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OBROLAN TEKS DARING vs OBROLAN SUARA: MANAKAH YANG LEBIH BAIK MENDUKUNG PENGEMBANGAN KETERAMPILAN BERBICARA BAHASA INGGRIS MARITIM BAGI TARUNA DENGAN KECAPAKAN RENDAH?

ONLINE TEXT CHAT vs VOICE CHAT: WHICH BETTER SUPPORTS MARITIME ENGLISH SPEAKING DEVELOPMENT FOR LOW-PROFICIENCY CADETS?

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ABSTRAK

Penelitian ini bertujuan untuk menginvestigasi peran dua moda komunikasi, yaitu teks dan suara, dalam mendukung perkembangan kemampuan berbicara pada pelajar *English as a Foreign Language* (EFL) berkemampuan rendah. Subjek penelitian ini adalah taruna tingkat pemula di Perguruan Tinggi Pelayaran di Indonesia yang memiliki tingkat kecakapan Bahasa Inggris rendah. Dengan menggunakan desain kualitatif komparatif, yang dianalisis secara tematik kualitatif terhadap transkrip interaksi, refleksi, dan deskripsi perkembangan kemampuan berbicara sebelum dan sesudah intervensi. Analisis ini dilakukan untuk mengeksplorasi bagaimana masing-masing moda memengaruhi capaian linguistik dan afektif, dengan fokus khusus pada tingkat berbahasa asing peserta. Temuan penelitian menunjukkan bahwa percakapan berbasis teks memfasilitasi perencanaan pesan, pemantauan bentuk bahasa, dan penurunan kecemasan performatif**.** Hal ini memungkinkan peserta untuk membangun kepercayaan diri dan kontrol yang lebih baik terhadap struktur linguistik dasar. Sebaliknya, percakapan berbasis suara memberikan kesempatan untuk produksi spontan dan keterlibatan dalam percakapan autentik. Moda ini mendorong peserta untuk bernegosiasi makna, mengelola giliran berbicara, dan mengembangkan ritme komunikasi yang lebih alami, meskipun mereka mungkin mengalami kecemasan pada awalnya. Kedua moda tersebut sama-sama memberikan kontribusi positif terhadap perkembangan kemampuan lisan, namun melalui mekanisme yang berbeda: interaksi berbasis teks memperkuat akurasi dan kejelasan konseptual, sedangkan interaksi berbasis suara meningkatkan kelancaran, spontanitas, dan kompetensi interaksional. Penelitian ini menyimpulkan bahwa kedua moda tersebut bersifat saling melengkapi (*complementary*) dan bukan saling bersaing. Secara pedagogis, integrasi bertahap yang dimulai dengan percakapan teks untuk membangun stabilitas dasar dan dilanjutkan dengan percakapan suara untuk mendorong produksi spontan menawarkan pendekatan yang efektif untuk mendukung transisi pembelajar pemula menuju komunikasi lisan yang lebih percaya diri.

Kata kunci: Interaksi Berbasis Teks; Interaksi Berbasis Suara; Pengembangan Kemampuan Berbicara

ABSTRACT

This study investigates how two synchronous digital communication modalities—real-time text chat and real-time voice chat—support the early speaking development of low-proficiency EFL learners. The participants were beginner-level maritime cadets enrolled in an Indonesian maritime higher education institution, all of whom were classified as low-proficiency EFL learners. Adopting a comparative qualitative design, were analyzed using qualitative thematic analysis of interaction transcripts, learner reflections, and descriptive profiles of pre- and post-intervention speaking performance. Findings reveal that text chat facilitated message

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planning, form-focused monitoring, and reduced performance anxiety, allowing learners to develop confidence and greater control over basic linguistic structures. In contrast, voice chat provided opportunities for spontaneous production and authentic conversational engagement, prompting learners to negotiate meaning, manage turn-taking, and develop a more natural communicative rhythm despite initial anxiety. Both modalities contributed positively to oral development, though through different mechanisms: text-based interaction strengthened accuracy and conceptual clarity, while voice-based interaction fostered fluency, immediacy, and interactional competence. The study concludes that the two modalities are complementary rather than competitive. Pedagogically, a sequenced integration—beginning with text chat to build foundational stability and progressing to voice chat to promote spontaneous speech—offers an effective approach for supporting novice learners' transition into more confident oral communication.

Keywords: *Text-Based Interaction; Voice-Based Interaction; Speaking Development*

1. Introduction

In maritime education, oral communication in English plays a critical role, particularly for cadets who are expected to operate in multilingual and high-risk environments such as shipboard operations, port communication, and safety procedures. Maritime English competence is not only an academic requirement but also a professional necessity governed by international regulations such as the STCW Convention. However, many maritime cadets enter higher education with low English proficiency and high communication anxiety, which often limits their participation in oral interaction. In this context, digital real-time communication tools offer potential pedagogical affordances for supporting early-stage speaking development in Maritime English classrooms.

The rapid expansion of digital communication technologies has reshaped contemporary language-learning practices, giving learners new opportunities to participate in interactive environments beyond classroom constraints. Among these innovations, real-time communication tools—ranging from instant text messaging platforms to synchronous audio interfaces—have gained increased relevance in second and foreign language pedagogy for their potential to promote authentic interaction and facilitate oral language development. Research suggests that computer-mediated exchanges enable learners to collaboratively negotiate meaning, produce more comprehensible output, and engage in communicative activities that mirror natural conversational settings (Muchtar et al., 2024). These affordances have made real-time digital environments a central component of modern instructional design in many EFL contexts.

Despite the widespread use of these tools, different types of real-time communication may not benefit all learners equally. Text-based interaction allows more time for planning and processing, which may help individuals with limited linguistic resources organise their ideas and reformulate messages before sending them (Uludağ, 2024). Voice-based systems, by contrast, more closely approximate face-to-face exchanges and may therefore strengthen fluency, automaticity, and oral confidence (Takase, 2024). However, spoken interaction can also impose heavier cognitive demands (Sachs & Polio, 2017) and trigger higher levels of communication anxiety, particularly among learners with low proficiency (Dewaele, Gkonou, & Mercer, 2018). These contrasting characteristics indicate that the suitability of each modality may vary depending on learners' linguistic readiness and emotional profiles.

Although the pedagogical value of computer-mediated communication is well documented, current evidence remains inconclusive and often contradictory regarding which real-time channel best supports the oral development of low-proficiency EFL learners. Existing research often centers on intermediate or mixed-level participants, leaving the experiences of beginners comparatively underexamined (Young & Son, 2023). Moreover, few studies systematically compare how text-based and voice-based real-time communication shape the early stages of speaking ability while simultaneously accounting for the emotional factors—such as apprehension and communication stress—that strongly

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influence learners' willingness to speak. As anxiety has been shown to hinder oral production and limit engagement in communicative tasks (Kim, 2014), understanding how different modalities modulate affective responses is crucial for determining the most effective environment for novice language users.

This study offers several novel contributions to the field of computer-mediated communication and Maritime English education. First, it focuses exclusively on low-proficiency maritime cadets**,** a population that has been largely overlooked in previous studies that predominantly examine mixed or intermediate proficiency learners. Second, rather than treating text-based and voice-based interaction as competing modalities, this study conceptualizes them as developmentally complementary, revealing how each mode supports different dimensions of early speaking development. Third, the study situates synchronous digital interaction within a maritime educational context, where oral communication carries professional and safety-related implications. By integrating linguistic development and affective responses, this research provides empirically grounded insights for designing staged digital speaking instruction in Maritime English classrooms.

The present study addresses this gap by examining how real-time text and real-time voice communication differentially contribute to the speaking development of low-proficiency EFL learners. By analysing learners' oral performance and affective reactions across the two modalities, the study aims to offer clearer evidence about which type of digital interaction is more suitable for beginners and to propose a pedagogical sequencing strategy. Insights from this investigation can guide educators in selecting technologies that better accommodate learners' developmental needs and create conditions that lower anxiety while promoting oral engagement.

Although numerous studies have explored digital interaction in language learning, few have isolated novice learners as a distinct group with unique cognitive and affective constraints (Aubrey & Philpott, 2023). Prior researches tend to generalise findings from mixed-proficiency samples, making it difficult to determine how specific real-time modalities support early oral development (Yu, 2022; Zieglar, 2015). Furthermore, little is known about how these modalities simultaneously influence speech production and foreign language anxiety, despite the recognised importance of affective factors in shaping oral participation. This lack of targeted empirical evidence highlights the need for research that systematically compares text-based and voice-based real-time communication for learners at the lowest proficiency levels.

Previous empirical work has frequently drawn conclusions from learner groups whose proficiency levels are mixed or insufficiently controlled, resulting in substantial variation in linguistic readiness and interactional behaviour across participants. This heterogeneity—reported in several influential reviews and primary studies—makes it difficult to isolate the specific contribution of individual real-time communication modalities to early oral development. For instance, Alghammas (2020) meta-analysis highlights pronounced variability among CMC studies in terms of participant proficiency, task type, and modality design; Huang (2018) similarly notes that both text- and voice-based interactions often include learners with uneven linguistic backgrounds, complicating direct comparisons of their effects; Miura (2022) show that cognitive load and working-memory demands differ substantially across learners of diverse ability levels; Dey-Plissonneau et al., (2022) demonstrate that the affordances of text-based interaction tend to benefit participants unevenly when proficiency is not controlled; and Safitri et al., (2005) emphasizes that audiographic communication tasks produce divergent outcomes when learners possess markedly different linguistic capacities. Collectively, these studies indicate that the dominance of heterogeneous or mixed-proficiency samples has limited the field's ability to determine how particular real-time modalities uniquely support the earliest stages of L2 speaking development.

2. Metode Penelitian

Research Design

This study adopted a comparative qualitative design to explore how two real-time digital communication modalities—text-based chat and

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voice-based chat—support the speaking development of low-proficiency EFL learners. Rather than testing statistical hypotheses or relying on numerical comparisons, the study emphasized detailed description, interpretive analysis, and the examination of interactional patterns emerging within each modality. Both groups completed the same communicative tasks under parallel conditions, with the sole distinction being the nature of the channel through which they interacted. This design allowed for a focused comparison of participants' linguistic behaviour, development, and affective experiences across the two modes without the constraints of controlled experimental statistics. The choice of this interpretive approach aligns with established frameworks for qualitative inquiry (Creswell & Poth, 2018).

Participants

Participants were drawn from a beginner-level of university students. They were divided into two groups of equal size: a real-time text-chat group and a real-time voice-chat group. All learners had limited prior experience with interactive digital communication in English and were at the early stages of spoken language development. Background information regarding learners' years of English study, and previous exposure to online tools was collected to contextualize the interpretation of findings.

Instruments and Procedures

Learners' speaking development was examined using a combination of pre- and post-intervention speaking samples, recordings of real-time interactions, and open-ended reflective responses. Before the intervention began, each participant completed a brief baseline speaking task such as a personal introduction or a simple picture description. These baseline recordings provided an initial profile of each learner's oral abilities.

The instructional phase consisted of four real-time interaction sessions in which the two groups engaged in equivalent communicative tasks but through different modalities. The text-chat group used a synchronous messaging platform that allowed them to type responses and negotiate meaning in real time, while the voice-chat group interacted through an audio-based platform requiring spontaneous oral production. Tasks were designed according to task-based language teaching principles (Ellis, 2003) and included information-gap exchanges, jigsaw activities, opinion-sharing prompts, and short problem-solving scenarios. All tasks were completed in pairs to maximize participation and ensure that learners had frequent opportunities to produce meaningful language.

After each session, participants were invited to write brief reflections about their experience. These reflections asked learners to describe what they found helpful, difficult, or surprising, as well as how the mode of communication affected their confidence and ability to express themselves. At the end of the four-week intervention, participants completed a post-intervention speaking task that mirrored the format of the baseline. Two experienced raters evaluated these recordings using an analytic rubric with qualitative descriptors covering clarity of meaning, fluency, grammatical control at a functional level, vocabulary adequacy, and overall intelligibility. Instead of assigning numerical scores, the raters produced descriptive comments characterizing improvements or persistent challenges. To ensure interpretive consistency, the raters conducted joint calibration discussions at the beginning and met periodically to review a subset of recordings.

In addition to the speaking samples, all text and voice interactions were recorded and later transcribed for qualitative analysis. These transcripts provided rich evidence of how learners managed turn-taking, negotiated meaning, used repair strategies, or displayed signs of hesitation, self-correction, or planning. Patterns emerging from the interaction data were then compared with learners' reflections and post-intervention speaking profiles to form a holistic understanding of how each modality shaped both linguistic outcomes and emotional comfort.

Data Analysis

Data analysis followed an interpretive, multi-source triangulation approach. The interaction transcripts, reflective comments, and pre-/post-speaking samples were examined iteratively to identify recurring patterns. Thematic analysis was used to categorize learners' comments and interactional behaviours into broader themes such

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as perceived comfort, cognitive load, interactional fluency, form-focused monitoring, and anxiety triggers. The qualitative descriptors from the speaking rubric were consolidated into developmental profiles, enabling clear narrative comparisons between learners in each group.

Rather than quantifying differences, the analysis focused on the nature and depth of changes observed in each modality. For example, comparisons involved examining whether text-chat participants displayed greater control over message planning or whether voice-chat participants showed stronger gains in spontaneity and rhythm of speech. Extracts from transcripts and paraphrased examples from reflections were used to support interpretations. Triangulation across these data sources enhanced the credibility of findings. Select thematic summaries were shared with a subset of participants for member checking to confirm that interpretations aligned with their lived experiences.

Ethical Considerations

Ethical guidelines were followed throughout the study. Participation was voluntary, and learners were informed that they could withdraw at any time without any academic consequence. All personal identifiers were removed from the data, and recordings were stored securely. Only the research team had access to the files, and the data were used solely for academic research purposes.

3. Results and Discussion

Analysis of the data revealed several recurring patterns that distinguished the text-chat group from the voice-chat group, while also showing areas where both modalities supported learners' emerging speaking abilities. Across both groups, learners demonstrated noticeable development in their ability to convey meaning, construct simple utterances more confidently, and engage more actively in task-based communication. However, the pathways through which these improvements emerged differed substantially between the two modalities, leading to distinct experiential and linguistic outcomes.

Learners in the text-chat group consistently reported feeling more comfortable and less pressured during their real-time interactions. The transcripts showed clear evidence of deliberate message planning: participants frequently paused to choose wording, rephrased their sentences before sending them, and used the written channel to verify meaning. Many learners described the text-based environment as a "safe space" where they could formulate ideas without the immediate fear of mispronouncing words or failing to understand their partner. Their post-intervention speaking samples reflected this sense of cognitive control. Although their speech remained characteristic of novice learners, they appeared more organized in their expression, more capable of managing simple sentence patterns, and more willing to attempt new vocabulary items. Raters noted that these learners tended to self-correct calmly and were able to maintain coherence in short descriptions and narratives.

In contrast, the voice-chat group demonstrated a different pattern of engagement. Learners described the sessions as more challenging but also more "real," noting that they felt as though they were engaged in authentic conversation. The audio transcripts revealed frequent instances of hesitation, reformulation, and clarification requests—behaviors typical of spontaneous oral exchanges. Although some learners initially struggled with pronunciation demands and processing their partner's speech in real time, many also reported that the immediacy of voice interaction compelled them to think quickly and respond more naturally. Their post-intervention speaking samples displayed increased spontaneity: utterances tended to be produced with fewer prolonged pauses, and learners appeared more willing to take risks, even when unsure about accuracy. Raters observed that the voice group often displayed improvements in communicative rhythm and basic fluency, even when grammatical control remained limited.

Reflections collected after each session supported these observations. Text-chat learners repeatedly described reduced anxiety, greater confidence, and a sense of "control over communication." Meanwhile, voice-chat learners often reported feeling nervous at first but later appreciated the authenticity and real-time nature of oral interaction. A small number of learners expressed frustration with pronunciation or listening difficulties, yet they also acknowledged

that these challenges pushed them to engage more actively.

Overall, the results show that both modalities contributed positively to learners' oral development, but in different ways: text chat enhanced planning, accuracy, and confidence, while voice chat fostered spontaneity, rhythm, and a sense of real conversational engagement.

The findings suggest that real-time digital communication can meaningfully support speaking development among low-proficiency learners, though the benefits vary according to the modality used. The patterns observed in the text-chat group confirm the importance of processing time and reduced performance pressure in early language development. The ability to draft, revise, and monitor messages appears to help novice learners manage the cognitive load associated with constructing meaning in a second language. This resonates with previous research highlighting the role of written SCMC in promoting metalinguistic reflection and increasing learners' willingness to take risks (Smith, 2003; Thorne&Black, 2007). For these learners, the written modality functioned as a scaffold that allowed them to rehearse language, experiment with new forms, and gradually strengthen their command of basic structures before producing them orally.

By contrast, the voice-chat group's experiences underscore the pedagogical value of immediacy and authentic communicative demand, even for beginners. Although learners initially reported anxiety and difficulty responding spontaneously, many ultimately perceived the experience as motivating. The audio transcripts showed that challenges such as miscommunication, hesitation, and negotiation of meaning were not hindrances but central mechanisms through which learners practiced authentic conversational strategies. These findings suggest that voice-based interaction can accelerate the development of pragmatic skills, turn-taking competence, and fluency-related features that are difficult to cultivate in text-based environments.

Taken together, the results point to an important pedagogical insight: the two modalities do not compete but complement each other, responding to different developmental needs. Text chat appears particularly suitable for building learners' confidence, accuracy, and linguistic preparation, while voice chat supports the transition to more spontaneous and interactive oral production. For low-proficiency learners, beginning with text-based interaction may reduce affective barriers and create a foundation of linguistic stability. Gradually introducing voice-based interaction thereafter may allow learners to transfer their planned language into more fluid and natural speech.

The study also highlights the central role of affective factors in shaping learners' preferences and performance. Anxiety emerged as a decisive element distinguishing learners' experiences: while text-chat participants felt safe and in control, voice-chat participants negotiated a more complex balance between challenge and motivation. This suggests that modality selection should consider not only linguistic objectives but also learners' emotional readiness.

In conclusion, the findings emphasize that both real-time text and voice communication hold valuable roles in supporting novice learners' speaking development, though they do so through different mechanisms. Integrating both modalities within a curriculum—starting with text chat to build confidence, followed by voice chat to promote fluency—may offer a balanced and effective pathway for guiding low-proficiency learners toward more competent and confident spoken communication.

4. Conclusion

This study examined how two synchronous digital communication modalities—real-time text chat and real-time voice chat—support the speaking development of low-proficiency EFL learners. Although the two groups engaged in the same instructional tasks, their experiences and developmental trajectories differed. Text chat fostered a sense of cognitive control and reduced performance pressure, enabling learners to plan messages, experiment with language, and build confidence in a supportive environment. In contrast, voice chat encouraged spontaneous production, negotiation of meaning, and the development of basic fluency by placing learners in a more authentic communicative situations.

The findings demonstrate that both modalities can contribute meaningfully to early speaking development, though they do so through distinct mechanisms. Text chat enhances accuracy and comfort, while voice chat promotes spontaneity and communicative rhythm. By understanding how these modalities function differently, educators can more strategically integrate them to meet learners' linguistic and affective needs. Rather than privileging one modality over the other, the study highlights the value of sequencing or combining them in ways that scaffold learners' progress toward more confident and capable oral communication.

The findings of this study offer several important pedagogical insights for instructors teaching low-proficiency English learners, particularly those seeking to integrate digital communication tools into speaking instruction. Given that many beginners struggle with linguistic insecurity and performance anxiety, it is pedagogically advantageous to begin with text-based interaction. This modality affords learners additional planning time, enabling them to rehearse grammatical structures, explore vocabulary choices, and monitor their output before sharing it with a partner. Such cognitive and emotional scaffolding helps build early linguistic stability and gradually strengthens their willingness to communicate. Once this foundation is established, instructors can progressively introduce voice-based interaction to encourage spontaneous speech. Because voice chat requires real-time processing, turn-taking, and instant meaning negotiation, learners benefit most from this modality after developing a degree of comfort and confidence through text-based exchanges. A sequenced progression—from written planning to oral spontaneity—thus allows learners to transfer prepared language into more fluid spoken production.

Moreover, both modalities are most effective when paired with tasks that require meaningful information exchange and collaborative problem-solving. Tasks that naturally elicit clarification requests, repetition, and self-repair provide rich opportunities for learners to practice interactional skills essential for oral development. At the same time, instructors should remain sensitive to the affective differences that learners may experience across modalities. While some learners may thrive in the immediacy of voice interaction, others may initially prefer the relative safety of text-based communication. Creating space for reflection, offering supportive feedback, and allowing flexible transitions between modalities can help learners manage anxiety and maintain sustained engagement. Ultimately, rather than positioning text and voice interactions as competing options, teachers can integrate them into a balanced digital speaking curriculum in which learners prepare language through text-based activities and subsequently apply it in voice-based tasks. This integrated approach not only capitalizes on the unique strengths of each modality but also aligns with the developmental trajectories observed in this study, facilitating a smoother progression toward confident and competent oral communication.

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