagreed. The improvement may be linked to the frequent exposure to written materials in online formats, spell-check functions, and digital writing exercises. However, the 30% neutrality implies that not all students actively engaged in spelling-specific activities, relying instead on automated corrections rather than internalizing spelling rules.

7. Students' Perceptions on Grammar

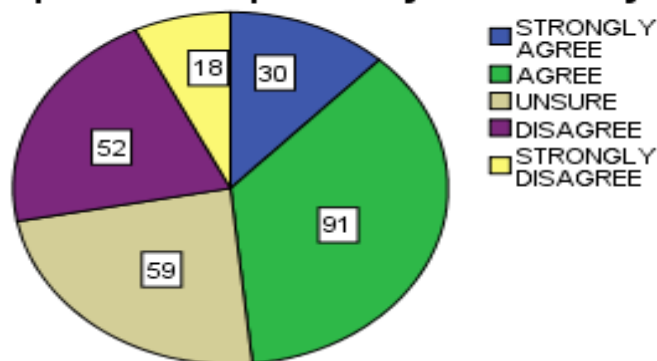
I think that using blended learning helps me to improve my grammar.



For grammar skills, 68% of students reported improvement, 22% were neutral, and 10% disagreed. The positive perception could be due to the structured online grammar exercises, instant feedback mechanisms, and opportunities for repeated practice. The small negative percentage suggests that while most students benefit from these tools, some still struggle with applying grammatical rules in real-life communication without direct teacher intervention.

8. Students' Perceptions on Vocabulary

I think that using blended learning helps me to improve my vocabulary.



Finally, regarding vocabulary acquisition, 72% of respondents indicated improvement, 18% were neutral, and 10% reported no effect. This strong positive rating reflects the vocabulary-rich nature of online learning environments, where students encounter diverse words through videos, readings, and discussion forums. The small negative group may be those who did not actively engage with vocabulary-building tasks or who prefer more traditional learning methods.

Cross-Skill Patterns and Interpretation

The data reveals distinct patterns in student improvement. Skills that benefit from repetitive, self-paced exposure, such as vocabulary, reading, and grammar, showed the highest levels of improvement. These skills benefit from the structured, digital, and flexible environment provided by blended learning. In contrast, skills that require interactive, real-time communication, such as speaking and pronunciation, showed more modest gains. This indicates that blended learning, as implemented in this study, did not provide enough synchronous interaction to significantly improve these oral skills.

The consistency in the "no benefit" response across all skills (~10%) suggests that a small group of students may face access or engagement barriers, such as limited technological resources or a lack of active participation. This is a critical area for improvement, as addressing these barriers can ensure that more students benefit from blended learning.

Discussion

This study aimed to explore undergraduate students' perceptions of blended learning in enhancing their academic skills. The findings show significant improvements in vocabulary, reading, and grammar, with more modest gains in speaking and pronunciation. These results resonate with the literature that highlights the positive impact of blended learning on skill development and student engagement, particularly in domains that benefit from multimodal input and flexible, self-paced learning (Chekour, 2024; Morton et al., 2016).

The substantial improvements in receptive skills such as vocabulary (72%), reading (70%), and grammar (68%) align with the Multimodal Input Theory, which emphasizes that learning is most effective when students engage with content through different formats, such as videos, texts, and interactive tasks. The online resources in blended learning environments allow students to interact with materials in varied ways, reinforcing their learning and aiding retention. The positive outcomes in these areas support previous research that suggests the multimodal nature of blended learning fosters engagement and improves learning outcomes (Chekour, 2024; Morton et al., 2016).

Additionally, the relatively high improvement in reading skills (70%) and vocabulary acquisition (72%) suggests that Deliberate Practice Theory (Ericsson et al., 1993) may also explain some of these findings. The repetition and continuous exposure to learning materials—such as reading assignments, vocabulary exercises, and interactive tools—allow students to engage in deliberate practice. This form of targeted practice, which provides opportunities for students to focus on specific skills, has been shown to lead to significant improvements in academic achievement (Tong et al., 2022).

However, the study found more modest improvements in productive skills such as speaking (58%) and pronunciation (55%), with a significant portion of students reporting neutrality in these areas. This outcome underscores the blended learning model's limitations for skills requiring real-time interaction, such as speaking and pronunciation. As highlighted by Social Learning Theory (Bandura, 1977) and Community of Inquiry Framework (Garrison et al., 2001), learning in these domains is enhanced through direct social interaction and immediate feedback, which are often less prevalent in asynchronous online components. The lack of synchronous speaking activities and immediate corrective feedback in the blended model could explain why these skills showed lower perceived improvement compared to receptive skills.

The 10% of students who reported no benefit from blended learning suggest that Sociocultural Learning Theories (Vygotsky, 1978) may be relevant here. These theories emphasise that learning is not only an individual process but also a social one. The "no benefit" group may represent students who faced challenges such as limited access to technology, low engagement, or lack of peer interaction, as also suggested by the digital divide concerns raised in the literature (Krasnova & Vanushin, 2016). These barriers can significantly impact the effectiveness of blended learning, limiting the opportunities for these students to fully benefit from the technology-enhanced learning environment.

Self-Regulated Learning Theory (Zimmerman, 2002) also provides insight into the variation in students' responses. Students who reported positive gains may have engaged more effectively with the online resources and demonstrated better self-regulation skills, such as managing their time and staying motivated in the learning process. Conversely, students who experienced little to no benefit may have struggled with the autonomy required in blended learning environments or faced difficulties in managing their learning without sufficient guidance.

Implications for Course Design

To address these challenges and optimize the benefits of blended learning, course designs should incorporate more synchronous speaking practice, especially for skills like pronunciation, which benefit from real-time feedback and social interaction. Deliberate practice could be enhanced by providing opportunities for more interactive speaking tasks, live group discussions, and immediate corrective feedback.

In addition, it is crucial to address the barriers faced by students who report little to no benefit from blended learning. By focusing on equitable access to technology and offering personalized support, educators can ensure that all students are able to fully engage with the course materials. The integration of interactive support systems (e.g., peer mentoring, tutor-led sessions) can help foster a greater sense of community and engagement in blended learning environments.

Future Directions

To enhance understanding of how blended learning impacts academic skills, future research could explore several key directions. First, mixed-methods research combining quantitative data (e.g., pre- and post-assessments) with qualitative insights (e.g., interviews, focus groups) can provide a deeper understanding of student experiences. Second, disaggregating data by demographic factors, such as prior proficiency, access to technology, and socioeconomic status, can help identify which groups benefit most from blended learning and where challenges exist. Exploring engagement metrics, such as time spent on tasks and participation rates, could also offer insights into how student involvement correlates with academic outcomes. Moreover, experiments with specific interventions, like scaffolding or individualized feedback, could help determine which adjustments lead to the most significant improvements in skill development. Longitudinal studies assessing the long-term impact of blended learning would also be valuable for understanding its lasting effects. Addressing issues of technology access and equity is critical, with research into solutions such as device lending programs and internet subsidies to ensure equal participation. Cross-institutional studies comparing blended learning across various contexts can help generalize findings and highlight challenges unique to different environments. Lastly, research on instructor training and support will be essential to understanding how teacher preparedness influences the success of blended learning and student outcomes.

Conclusion

This study has provided valuable insights into undergraduate students' perceptions regarding the use of blended learning to enhance their academic skills. The findings indicate that blended

learning is perceived to be particularly effective in improving students' vocabulary, reading, grammar, and listening skills, which can be attributed to the flexibility, multimedia resources, and self-paced nature of the online components. However, the results also highlight the challenges associated with improving oral communication skills, particularly speaking and pronunciation, where students reported more modest gains. These skills, which require real-time interaction and immediate corrective feedback, remain areas where blended learning models need further refinement.

The study also revealed a small but consistent group of students who reported no benefit from the blended learning approach, suggesting that issues such as limited access to technology, low engagement, or insufficient interaction could hinder their success. Addressing these barriers is essential to ensuring that all students, regardless of background or access, can fully benefit from blended learning environments.

Ultimately, the findings underscore the transformative potential of blended learning, provided that its design is carefully tailored to support all aspects of language learning. Educators can enhance the effectiveness of blended learning models by incorporating more synchronous oral practice, targeted pronunciation scaffolds, and continuous engagement with writing and grammar tasks. Moreover, a focus on equitable access and personalized support will help mitigate the challenges faced by marginalized students, ensuring that the benefits of blended learning are accessible to all.

This research contributes to the growing body of knowledge on blended learning, offering practical recommendations for course design, student engagement, and technological integration. As education continues to evolve in the digital age, understanding and optimizing the use of blended learning will play a pivotal role in shaping the future of academic skill development.

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