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IDENTIFYING THE SPEAKING PROBLEMS AND LEARNING NEEDS OF SECONDARY ESL STUDENTS: A NEEDS ANALYSIS STUDY

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Abstract
This paper presents the crucial first stage—the **Needs Analysis (NA)**—of a larger Design and Development Research (DDR) project. The goal of this analysis was to clearly identify the challenges faced by secondary school students in learning English speaking and to determine the requirements for a new instructional tool. Despite national efforts to improve digital literacy in education, many English as a Second Language (ESL) students in semi-rural areas, such as the Maran district, still report low speaking proficiency and struggle with confidence. This situation calls for a targeted digital resource. Using a mixed-methods approach based on the **Hutchinson and Waters (1987) NA model**, data was gathered through a questionnaire survey (N=320 Form Four students) and interviews (N=4 English teachers). We assessed four constructs: Problems, Necessity, Wants, and Learning Content Needs. The findings showed that students experience a **high level of difficulty** in speaking, with an overall mean score of **M=4.385 (SD=0.955)** for the **Problems** construct. Correspondingly, students expressed an equally **high demand** for support, particularly for specific resource features (**Learning Content Needs M=4.310, SD=1.077**). Teacher feedback confirmed that anxiety and L1 interference were major factors. These empirical results successfully address Research Objective 1 by confirming a significant learning gap and providing the essential, data-driven specifications for designing the subsequent Web-Based Learning Resource (WBLR).
Keywords: Needs analysis, ESL speaking skills, secondary students, web-based learning resource, ADDIE model, Maran district.

1. INTRODUCTION

1.1 Background and Context of English Language Teaching

English speaking proficiency is a fundamental skill necessary for students to participate successfully in the global economy and to fulfill the requirements of the Fourth Industrial Revolution (Education 4.0). In Malaysia, national policies like the **Malaysian Education Blueprint (2013–2025)** clearly mandate that the educational system must produce graduates equipped with 21st-century skills, chief among them being effective communication (Ministry of Education Malaysia, 2013). This policy push encourages greater integration of digital technology into the classroom to support diverse learning needs (Abubakar et al., 2024).

However, despite these policy goals and investment in infrastructure, a noticeable gap remains between policy aspiration and actual student outcomes, particularly in productive skills like speaking.

1.2 The Problem of Low Speaking Proficiency

It is widely observed that secondary level **English as a Second Language (ESL)** students across Malaysia continue to exhibit low levels of confidence, fluency, and overall oral competence (Zulkflee et al., 2023). This problem is often more acute in sub-urban and semi-rural settings, where students may have less exposure to English outside of the classroom. This speaking deficit is mainly caused by three interconnected factors:

1. **Outdated Pedagogy:** Many classrooms still rely heavily on traditional, teacher-centered instruction, often referred to as "chalk-and-talk" methods (Sabarudin et al., 2024). These methods do not provide enough systematic practice or personalized feedback necessary for developing fluency.
2. **Psychological Barriers:** The classroom setting frequently raises the **affective filter**, leading to high speaking anxiety, fear of making mistakes, and a reluctance to participate in front of peers (Awang et al., 2022).
3. **Lack of Targeted Resources:** There is a verifiable lack of suitable, syllabus-aligned digital learning resources that focus specifically on improving speaking skills in a low-pressure environment (Juhaida, 2015). While technology is used for receptive skills (reading, listening), the tools for practical, interactive speaking are often missing or inappropriate for the local context.

To address these challenges, the development of a **Web-Based Learning Resource (WBLR)** is proposed as an optimal solution. A WBLR, such as the Sunny Speaks! platform being developed, is flexible. It can be accessed using existing school computer facilities or personal devices outside of school (Mustaffa & Sailin, 2022), providing the required ubiquitous learning environment. Most importantly, a well-designed WBLR can incorporate features, such as private voice recording and gamification, that directly implement principles like

Krashen's Affective Filter Hypothesis (Krashen, 2013) to reduce student anxiety and encourage low-risk practice.

For any instructional tool to be effective, it must be developed systematically and based on verifiable student needs. This study adopts the **Design and Development Research (DDR) Type 1 approach** (Richey & Klein, 2007). DDR begins with the **Analysis** phase, which is a thorough **Needs Analysis (NA)**. A proper NA, guided by frameworks like the one by **Hutchinson and Waters (1987)**, ensures that the resulting resource directly addresses actual student problems and expressed preferences, rather than being based on assumptions. It is essential to empirically confirm the problems (RQ1) and determine the exact requirements and desires of the students (RQ2) before moving to the design phase. This article is dedicated exclusively to presenting the methodology and findings of this critical initial Needs Analysis phase. The research specifically sought to identify the problems and learning needs related to English speaking among secondary school students.The findings presented here will confirm the existence of a significant learning gap and establish the blueprint for the subsequent development of the Sunny Speaks! WBLR.

2. LITERATURE REVIEW: JUSTIFYING THE NEEDS ANALYSIS

2.1 Theoretical Foundation of Needs Analysis

The starting point for any successful curriculum or instructional design is the establishment of a robust **Needs Analysis (NA)**. According to McKillip (1987), an NA is a systematic process used to determine and articulate the difference (or **gap**) between a learner's current performance and the required target performance. This foundational step is crucial because it ensures that the instructional resource, in this case, the Web-Based Learning Resource (WBLR), is built upon empirical evidence of student shortcomings rather than mere assumption. This process is integral to the **Analysis** phase of the **ADDIE instructional design model** (Gagne et al., 2005) and is the first step in the **Design and Development Research (DDR)** approach (Richey & Klein, 2007). By performing a comprehensive NA, this research aims to justify the necessity of the proposed WBLR and derive clear specifications for its content and features.

2.1.1 The Hutchinson and Waters (1987) Framework

This study utilizes the **Needs Analysis Model by Hutchinson and Waters (H&W)** (1987), which is specifically designed for curriculum development in language teaching. The H&W model offers a holistic view of learner needs by assessing four key constructs:

- **Problems (Lacks):** The actual difficulties students face in using English speaking skills, such as grammar errors, low vocabulary, or difficulty sustaining a conversation (addressing RQ1).
- **Necessity:** The degree to which speaking skills are considered vital or compulsory for students' academic, social, and future career success.
- **Wants:** The specific learning modalities and features students prefer (e.g., using digital tools, game-based learning).
- **Learning Content Needs:** The specific content types (e.g., role-play, quizzes, video) students require in the resource.

By examining both the target situation (what students must be able to do) and the learning situation (how students learn best), the H&W framework ensures that the WBLR will be both pedagogically relevant and motivating for the target group.

2.2 Psychological and Pedagogical Theories Guiding the Intervention Need

The identified problems in speaking skills often stem from psychological and cognitive factors. Understanding these theories is necessary to justify the type of resource needed—one that is web-based and low-pressure.

2.2.1 Affective Filter Hypothesis

Krashen's Affective Filter Hypothesis (2013) states that psychological factors like anxiety, low self-esteem, and low motivation can create a "mental barrier" that prevents language input from being processed into acquisition. Research confirms that ESL students often experience high levels of **speaking anxiety** (Awang et al., 2022). This problem is exacerbated by traditional, teacher-fronted classrooms. Therefore, the WBLR must be designed to **lower the affective filter** by providing a private, non-judgmental practice space, which digital tools are uniquely positioned to offer.

2.2.2 Communicative Competence

Effective speaking is not just about knowing grammar; it requires **Communicative Competence** (Canale & Swain, 1980). This includes the ability to use language effectively in real-world contexts, managing dialogue, and employing appropriate social language (pragmatics). The persistent gap observed in the field suggests that traditional methods often fail to develop these functional and strategic aspects of competence, focusing too much on simple grammatical accuracy. This gap justifies the need for a resource that emphasizes applied practice through functional tasks like role-play and simulation.

2.3 The Role of Digital Resources in ESL Speaking

The data collection was designed to explore students' readiness for technology and their needs for digital content, as this directly informs the WBLR's design.

2.3.1 Web-Based Learning (WBL) in the Local Context

Technology acceptance in Malaysian schools is generally high, yet the use of specific tools for speaking skills remains under-researched (Mustaffa & Sailin, 2022). A **Web-Based Learning Resource** is highly suitable for semi-rural settings because it capitalizes on existing computer lab infrastructure and allows students to learn outside of scheduled class hours (asynchronous learning). This approach supports the student preference for ubiquitous, self-paced learning.

2.3.2 Design Principles and Cognitive Load

Finally, the design of any new digital resource must be simple and efficient. **Cognitive Load Theory (CLT)**, proposed by Sweller (1988), suggests that instructional materials should minimize unnecessary mental effort (extraneous load) so that students can focus their working memory on learning the new language itself. Therefore, the WBLR must have an intuitive interface and carefully structured content to avoid overwhelming the learners. The Needs Analysis must identify features that simplify interaction, ensuring the tool is easy to use and effective.

3. METHODOLOGY

This section details the research design, participants, instruments, and data analysis procedures used exclusively for the Needs Analysis phase (Phase 1), ensuring the methodology is clear, simple, and grounded in academic practice.

3.1 Research Design and Setting

This study employed a **mixed-methods approach** during the Needs Analysis phase. This approach was chosen to leverage the strengths of both quantitative data (to measure the severity of problems and needs) and qualitative data (to gain in-depth pedagogical insights from teachers). This forms the crucial **Analysis** stage of the **ADDIE instructional design model** and the systematic foundation of the **Design and Development Research (DDR) Type 1** approach (Richey & Klein, 2007).

The research was conducted in the **Maran district of Pahang, Malaysia**. This location was specifically selected as it represents a typical semi-rural educational setting. Studying this context allows the research to focus on specific speaking challenges often amplified by limited exposure to English and heavy reliance on traditional classroom teaching.

3.2 Participants and Sampling

Data was collected from two distinct groups using purposive sampling, meaning participants were chosen because they represent the specific target user group (students) and content experts (teachers).

Group	Role in Study	Number (N)	Sampling Strategy	Justification
Students	Target users for the WBLR	320 Form Four Students	Purposive	Form Four students are at the crucial A2/B1 proficiency transition level and are the primary target users of the resource.
Teachers	Content and pedagogical experts	4 English Teachers	Purposive	Experienced teachers provided essential qualitative validation of student-reported problems and defined practical resource requirements.

3.3 Instruments

Two primary instruments were used to address the research questions:

3.3.1 Needs Analysis Questionnaire (NAQ)

This quantitative instrument was administered to the students (N=320). It was designed based on the **Hutchinson and Waters (1987) framework** and contained four distinct sections to cover the research objectives:

- **Section B (Problems):** 12 items assessing the difficulties students face (answers RQ1).
- **Section C (Necessity):** 7 items on the importance of speaking skills.
- **Section D (Wants):** 16 items on preferred learning modalities (e.g., technology use).
- **Section E (Learning Content Needs):** 10 items on specific content features (e.g., role-play, audio feedback).

All items utilized a **5-point Likert scale** (1=Strongly Disagree to 5=Strongly Agree). The instrument's reliability was rigorously checked, showing high internal consistency across all four constructs (Cronbach's alpha ranging from 0.771 to 0.941).

3.3.2 Teachers' Semi-Structured Interview

This qualitative instrument was used with the four expert teachers. The interview protocol focused on gathering rich, detailed information on:

1. The observable causes of students' low speaking performance (e.g., anxiety, L1 interference).
2. The perceived limitations of existing resources.
3. Practical suggestions for the content and pedagogical features of a new digital tool.

3.4 Data Analysis

3.4.1 Quantitative Data Analysis

The student data (N=320) was analyzed using **descriptive statistics**. The mean (M) and standard deviation (SD) were calculated for each item and each construct in the NAQ. The mean scores were then used to interpret the severity of the problems (RQ1) and the strength of the needs (RQ2) based on the following scale:

Mean Score Range	Interpretation
1.00 – 1.80	Very Low / Very Weak
1.81 – 2.60	Low / Weak
2.61 – 3.40	Moderate / Neutral
3.41 – 4.20	High / Important
4.21 – 5.00	Very High / Very Important

3.4.2 Qualitative Data Analysis

The teacher interview transcripts were analyzed using **thematic analysis**. This involved transcribing the interviews, reading the data multiple times to identify recurring ideas and issues, grouping these ideas into meaningful codes, and finally synthesizing these codes into core themes (e.g., 'Anxiety in the Classroom', 'Need for Structured Practice'). This process ensured that the design specifications were validated by expert pedagogical opinion.

4. FINDINGS: PROBLEMS AND NEEDS FOR LEARNING SPEAKING

This section presents the results of the Needs Analysis Questionnaire (NAQ) administered to 320 students and the thematic findings from the teacher interviews, addressing both Research Question 1 (RQ1) and Research Question 2 (RQ2). The interpretation of mean scores follows the established scale where 4.21 - 5.00 indicates a **Very High/Very Important** level.

4.1 Research Question 1: What are the specific problems secondary school students experience when learning to speak English?

RQ1 sought to determine the extent of the problems students face when developing their English speaking skills. The results for the overall **Problems** construct are presented in Table 4.1.

Table 4.1 Overall Mean Score for Students' Perceived Problems in Speaking (N=320)

Construct	Mean (M)	Standard Deviation (SD)	Interpretation (Scale: 4.21-5.00 = Very High)
Problems	4.385	0.955	Very High Level of Difficulty

The high overall mean score of **M=4.385** confirms that the Form Four students in the Maran district experience a **Very High Level of Difficulty** in their speaking development. This strong agreement among students validates the fundamental premise of this study: a significant problem exists that requires pedagogical intervention.

4.1.1 Key Specific Problem Areas

A detailed analysis of individual items within the Problems construct provided crucial information for the WBLR design blueprint. The highest-rated specific problems focused less on basic grammar rules and more on the **deployment and functional use** of the language:

1. **Discourse Management:** The most problematic items concerned the inability to sustain speech, manage turn-taking, and link ideas logically in a conversation. This indicates a weakness in **coherence and strategic competence** (Canale & Swain, 1980).
2. **Affective Barriers:** Students reported high scores for items related to **fear of making mistakes** and **anxiety** when speaking English in front of the class. This reinforces the psychological element of the problem, suggesting the school environment raises the affective filter (Krashen, 2013).
3. **L1 Interference:** Items related to thinking in their mother tongue before translating to English also scored highly. This difficulty in real-time language formulation points to a need for practice that promotes automation and fluency.

4.2 Research Question 2: What are the students' perceived needs for improving their English speaking skills?

RQ2 explored the students' requirements by examining the remaining three constructs of the H&W framework: Necessity, Wants, and Learning Content Needs. The overall findings are shown in Table 4.2.

Table 4.2 Overall Mean Scores of Needs Analysis Constructs (N=320)

Construct	Mean (M)	Standard Deviation (SD)	Interpretation (Scale: 4.21-5.00 = Very High)
Necessity	4.273	1.156	Very High Importance

Construct	Mean (M)	Standard Deviation (SD)	Interpretation (Scale: 4.21-5.00 = Very High)
Wants	4.043	0.774	High Importance
Learning Content Needs	4.310	1.077	Very High Importance

4.2.1 Interpretation of Overall Needs

The results show a consistently **high to very high demand** for resources and support.

- **Necessity (M=4.273):** This score is in the Very High range, demonstrating that students fully understand and accept that English speaking is a compulsory and vital skill for their academic and future success.
- **Wants (M=4.043):** This score falls in the High Importance range, indicating a strong positive attitude and preference for using modern digital technology, specifically a web-based platform, for their learning. This assures high user adoption of the planned WBLR (Mustaffa & Sailin, 2022).
- **Learning Content Needs (M=4.310):** This construct recorded the highest mean score, emphasizing that students have strong, specific ideas about the instructional features the new tool must include. This data is the most direct evidence for the WBLR's design specifications.

4.2.2 Detailed Learning Content Needs (WBLR Blueprint)

The specific items within the **Learning Content Needs** construct (M=4.310) serve as the direct blueprint for the WBLR design. The highest-rated items include:

1. **Voice Recording and Self-Correction:** Students overwhelmingly requested features that allow them to **record and listen to their own voice** for practice. This directly counters the anxiety identified in RQ1 by providing a private, low-pressure practice environment.
2. **Guided Role-Play and Dialogues:** There was a strong demand for structured, task-based activities like role-play and dialogue simulations. This addresses the weakness in **Discourse Management** by offering scaffolded practice in functional language use.
3. **Multimedia Integration:** High mean scores for items related to the use of videos, interactive games, and colorful, simple interfaces confirmed the need to manage cognitive load and increase engagement.

4.3 Qualitative Findings from Teacher Interviews

The qualitative data collected from the four experienced teachers strongly **validated and provided context** for the quantitative findings, strengthening the reliability of the Needs Analysis. The key emergent themes were:

1. **The Dominance of Anxiety:** All four teachers cited student anxiety and lack of confidence as the number one obstacle to improving speaking skills. This confirms the student-reported high mean scores for affective barriers. Teachers noted that a **"zero-pressure" environment** is non-existent in the traditional classroom, making a private digital resource essential.
2. **L1 Interference and Accuracy:** Teachers agreed that students often struggled with the **Formulator stage** of speech production (Levelt, 1989), frequently stopping to translate, which kills fluency. They recommended resources that provide fixed phrases and vocabulary in a contextualized manner to promote automatization.
3. **Deficiency in Existing Resources:** Teachers confirmed that current textbook-based methods provide limited opportunities for interactive, personalized, and sustained practice. They explicitly requested a resource that provides **structured practice materials** to bridge the gap between knowing grammar and applying it in conversation.

This comprehensive evidence from both student perception and expert validation confirms the necessity for the Sunny Speaks! WBLR and provides the precise design requirements needed for the next phase of the DDR project.

5. DISCUSSION AND CONCLUSION

This section links the findings of the Needs Analysis (Phase 1) directly back to Research Objective 1 (RO1), interprets the results within the existing scholarly context, discusses the practical implications for educational practice, and highlights the limitations of the current study.

5.1 Linking Findings to Research Objectives

The data collected successfully addresses **Research Objective 1 (RO1): To identify the problems and learning needs related to English speaking among secondary school students.**

The quantitative results confirmed a severe skill gap, as indicated by the **Very High** mean score for the **Problems** construct (M=4.385). This empirically validates the need for intervention, serving as the essential foundation for the DDR project. Furthermore, the consistently **High to Very High** mean scores across the **Needs** constructs (M>4.00), particularly for **Learning Content Needs** (M=4.310), demonstrate that the target users are motivated and ready to adopt the proposed Web-Based Learning Resource (WBLR). This combination of verified problems and expressed needs provides the necessary, data-driven mandate for proceeding to the design phase.

5.2 Interpretation and Comparison with Existing Literature

The key findings align with and deepen established knowledge regarding ESL speaking deficits, particularly in the local context:

5.2.1 Anxiety and Affective Barriers

The high scores related to the **fear of making mistakes** and the teachers' unanimous feedback on student anxiety confirm previous studies (Awang et al., 2022; Zulkflee et al., 2023). This is a critical psychological finding: the core problem is often not a lack of linguistic knowledge, but the inability to deploy that knowledge due to a **high affective filter** (Krashen, 2013). This differs from traditional interventions that focus solely on grammar correction; our results necessitate an intervention that prioritizes creating a **low-pressure environment**, which the WBLR's private practice features will address.

5.2.2 The Shift from Grammar to Deployment

The high ratings for difficulties in **Discourse Management** and **Functional Language**—as opposed to just basic vocabulary—strongly suggest that the students' problem lies in the **application** of language in real-time, functional settings. This supports the concept of **Communicative Competence** (Canale & Swain, 1980), where knowing the rule (Grammatical Competence) is insufficient without the ability to use it strategically and appropriately (Strategic and Pragmatic Competence). The reliance on **L1 translation** reported by teachers further suggests that students are struggling with the cognitive demand of the **Formulator stage** of speech production (Levelt, 1989), reinforcing the need for structured, automated practice features in the WBLR.

5.2.3 Digital Readiness and Resource Preference

The high mean scores for **Wants** and **Learning Content Needs** confirm the high digital readiness among secondary students, which contradicts the perception that technology integration might be rejected in non-urban settings. Students are actively requesting a shift from traditional, textbook-based learning—which teachers confirmed as inadequate for speaking practice—to interactive, multimedia resources. This finding is consistent with research advocating for ubiquitous learning in the Malaysian context (Mustaffa & Sailin, 2022).

5.3 Practical Implications

The findings offer clear, actionable guidance for educators and curriculum developers:

1. **Prioritize Affective Factors:** Teachers should move away from assessment methods that punish errors during practice. The design should explicitly include low-stakes, self-directed activities (e.g., voice recording, self-assessment) to lower the affective filter.
2. **Focus on Functional Practice:** Instructional time should be reallocated to focus on **task-based learning** and **simulations** that force students to use language for a purpose (e.g., making a complaint, asking for information), thereby directly targeting the identified deficits in Discourse and Functional Language.
3. **Targeted Technology Investment:** The results provide a strong justification for educational bodies to invest in and integrate specific digital tools, like the planned WBLR, that offer **structured audio-based practice** rather than generic technology applications.

5.4 Limitations of the Needs Analysis

While comprehensive, this phase of the study has three main limitations:

1. **Geographical Scope:** The study was limited to the Maran district. While this provided a focused view of the semi-rural context, the findings may not be fully generalizable to highly urbanized or entirely remote settings.
2. **Self-Reported Data:** The quantitative findings rely on self-reported perception via the questionnaire. Although this was validated by teacher interviews, future research must include objective performance data (e.g., a diagnostic test) to further confirm the severity of the actual skill gaps.
3. **Cross-Sectional Design:** As a one-time, cross-sectional survey, this study captures the needs at a single point in time, limiting our ability to track how student needs or problems change over a prolonged learning period.

6. CONCLUSION

This research successfully completed the foundational phase of a DDR project by achieving **Research Objective 1 (RO1): To identify the problems and learning needs related to English speaking among secondary school students.**

6.1 Summary of Contributions

The study's most significant contribution is the empirical validation of the instructional gap and the generation of a precise, user-centered **design blueprint** for the **Sunny Speaks!** WBLR. The findings clearly established:

1. **The Severity of the Problem:** Students experience a **Very High** level of difficulty in speaking (M=4.385), driven by psychological anxiety and weaknesses in functional language application.
2. **The Necessity for Digital Intervention:** Students expressed a **Very High** demand for a technology-based solution, particularly favoring features like private voice recording and guided interactive dialogues.

This synthesized data directly justifies the shift from general calls for technology use to the specific **Design** and **Development** of a resource tailored for the local context.

6.2 Practical Recommendations and Future Directions

Based on the evidence gathered, the following recommendations are made:

- **For Practice:** Instructional material developers must prioritize **low-anxiety practice features** and **structured task-based activities** over isolated grammar drills to bridge the gap between knowledge and application.
- **For Research:** Future studies should focus on the remaining phases of the DDR model. Specifically, research should conduct a **longitudinal efficacy study** using objective measures (e.g., the Complexity, Accuracy, and Fluency - CAF framework) to quantify the actual impact of the Sunny Speaks! WBLR on student proficiency over an entire academic semester.

REFERENCES

1. Abubakar, M. M., et al. (2024). The Digital Transformation in Education: Implications for Developing Nations. Journal of Technology and Education, 15(2), 1-18.
2. Awang, R., et al. (2022). Speaking Anxiety and its Impact on Secondary School ESL Learners' Oral Performance. International Journal of Modern Languages, 14(3), 50–65.
3. Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. Applied Linguistics, 1(1), 1–47.
4. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.
5. Gagne, R. M., et al. (2005). Principles of instructional design (5th ed.). Wadsworth Publishing.
6. Hutchinson, T., & Waters, A. (1987). English for specific purposes: A learning-centred approach. Cambridge University Press.
7. Juhaida, S. (2015). A needs analysis on the use of mobile learning in developing productive skills. Journal of Educators and Education, 30(2), 48–62.
8. Krashen, S. (2013). Second language acquisition and second language learning. Pergamon Press.
9. Levelt, W. J. M. (1989). Speaking: From Intention to Articulation. MIT Press.
10. McKillip, J. (1987). Needs Analysis: Instruments and Techniques. SAGE Publications.
11. Ministry of Education Malaysia. (2013). Malaysia Education Blueprint 2013–2025 (Preschool to Post-Secondary Education). Ministry of Education.
12. Mustaffa, C. S., & Sailin, R. (2022). Web-based learning adoption among secondary ESL students in rural schools. International Journal of Modern Languages, 14(1), 1–15.
13. Richey, R. C., & Klein, J. D. (2007). Design and Development Research: Methods, Strategies, and Issues (1st ed.). Routledge.
14. Sabarudin, S., et al. (2024). Reevaluating Instructional Planning in the 21st Century: Teacher Adaptations in ELT. Journal of English Language Education, 9(1), 45–60.
15. Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. Cognitive Science, 12(2), 257–285.
16. Zulkflee, Z., et al. (2023). Low communicative competence in oral skills among ESL learners: Challenges and recommendations. Journal of Language and Communication, 7(2), 110–125.