

Technology Adoption Barriers and System Usability in Blended Learning Environments: A Case Study-Based Quality Framework Development

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Abstract

This study investigated the challenges experienced by students in an English for Public Speaking course during the implementation of blended learning instruction. This study employed a qualitative descriptive design to examine students' challenges in implementing blended learning instruction in an English for Public Speaking course. Data were collected from three classes in the Business English Communication Study Program at Universitas Negeri Makassar through document analysis, classroom observations, and semi-structured interviews. The data were analyzed using the interactive model of Miles, Huberman, and Saldaña, which consists of data condensation, data display, and conclusion drawing/verification, to identify recurring challenges experienced by students in blended public speaking instruction. The findings revealed four major categories of challenges. First, students encountered linguistic and content-related difficulties, including limited vocabulary, grammatical inaccuracies, and problems in organizing coherent and persuasive arguments. Second, methodological challenges emerged from unclear instructional guidelines, limited lecturer-student interaction, and insufficiently engaging asynchronous learning activities. Third, practical challenges were associated with unstable internet connectivity, limited access to reliable digital devices, and inadequate digital literacy. Fourth, psychological challenges, particularly speaking anxiety, fear of making mistakes, and low self-confidence, negatively affected students' public speaking performance. These challenges were interconnected and collectively shaped students' learning experiences in the English for Public Speaking course. This study offered a holistic understanding of students' challenges in the implementation of blended learning instruction in an English for Public Speaking course. By highlighting the interrelationship among linguistic, methodological, practical, and psychological factors, the study contributed to the development of more responsive blended learning practices that supported students' communicative competence and public speaking development.

Keywords: Blended learning; challenges; public speaking; qualitative descriptive.

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1. Introduction

Proficiency in English has become an essential prerequisite for academic achievement and professional advancement in an increasingly globalized world. In Indonesia, English is taught as a foreign language and has been incorporated into higher education curricula to equip students with the communicative skills required for global engagement (Abduh, 2018). Despite its importance, many Indonesian university students continue to experience difficulties in developing communicative competence, particularly in oral performance. Public speaking, as one of the most demanding forms of oral communication, requires not only linguistic accuracy but also fluency, confidence, organization of ideas, and the ability to engage an audience effectively. However, limited exposure to authentic English use beyond the classroom often restricts students' opportunities to apply their linguistic knowledge in meaningful communicative contexts (Sakkir, 2022). Therefore, English for Public Speaking courses play a significant role in strengthening students' confidence, fluency, and ability to express ideas effectively in English.

The rapid development of digital technologies has significantly transformed teaching and learning practices in higher education, including English language instruction (Sakkir, 2020). One instructional approach that has gained increasing

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attention is blended learning, which integrates synchronous and asynchronous learning activities to provide more flexible, accessible, and interactive learning experiences. In the context of English for Public Speaking, blended learning offers several potential benefits, including expanded access to learning materials, opportunities for self-paced practice, repeated exposure to speaking models, and varied forms of lecturer and peer feedback. Nevertheless, the implementation of blended learning does not automatically guarantee effective learning outcomes. Students may encounter difficulties in adapting to online learning platforms, managing digital tools, sustaining motivation, and maintaining engagement during asynchronous activities. These challenges suggest that the effectiveness of blended learning depends not only on technological availability but also on instructional design, learner readiness, and the extent to which online and face-to-face components are meaningfully integrated (Abduh, 2022).

Previous studies have examined the implementation of blended learning in language education and English for Specific Purposes contexts. For instance, Nurmasitah et al. (2019), Irfan (2019), and Melissa et al. (2019) reported that students generally hold positive perceptions of blended learning, particularly regarding flexibility and access to learning resources. However, these studies also identified several persistent barriers, including linguistic limitations, insufficient instructional guidance, limited interaction, speaking anxiety, and low self-confidence. Despite these contributions, many previous studies have examined linguistic, technological, and psychological barriers separately. These limits understanding of how these challenges interact in performance-based courses such as English for Public Speaking. Therefore, empirical studies that specifically examine students' challenges in studies on English for Public Speaking courses delivered through blended learning instruction remain limited. Moreover, much of the existing research tends to emphasize students' perceptions of blended learning, technological barriers, or general speaking difficulties, while limited attention has been given to how linguistic-content, methodological, practical, and psychological challenges are interconnected in the implementation of blended learning instruction in an English for Public Speaking course, particularly in Indonesian higher education.

In response to these gaps, the present study aims to explore and analyze the challenges faced by students in the implementation of blended learning instruction in an English for Public Speaking course. Specifically, this study examines how linguistic and content-related difficulties, instructional methods, practical constraints, and psychological factors influence students' learning experiences and oral performance. By providing a more holistic understanding of these challenges, this study is expected to contribute to the development of more effective, inclusive, and student-centered blended learning instruction for public speaking course in higher education. Its findings may also offer practical implications for lecturers, curriculum designers, and higher education institutions in designing instructional strategies that better support students' communicative competence in English. Based on this background, this study was guided by the following research question: How do linguistic-content, methodological, practical, and psychological challenges shape students' experiences in the implementation of blended learning instruction in an English for Public Speaking course?

2. Literature Review

Public speaking constitutes an important component of English for Specific Purposes (ESP), as it equips students with the communicative competence required in academic, professional, and social contexts. In Indonesian higher education, English for Public Speaking courses are designed to develop students' ability to express ideas effectively in English while demonstrating confidence, fluency, coherence, and audience awareness. However, the development of communicative proficiency in a foreign language is not limited to linguistic mastery. It also involves psychological readiness, contextual adaptation, interactional competence, and opportunities for authentic language practice. These multidimensional demands make public speaking a challenging subject for many English as a Foreign Language (EFL) learners, particularly in blended learning environments where face-to-face and online instructional modes are integrated.

The present study is theoretically grounded in social constructivism and grounded cognition. Social constructivism, as proposed by Vygotsky (1986), views learning as a socially mediated process in which knowledge is co-constructed through interaction with peers, instructors, and cultural tools. Within the concept of the Zone of Proximal Development (ZPD), learners are able to perform beyond their independent capabilities when supported through scaffolding provided by more knowledgeable others. In the context of English for Public Speaking instruction, this perspective suggests that students require meaningful interaction, constructive feedback, collaborative learning, and guided practice to gradually develop from supported performance toward independent communicative competence. In blended learning environments, however, these forms of scaffolding are distributed across synchronous and asynchronous modes, which may create challenges in sustaining interaction, monitoring students' progress, and ensuring the continuity of feedback.

Grounded cognition theory, introduced by Barsalou (1999), further strengthens the theoretical foundation of this study by emphasizing that cognition is situated in embodied, contextual, and experiential processes. From this perspective, public speaking is not merely a verbal activity but also an embodied communicative performance involving gestures, posture, voice control, emotional regulation, audience engagement, and situational awareness. Therefore, effective public speaking instruction should provide learners with opportunities to practice in contexts that approximate authentic communicative situations. Although blended learning has the potential to support such experiences through digital resources, recorded performances, peer feedback, and flexible practice opportunities, its effectiveness depends largely on instructional design, technological readiness, and the quality of interaction between lecturers and students.

Previous studies have examined challenges in ESP contexts and blended learning instruction. Bonk and Graham (2004), Bailey et al. (2013), Nurmasitah et al. (2019), and Melissa et al. (2019) indicate that blended instruction can enhance flexibility, accessibility, and learner autonomy. However, these studies also reveal that blended learning may present linguistic, methodological, practical, and psychological challenges. Students often experience difficulties related to limited vocabulary, lack of fluency, inaccurate pronunciation, and limited ability to organize ideas coherently. In addition, unclear task instructions, insufficient interaction, unstable internet connectivity, limited access to digital devices, and low levels of digital literacy may hinder students' participation and engagement. Psychological factors, including speaking anxiety, fear of negative evaluation, and low self-confidence, may further constrain students' oral performance in public speaking activities (Irfan, 2019; Amir, 2023).

Despite these contributions, limited empirical attention has been given to how students experience and navigate the interrelated linguistic, methodological, practical, and psychological challenges of learning English for Public Speaking course through blended learning instruction, particularly in Indonesian higher education. Existing studies have often addressed these issues separately, focusing mainly on technological implementation, students' perceptions, or general language learning outcomes. This study seeks to address this gap by identifying and analyzing the specific challenges faced by students in learning English for Public Speaking course through blended learning instruction. Grounded in social constructivist and grounded cognition perspectives, the study argues that understanding these challenges is essential for designing blended learning environments that effectively integrate digital tools, interactive pedagogy, authentic speaking practice, and supportive feedback to foster both linguistic competence and communicative confidence.

3. Research Method

This study employed a qualitative descriptive design to examine students' challenges in the implementation of blended learning instruction in an English for Public Speaking course. This design was appropriate because the study focused on understanding students' experiences within a specific instructional context. The research was conducted in three English for Public Speaking classes at Universitas Negeri Makassar over one academic semester. The three classes served as the research setting, while six students – S1, S2, S3, S4, S5, and S6 – were purposively selected as participants for interviews based on their direct involvement in both synchronous and asynchronous learning activities.

Data were collected through document analysis, classroom observation, and semi-structured interviews. Document analysis was used to examine course-related materials, including the syllabus, lesson plans, instructional guidelines, and assessment documents. Classroom observations were conducted to capture the implementation of blended learning instruction and students' learning challenges during the course. Semi-structured interviews were administered to the six selected students to obtain deeper insights into their experiences and perceptions. The data were analyzed using the interactive model of Miles, Huberman, and Saldaña (2018), consisting of data condensation, data display, and conclusion drawing/verification. The findings were categorized into linguistic, methodological, practical, and psychological challenges, while triangulation across documents, observations, and interviews was used to enhance the credibility of the study.

4. Results

The analysis of classroom observations, semi-structured interviews, and course documents revealed that students encountered interconnected challenges in the implementation of blended learning instruction in an English for Public Speaking course. These challenges affected students' language development, speech preparation, participation, and confidence across synchronous and asynchronous learning activities. Based on the condensed and verified data, the findings are presented in four categories: linguistic and content-related challenges, methodological challenges, practical challenges, and psychological challenges. To provide a clearer data display, Table 1 summarizes these categories by

presenting evidence from classroom observations in three classes and semi-structured interviews with six selected students. Each category is then described in detail with supporting evidence from the data.

Table 1. Condensed Data Display of Students' Challenges

| Challenge Categories | Observation Data | Classroom Observation | Sample | Semi-Structured Interviews |
|--------------------------------|------------------|---|------------|--|
| Linguistic and content-related | 3 classes | Pauses, simple expressions, grammatical errors, weak argument development, note dependence | 6 students | Vocabulary difficulty, grammar uncertainty, weak idea organization, memorization |
| Methodological | 3 classes | Repeated clarification about task procedures, presentation format, assessment criteria, submission requirements | 4 students | Unclear instructions and limited interaction, especially in asynchronous tasks |
| Practical | 3 classes | Delayed responses, unclear audio, unstable connection, frozen screens, interrupted interaction | 3 students | Internet problems, device limitations, uploading difficulties |
| Psychological | 3 classes | Low voice, limited eye contact, hesitation, nervous gestures, forgotten scripts | 6 students | Anxiety, fear of mistakes, fear of peer judgment, low self-confidence |

As shown in Table 1, linguistic and content-related challenges and psychological challenges were the most dominant categories, as both appeared across the three observed classes and were emphasized by all six interviewed students. Methodological challenges were emphasized by four students, while practical challenges were emphasized by three students. This pattern indicates that students' main difficulties were related to language use, content development, anxiety, and confidence, while instructional and technical issues remained relevant but less dominant. The following subsections describe each challenge category in detail.

4.1. Linguistic and Content Challenges

Linguistic and content-related challenges emerged as one of the most dominant challenges identified in the implementation of blended learning instruction in an English for Public Speaking course. Observation data showed that several students paused frequently, repeated simple expressions, made grammatical errors, and relied heavily on written notes during presentations. Although some students were able to introduce their speech topics, they had difficulty developing supporting arguments, examples, and conclusions. Their speeches often lacked coherence, especially when the topics required academic vocabulary or specific terminology.

The interview data confirmed these findings. All six students reported difficulties in expressing ideas in English, selecting appropriate vocabulary, constructing grammatically accurate sentences, and organizing speech content. Particularly, during the asynchronous component of blended learning, students had limited opportunities for immediate clarification when facing vocabulary, grammar, or content organization problems. As a result, linguistic uncertainty and weak content development affected their fluency, coherence, and overall public speaking performance. Several students also stated that they relied on memorization rather than spontaneous speaking because they were unsure about their language accuracy and content structure. S1 and S2 explained as follows:

S1: "...the biggest challenges for me are arranging the correct statements because I lack vocabulary and always use wrong grammar..."

S2: "...the challenges I faced mostly when I should organize my speech, sentence by sentence, because the lecturer asked us to make it coherent to each other..."

Therefore, the observation and interview data show that students' linguistic problems were inseparable from their content-related difficulties. Limited vocabulary and grammatical uncertainty restricted students' ability to develop coherent and well-supported speeches, while difficulties in organizing ideas increased their dependence on memorized

scripts. Therefore, linguistic and content-related challenges became a major barrier to students' fluency, coherence, and spontaneous communication in the blended English for Public Speaking course.

4.2. Methodological Challenges

Methodological challenges were identified in the implementation of blended learning instruction, particularly in relation to instructional clarity and interaction across learning modes. This category first appeared during classroom observation, where several students repeatedly asked for clarification about task procedures, presentation format, assessment criteria, and submission requirements. The confusion was more visible when instructions were delivered fully in English, as some students required additional explanation to understand the task expectations.

The interview data confirmed this finding. Four students emphasized methodological challenges during the semi-structured interviews. They reported that unclear instructions and limited interaction in asynchronous activities affected their preparation for speaking tasks. Some students were confused about assignment guidelines and lecturer expectations, especially for tasks uploaded to the learning management system. This uncertainty influenced how they prepared, organized, and submitted their speaking assignments. S3 and S4 explained as follows:

S3: *"...the assignment guidelines are sometimes difficult to understand if the lecturers explain it during the Zoom meeting, especially if the connection is unstable..."*

S4: *"...I cannot understand the instructions completely if the lecturer explains it using English entirely..."*

Overall, the findings show that methodological challenges were mainly related to insufficiently explicit guidance and limited interaction in asynchronous learning. These challenges were less visible in synchronous meetings because students could directly ask questions and receive immediate clarification. However, they still appeared when explanations were delivered entirely in English, indicating that instructional clarity in blended public speaking instruction depended not only on the learning mode but also on the language and accessibility of lecturer explanations.

4.3. Practical Challenges

Practical challenges were identified across the three observed classes, particularly during online speaking activities. Observation data showed delayed responses, unclear audio, unstable connections, frozen screens, and interrupted interaction. These problems were most visible during asynchronous presentations through platforms such as Zoom or Google Meet, where real-time speech delivery depended on stable internet access. Even brief connection problems disrupted students' presentations, reduced concentration, and affected the continuity of lecturer-student interaction.

The interview data confirmed these findings. Three students emphasized practical challenges during the semi-structured interviews. They reported unstable internet connections, limited access to suitable devices, and difficulties uploading recorded speaking assignments. Some students also experienced problems when submitting large video files to the online learning platform. These technical barriers affected students' participation, assignment submission, and overall readiness for blended public speaking activities. S5 and S6 explained as follows:

S5: *"...the internet connection sometimes is unstable during my speech in Zoom, and that makes me panic..."*

S6: *"...my challenge is always on my device because it bugs every time, especially when I do the Zoom meeting..."*

Overall, practical challenges were less dominant during synchronous learning, but they still influenced the implementation of blended learning instruction. The evidence showed that technical problems did not only interrupt access to online learning but also affected students' performance, concentration, and confidence during speaking tasks.

4.4. Psychological Challenges

Psychological challenges emerged as one of the most dominant challenges in the blended English for Public Speaking course. Observation data showed that several students spoke with low voice volume, avoided eye contact, hesitated before speaking, forgot parts of their scripts, and displayed nervous gestures during presentations. Some students were also reluctant to volunteer and waited until they were directly called by the lecturer.

The interview data confirmed this finding. All six students emphasized psychological challenges, including speaking anxiety, fear of making mistakes, fear of peer judgment, and low self-confidence. Students reported heightened anxiety during synchronous speech delivery because they felt pressured by being observed in real time. Anxiety also appeared in asynchronous tasks, particularly in video-recorded speeches, as students were concerned that their performances could be replayed and evaluated repeatedly by lecturers or peers. S1 and S2 explained as follows:

S1: "...yes, I always feel nervous if asked to speak in front of the class, especially in public space during the final exam..."

S2: "...I'm always afraid if my connection is unstable suddenly so that I lose my concentration to remember my script..."

Overall, the evidence shows that psychological challenges affected students across both synchronous and asynchronous learning modes. In synchronous activities, anxiety was related to immediate performance pressure, while in asynchronous tasks, it was linked to recorded visibility and fear of repeated evaluation. These psychological barriers reduced students' confidence, spontaneity, and willingness to participate in blended public speaking activities.

5. Discussions

This study aims to examine students' challenges in the implementation of blended learning instruction in an English for Public Speaking course. The findings show that students' challenges were not isolated but interconnected. Linguistic-content and psychological challenges were the most dominant, while methodological and practical challenges were minor, but still affected students' preparation, participation, and performance. This pattern indicates that blended learning should not be viewed simply as the combination of synchronous and asynchronous activities, but as a purposeful integration of both modes in which learning tasks, interaction, and feedback are systematically connected. This study's findings support this view, as students encountered difficulties when online preparation, synchronous interaction, and performance tasks lacked equal support.

The dominance of linguistic and content-related challenges indicates that public speaking in English requires more than oral fluency. Students need sufficient vocabulary, grammatical control, speech organization, and the ability to develop arguments coherently. The observed frequent pauses, simple expressions, grammatical errors, and dependence on notes show that students were still struggling to transform ideas into organized English speech. This finding aligns with previous studies in blended and public speaking contexts, which show that students frequently struggle with linguistic limitations, low fluency, and difficulties in organizing ideas during English-speaking tasks (Irfan, 2019; Amir, 2023). Thus, English for Public Speaking requires the integrated development of linguistic accuracy, fluency, confidence, coherence, and audience awareness.

Psychological challenges were equally dominant because all six students reported anxiety, fear of mistakes, fear of peer judgment, and low self-confidence. This finding is also supported by recent EFL speaking-anxiety studies, which show that students' psychological barriers are shaped by fear of negative evaluation, low self-confidence, fear of making mistakes, limited language proficiency, and insufficient speaking practice; these factors directly affect students' confidence and public speaking performance (Halimah and Nuraida, 2025). In this study, anxiety appeared in both synchronous and asynchronous modes. In synchronous speech delivery, students felt pressured by real-time observation, while in asynchronous speaking tasks, they feared that the internet connection might suddenly become unstable. This shows that blended learning does not automatically reduce speaking anxiety; instead, anxiety may shift depending on the mode of performance. The relationship between linguistic-content challenges and psychological challenges is crucial to the discussion. Students' limited vocabulary, grammar uncertainty, and weak speech organization increased their anxiety, while anxiety reduced their fluency, confidence, and willingness to speak spontaneously. This explains why several students relied on memorized scripts rather than natural communication. Thus, students' public speaking problems should not be treated only as language problems or emotional problems but as combined linguistic-psychological barriers.

Methodological challenges indicate that instructional clarity and interaction are essential in blended learning instruction. Four students reported unclear instructions and limited interaction, especially in asynchronous activities. This finding aligned with Vygotsky's social constructivist perspective that learning develops through interaction and guided support (1986). Recent EFL studies similarly emphasized that scaffolding, teacher–learner interaction, peer collaboration, and feedback are essential for supporting learners' language development, particularly when students face proficiency and participation challenges (Huda et al., 2025). In this study, students experienced fewer methodological difficulties in synchronous meetings because they could ask questions directly. However, confusion increased in asynchronous tasks when guidelines were not explicit or when instructions were delivered fully in English. Therefore, the implementation of blended learning instruction in an English for Public Speaking course requires clear rubrics, accessible language, examples of expected performance, and opportunities for clarification.

Practical challenges were less dominant but still affected students' learning experience. Three students emphasized unstable internet connection, device limitations, and difficulties uploading assignments. These problems interrupted online interaction, reduced concentration, and affected students' readiness for speaking tasks. This is also supported by previous blended learning literature showing that technological readiness, internet access, and digital literacy influence

the effectiveness of blended learning environments (Nurmasitah et al., 2019). In an English for Public Speaking course, technical disruptions are especially important because they directly affect real-time delivery, audience connection, and students' emotional stability.

Overall, this study contributes to blended learning and ESP research by showing that students' most serious challenges in the implementation of blended learning instruction in an English for Public Speaking course were linguistic-content difficulties and psychological barriers. Methodological and practical challenges were less dominant, but they intensified students' problems in preparation, participation, and performance. Accordingly, the implementation of blended learning instruction in an English for Public Speaking course should equip students through language scaffolding, speech-content planning, clear guidance, timely feedback, and gradual confidence-building speaking practice. This aligns with social constructivist learning principles, in which students develop competence through guided interaction, feedback, and gradual movement from supported practice to independent performance.

6. Conclusions

This study concludes that students' challenges in implementing blended learning instruction in an English for Public Speaking course were multidimensional and interconnected. The most dominant challenges were linguistic-content difficulties and psychological barriers, while methodological and practical challenges were less dominant but still affected students' preparation, participation, and performance. Students' limited vocabulary, grammatical uncertainty, weak speech organization, speaking anxiety, fear of mistakes, and low self-confidence reduced their fluency, coherence, and spontaneity in public speaking. These findings indicate that students' difficulties should not be viewed only as linguistic problems or emotional problems, but as combined linguistic-psychological barriers that shape their public speaking performance across synchronous and asynchronous learning modes.

This study further contributes to the literature on the implementation of blended learning instruction and English for Public Speaking courses by providing a deeper and more comprehensive understanding of students' challenges across linguistic-content, psychological, methodological, and practical dimensions. The findings can serve as a useful reference for lecturers, curriculum designers, institutions, and government stakeholders in developing more responsive blended learning policies and English for Public Speaking programs. Such development should emphasize language scaffolding, structured speech-content planning, clear instructional guidance, accessible learning support, timely feedback, and gradual confidence-building practice to strengthen students' public speaking competence.

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