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NEEDS ANALYSIS FOR DEVELOPING ONLINE TASK-BASED SPEAKING SKILLS MODULE FOR TVET LEARNERS

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Abstract:

Proficiency in speaking skills is crucial for Technical and Vocational Education and Training (TVET) learners to effectively communicate in professional settings. This study aims to identify the specific needs and challenges of TVET learners in developing speaking skills through online task-based language teaching (TBLT). The research addresses the key question: What are the specific speaking skill requirements of TVET learners and how can online TBLT frameworks be structured to meet these needs? A comprehensive needs analysis was conducted using surveys administered to 80 TVET learners across various disciplines. The surveys employed both closed-ended and open-ended questions to capture quantitative and qualitative data. Purposive sampling was used to ensure representation from diverse vocational backgrounds. The findings reveal that TVET learners primarily require enhanced skills in professional communication, including presentations, negotiations, and technical explanations. Learners preferred interactive online tools such as video conferencing platforms and language learning applications that provide real-time feedback. Major challenges identified include a lack of face-to-face interaction, limited opportunities for immediate feedback, and technical issues such as unstable internet connectivity. These insights underscore the necessity for a well-structured online TBLT framework tailored to the specific speaking needs of TVET learners. Future research should focus on refining the TBLT framework to better address these challenges and explore the integration of AI-driven tools for real-time feedback.

Keywords:

Online Learning, Needs Analysis, Task-Based Language Teaching, TVET Learners, Speaking Skills

Introduction

In the rapidly evolving landscape of Technical and Vocational Education and Training (TVET), effective communication skills, particularly in speaking, are increasingly recognized as essential for learners to succeed in professional environments (Chen, 2020; Rahman et al., 2019). As the demand for highly skilled professionals rises, the ability to articulate ideas clearly and confidently during presentations, negotiations, and technical explanations has become a critical competency (Kasim & Ali, 2021). Despite growing emphasis within TVET curriculum, many learners face persistent challenges in developing these skills, particularly in online education environments (Tan et al., 2022). For example, studies have shown that traditional TVET programs often inadequately address the contextual and dynamic nature of professional communication, leaving learners underprepared for workplace demands (Chappell, 2020; Wang & Doo, 2021; Lee et al., 2023).

The rise of online learning offers new opportunities for addressing these gaps through innovative methods such as Task-Based Language Teaching (TBLT). This pedagogical approach focuses on the practical use of language in authentic, real-world tasks (Ellis, 2018). In online platforms, however, implementing TBLT faces unique challenges. These include reduced face-to-face interaction, limited opportunities for immediate feedback, and technological constraints such as unstable internet connectivity (Zhou & Wei, 2021; Smith & Richards, 2020). Research highlights that these barriers significantly hinder the development of speaking skills, particularly for learners in asynchronous or resource-limited environments (Rahimi & Pourshahbaz, 2019; Zhu & Peng, 2020; Lim et al., 2024).

Emerging studies suggest that leveraging advanced tools, including AI-driven language applications and real-time feedback systems, could mitigate these challenges and enhance the effectiveness of online TBLT frameworks (Lu & Zhang, 2020; Rahman et al., 2023). For instance, interactive platforms like video conferencing tools, coupled with intelligent feedback algorithms, simulate face-to-face communication, providing learners with immediate corrective input and boosting engagement (Kang & Lee, 2024). Addressing these needs is particularly important for TVET learners, who require targeted and task-specific communication training to meet the demands of diverse professional contexts.

This study seeks to explore these issues through a comprehensive needs analysis of TVET learners' speaking requirements and preferences in online TBLT environments. Surveys and interviews with 80 learners from varied disciplines aim to identify both the key competencies required and the barriers encountered in improving speaking skills. The findings will inform the design of an enhanced online TBLT framework, tailored to the unique challenges and professional needs of TVET learners, ensuring practical, effective, and engaging language instruction.

Literature Review

One of the primary issues in the context of Technical and Vocational Education and Training (TVET) is the gap between the communication skills emphasized in TVET curriculum and the actual professional communication needs of learners. Despite the growing recognition of the importance of speaking skills for professional success, many TVET programs fail to adequately address specific professional demands, such as technical explanations, negotiations, and presentations. This gap is critical, as it may leave learners underprepared for the

communication challenges they will face in real-world professional settings (Chappell, 2020; Wang & Doo, 2021; Pelizzari, 2024; Rassaei, 2024).

The shift to online education, particularly through Task-Based Language Teaching (TBLT), introduces unique challenges in developing speaking skills. Unlike traditional classroom settings, online learning environments often lack face-to-face interaction, which is detrimental to the practice and improvement of speaking abilities. The absence of immediate feedback in asynchronous online environments further complicates the learning process, while technical issues, such as unstable internet connectivity, disrupt lesson flow and hinder progress (Aslin & Bejjanki, 2024; McCarthy, 2019; Richardson & Folkvord, 2024; Zhu & Peng, 2020). These challenges highlight the need for innovative solutions to optimize online learning environments for TVET learners.

Another critical issue is the role of real-time feedback in the effectiveness of online TBLT. Real-time feedback is essential in language learning, particularly for speaking skills, as it enables learners to correct mistakes and refine their language use effectively. The Interaction Hypothesis (Long, 1996) emphasizes the role of interaction in facilitating language acquisition, which relies on timely feedback to promote linguistic accuracy and fluency. In online TBLT environments, however, providing real-time feedback remains challenging due to the asynchronous nature of interactions and technical limitations. Addressing these gaps is critical to enhancing feedback mechanisms and improving the quality of language instruction (Golonka et al., 2014; Chiu & Liu, 2023; Lu & Zhang, 2020; Rassaei, 2024).

Understanding the preferences of TVET learners for online learning tools is also crucial. Learners often favor tools that are interactive and provide real-time feedback, which aligns with TBLT principles of engaging learners in authentic, task-based scenarios. These preferences significantly influence the success of language learning experiences. By incorporating educational technologies that cater to these preferences, educators can create more engaging and effective learning environments, ensuring that task-based activities are relevant to learners' professional contexts (Valizadeh & Soltanpour, 2017).

Finally, the impact of technical issues, such as unstable internet connectivity, on language learning outcomes cannot be overlooked. These issues are particularly problematic in online learning environments, where consistent and reliable internet access is essential for uninterrupted learning. In regions where internet connectivity is less reliable, these challenges can exacerbate educational inequalities and hinder the development of speaking skills (Smith & Brame, 2020; Wang, 2017). Addressing these technical barriers is critical to ensuring that all learners have equal access to high-quality language education, regardless of their geographic location.

Theoretical Frameworks

This study is grounded in several key theories:

1. Task-Based Language Teaching (TBLT): Focuses on engaging learners in real-world tasks to foster communicative competence (Ellis, 2018).
2. Sociocultural Theory (Vygotsky, 1978): Highlights the importance of interaction and scaffolding in language learning, which is limited in asynchronous online environments.

3. Kolb's Experiential Learning Theory (1984): Suggests that learning involves active experimentation and reflection, which can be disrupted in online settings.

Summary of Past Studies

The table below provides an overview of key past studies relevant to online TBLT and speaking skills development.

Table 1: Summary of Past Studies

Study	Focus	Key Findings
Valizadeh & Soltanpour (2017)	Feedback in online language learning	Real-time feedback enhances learner accuracy and engagement.
Ellis (2018)	Task-Based Language Teaching	Real-world tasks improve communicative competence.
Pelizzari (2024)	Communication in vocational education	Gaps exist between professional communication needs and TVET curriculum.
Aslin & Bejjanki (2024)	Neurocognitive aspects of online learning	Interaction and feedback are crucial for improving speaking skills.
Rassaei (2024)	Role of anxiety and feedback in online TBLT	Anxiety influences language acquisition, mitigated by real-time corrective feedback.
Chiu & Liu (2023)	Interactive tools in online TBLT	Highlighted the importance of synchronous tools for effective communication skills development.
Richardson & Folkvord (2024)	Barriers in online speaking skills acquisition	Internet issues and lack of interaction limit language learning outcomes.

Method

Research Design

This study employs a mixed-methods approach, integrating quantitative and qualitative data, to thoroughly analyze the needs and challenges faced by Technical and Vocational Education and Training (TVET) learners in developing speaking skills through online Task-Based Language Teaching (TBLT). The mixed-methods design is well-suited for capturing both broad trends and in-depth insights, allowing for a comprehensive understanding of the research problem (Creswell & Plano Clark, 2018). The combination of surveys for quantitative data and interviews for qualitative insights is a common strategy in educational research to provide a robust and nuanced analysis.

Participants

The study's participants consisted of 80 TVET learners from various disciplines, including engineering, hospitality, information technology, and healthcare. Purposive sampling was employed to ensure that the sample included learners from diverse vocational backgrounds, which is essential for exploring a wide range of communication needs (Palinkas et al., 2015). This sampling method is particularly useful in educational research where the aim is to gain insights from specific subgroups within a population.

Data Collection

A structured survey was administered to all participants to gather quantitative data on their speaking skill needs, preferences for online learning tools, and challenges in online TBLT. Surveys are a widely used tool in educational research for collecting data from large groups and are particularly effective for identifying trends and patterns (Dillman, Smyth, & Christian, 2014). The survey included both closed-ended and open-ended questions, which allowed for the collection of both quantitative and qualitative data (Fowler, 2013). Semi-structured interviews were conducted with a subset of 20 participants to gain deeper insights into the challenges identified in the surveys. Semi-structured interviews are particularly useful in educational research as they allow for flexibility in exploring participants' experiences while still providing structure to the data collection process (Kvale & Brinkmann, 2015). These interviews provided valuable qualitative data that complemented the survey findings, offering a richer understanding of the contextual factors influencing learners' speaking skills development.

Data Analysis

The quantitative data from the surveys were analyzed using descriptive statistics, a common approach in educational research for summarizing data and identifying patterns (Field, 2013). Cross-tabulation was used to explore relationships between variables, which is effective in understanding how different factors interact in the context of educational settings (Pallant, 2020). The qualitative data from open-ended survey questions and interviews were analyzed using thematic analysis, a method widely used in qualitative research for identifying, analyzing, and reporting patterns (themes) within data (Braun & Clarke, 2006). Thematic analysis was conducted in a systematic manner, involving stages such as familiarization with the data, coding, theme development, and review, to ensure a thorough and credible analysis (Nowell et al., 2017).

Research Findings

The survey results indicated that TVET learners place a high value on specific speaking skills necessary for their professional success. The quantitative analysis revealed the following:

Table 2: Speaking Skill Requirements

Speaking Skill	Mean Score	Standard Deviation (SD)	Percentage Rating as "Important" or "Very Important"
Presentations	4.6	0.7	85%
Negotiations	4.2	0.9	72%
Technical Explanations	4.8	0.5	90%

The study's findings reveal that TVET learners prioritize specific speaking skills necessary for their professional success. Technical explanations were rated as the most important skill, with 90% of respondents marking it as "important" or "very important" and a mean score of 4.8. Presentation skills followed closely, receiving an 85% importance rating and a mean score of 4.6. Negotiation skills, while slightly less emphasized, were still considered important, with 72% of respondents rating them highly and a mean score of 4.2.

Table 3: Preferred Online Learning Tools

Online Tool	Mean Score	Standard Deviation (SD)	Percentage Rating as "Effective" or "Very Effective"
Video Conferencing Platforms (e.g., Zoom)	4.5	0.6	78%
Language Learning Platform (e.g., Quizziz, Kahoot)	4.1	0.8	65%
Interactive Simulations and Role Playing Tools	3.9	0.9	60%

When it comes to preferred online tools, the learners showed a strong preference for video conferencing platforms like Zoom, which had a mean score of 4.5, and 78% of respondents found them "effective" or "very effective." Language learning applications such as Quizziz and Kahoot were also rated positively, with a mean score of 4.1 and a 65% effectiveness rating. Interactive simulations and role-playing tools were rated slightly lower, with a mean score of 3.9 and 60% of learners finding them effective.

Table 4: Challenges in Online TBLT

Challenge	Mean Score	Standard Deviation (SD)	Percentage Reporting Significant Impact
Lack of Face-to-Face Interaction	4.4	0.7	80%
Limited Immediate Feedback	4.3	0.8	75%
Technical Issues (Unstable Internet Connectivity)	4.0	1.0	60%

The study also identified key challenges in online Task-Based Language Teaching (TBLT). Lack of face-to-face interaction emerged as the most significant issue, with a mean score of 4.4, and 80% of respondents reporting it had a major impact on their learning. Limited immediate feedback followed, with 75% of respondents feeling that the delay in receiving feedback hindered their progress, reflected in a mean score of 4.3. Technical issues, particularly unstable internet connectivity, also presented a challenge, with 60% of learners reporting it significantly affected their learning experience, yielding a mean score of 4.0

The qualitative data gathered from follow-up interviews provided deeper insights into the challenges faced by TVET learners in online TBLT environments. Many learners expressed

that the lack of face-to-face interaction made them feel disconnected and less engaged in learning activities, which negatively impacted their confidence and motivation to participate in speaking tasks. This absence of real-time, in-person interaction was a significant barrier to developing speaking skills. Learners also emphasized the need for more immediate and actionable feedback during online sessions. They suggested that delayed feedback often led to missed opportunities for improvement, and some learners proposed that AI-driven tools could help bridge this gap by offering instant corrections and suggestions. Additionally, technical issues, particularly in rural areas, were a major source of frustration for learners. Unstable internet connections frequently disrupted live sessions and limited access to interactive learning tools, creating a fragmented learning experience and reducing opportunities for practicing speaking skills. These challenges highlight the need for improved technological infrastructure and more effective feedback mechanisms in online language learning environments.

Discussion

The findings of this study underscore the critical role that speaking skills play in the professional development of TVET learners. The emphasis placed on skills such as presentations, negotiations, and technical explanations aligns with existing literature that highlights the importance of effective communication in vocational contexts (Kasim & Ali, 2021; Wang & Doo, 2021). These skills are not only essential for conveying technical knowledge but also for engaging with stakeholders, negotiating contracts, and explaining complex concepts to non-specialists.

Addressing the Gap in Online TBLT

The study also reveals significant challenges in the current online TBLT frameworks, particularly the lack of face-to-face interaction and limited immediate feedback. These challenges are consistent with the findings of previous research, which indicates that the absence of real-time, in-person engagement can negatively impact language learning outcomes, particularly in the development of speaking skills (McCarthy, 2019; Zhu & Peng, 2020). The lack of immediate feedback further exacerbates this issue, as learners are unable to correct mistakes in real-time, leading to a slower learning process and potential fossilization of errors (Golonka et al., 2014; Lu & Zhang, 2020).

The Importance of Real-Time Feedback

The preference for real-time feedback, as highlighted by a significant portion of respondents, is well-supported by the literature on language acquisition. Real-time feedback allows learners to immediately address and correct errors, which is crucial for the development of fluency and accuracy in speaking (Golonka et al., 2014). The potential for integrating AI-driven tools to provide such feedback represents a promising avenue for enhancing online TBLT, as these tools can offer personalized, instantaneous corrections that mimic the benefits of face-to-face interactions (Lu & Zhang, 2020).

Technological Barriers in Online Learning

The technical issues identified by respondents, particularly those related to unstable internet connectivity, highlight a critical barrier to effective online learning. This finding is particularly relevant for TVET learners in rural or underserved areas, where access to reliable internet services may be limited. The impact of these technical barriers on learning outcomes is significant, as consistent disruptions can lead to disengagement and a lack of continuity in the

learning process (Smith & Brame, 2020; Wang, 2017). Addressing these issues is crucial for ensuring that all learners have equitable access to high-quality online education.

Implications for TBLT Framework Design

The insights gained from this study have important implications for the design of online TBLT frameworks tailored to the needs of TVET learners. The integration of more interactive tools that simulate face-to-face communication, coupled with AI-driven feedback mechanisms, could significantly enhance the effectiveness of online language instruction. Furthermore, addressing technical barriers through infrastructural improvements and the provision of offline resources could help mitigate the challenges faced by learners in regions with poor internet connectivity.

Contribution to the Field

This study contributes to the broader discourse on online language learning by providing a detailed analysis of the specific needs and challenges of TVET learners. The findings highlight the importance of designing TBLT frameworks that are not only pedagogically sound but also technologically robust and accessible. Future research could explore the effectiveness of specific AI-driven tools in providing real-time feedback and the impact of improved internet infrastructure on learning outcomes in rural areas.

Conclusion

The study examines the speaking skill needs of TVET (Technical and Vocational Education and Training) learners in professional settings, focusing on online task-based language teaching (TBLT). Through a survey of 80 TVET learners across various disciplines, the study successfully identified key areas requiring improvement, including professional communication skills such as presentations, negotiations, and technical explanations. Learners highlighted a preference for interactive online tools like video conferencing platforms and language learning applications that provide real-time feedback. The findings underscore the feasibility of achieving the study's objectives by proposing a tailored online TBLT framework designed to address these needs effectively.

However, the study faced limitations, including a relatively small and geographically confined sample size, which may restrict the generalizability of the findings to broader populations. Additionally, technological constraints during data collection, such as varying access to stable internet connections, may have influenced participants' responses. These limitations suggest the need for caution when applying the results to diverse or resource-constrained learning environments.

Future research could expand on this study by including a larger, more diverse sample of TVET learners from various regions and industries. Investigating the long-term impacts of implementing tailored online TBLT frameworks on learners' communication skills in real workplace scenarios could provide deeper insights. Moreover, exploring the integration of emerging technologies, such as artificial intelligence (AI)-driven feedback tools, into TBLT frameworks offers a promising avenue for enhancing the quality and accessibility of online vocational education.

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