



## Developing Listening Materials Using Educaplay Video Quiz for Seventh Grade Students at UPT SMP Negeri 17 Medan

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### ABSTRACT

This study aimed to develop listening materials using Educaplay Video Quiz for seventh-grade students at UPT SMP Negeri 17 Medan. Despite the Merdeka Curriculum's emphasis on digital literacy, field observations revealed that listening activities were systematically skipped due to the unavailability of supporting audio materials, leaving students with minimal exposure to structured listening practice. This study employed Design and Development Research (DDR) based on Borg and Gall's (2003) Research and Development model, following six stages: research and information gathering, needs analysis, developing preliminary product, expert validation, product revision, and final product. Data were collected through a needs analysis questionnaire administered to 32 seventh-grade students and an expert validation sheet completed by two design experts, an English education lecturer and an in-service English teacher. The needs analysis revealed that students strongly preferred video-based, interactive listening materials with immediate feedback and visually attractive displays. Based on these findings, 11 Educaplay Video Quiz activities were developed, covering

topics from the Grade 7 English for Nusantara textbook. Expert validation yielded an overall score of 90.83%, categorized as "Very Good" according to Suharto's (2008) criteria, with content appropriateness (88.00%), consistency (93.33%), practicality (92.00%), and effectiveness (90.00%) all meeting quality standards. Revisions included adding text captions to the videos and preparing a teacher guidance document. These findings confirm that the developed Educaplay Video Quiz materials are valid, practical, and appropriate for enhancing English listening instruction for seventh-grade EFL learners.

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### INTRODUCTION

Listening is one of the four fundamental language skills and is regarded as the

initial skill humans use before developing reading, speaking, and writing (Nation & Newton, 2009, as cited in Putri & Islamiati, 2018). As a receptive skill, listening involves a complex cognitive process of identifying and understanding spoken language through vocabulary, syntax, accent, and pronunciation (Rost, 2011), and in English as a Foreign Language (EFL) context it provides the comprehensible input necessary for developing other language competencies (Goh & Vandergrift, 2022). Listening also occupies a substantial share of daily communication; Miller (2003) reported that most communication time is spent listening rather than speaking, reading, or writing. In Indonesian EFL classrooms specifically, students spend the majority of lesson time listening to teacher talk rather than actively speaking (Huriyah & Agustiani, 2018), yet this exposure does not automatically translate into strong listening comprehension, particularly when learners lack engaging and well-designed materials (Nadhira & Warni, 2021). For seventh-grade students at the foundational stage of secondary English learning, developing strong listening skills is especially important, as it establishes the basis for continued language development (Widiyastuti et al., 2023). This need is further reinforced by Ariatna et al. (2023), who found that purposefully developed English teaching materials for seventh-grade learners can meaningfully strengthen both their English language ability and broader 21st-century skills.

The integration of digital media has emerged as a powerful approach to enhancing listening instruction. Technology-based materials expose learners to varied accents, speaking rates, and authentic communicative contexts (Al-Jarf, 2021), while multimedia elements such as visual aids, interactive exercises, and immediate feedback further support comprehension and retention (Ampa, 2015). Mobile-assisted language learning has likewise been shown to improve listening outcomes by offering flexible, personalized, and engaging learning experiences (Sepyanda et al., 2022). Indonesia's Merdeka Curriculum reflects this shift, explicitly encouraging teachers to integrate digital resources to build students' digital literacy and prepare them for 21st-century demands (Kemendikbudristek, 2024). However, studies conducted across Indonesian schools reveal a persistent gap between these curriculum expectations and actual classroom practice: technology-based listening materials remain rarely implemented, with teachers continuing to rely on conventional, textbook-based instruction (Maulina et al., 2022; Putri

& Islamiati, 2018), and students consequently report limited exposure to authentic digital listening input (Afana et al., 2025).

This broader pattern was directly observed during field observations at UPT SMP Negeri 17 Medan, where teachers were found to systematically skip listening activities in the government-provided textbook and proceed directly to reading or grammar exercises. Further investigation revealed that the audio materials intended to accompany the textbook were unavailable, leaving teachers to rely on teacher-read texts instead of authentic audio and leaving seventh-grade students with minimal structured listening practice despite the curriculum's emphasis on digital literacy. Building on these observations and on the broader research reviewed above, this study aimed to develop listening materials using the Educaplay Video Quiz for seventh-grade students at UPT SMP Negeri 17 Medan. Specifically, the study sought to identify students' needs regarding listening materials, Design and develop Educaplay Video Quiz materials to meet those needs, and determine the validity of the developed materials according to design experts.

## **METHOD**

This study employed Design and Development Research (DDR), adopting the Research and Development (R&D) model proposed by Borg and Gall (2003) to guide the development of Educaplay Video Quiz listening materials for seventh-grade students at UPT SMP Negeri 17 Medan. The adapted model consisted of six stages: (1) research and information gathering, (2) needs analysis, (3) developing preliminary product, (4) expert validation, (5) product revision, and (6) final product. This six-stage framework was chosen for its feasibility within an undergraduate research context and its demonstrated success in producing usable educational materials (Sugiyono, 2015). The participants comprised 32 seventh-grade students at UPT SMP Negeri 17 Medan during the 2025/2026 academic year, who completed a needs analysis questionnaire, and two design experts, an English education lecturer and an in-service English teacher, who validated the developed materials.

The needs analysis questionnaire, adapted from Hutchinson and Waters' (1987) framework as developed by Brown (2009), consisted of 25 Likert-scale items grouped into four sections: target needs (necessities), present situation (lacks), target wants (desires), and learning needs. The expert validation sheet, based on the formative

evaluation framework of Nieveen and Folmer (2013), examined four aspects: content appropriateness, consistency, practicality, and effectiveness, each rated on a five-point Likert scale with space for qualitative comments. Data from both instruments were analyzed quantitatively using the percentage formula proposed by Sudijono (2008):

$$P = \frac{f}{N} \times 100\%$$

Where:

P = Percentage

*f* = Frequency of a given response

*N* = Total number of respondents

Expert validation percentages were interpreted using the conversion criteria adapted from Suharto (2008), in which:

**Table 1. The Range of Expert Validation Score**

| Percentage (%) | Categories |
|----------------|------------|
| 81-100         | Very Good  |
| 61-80          | Good       |
| 41-60          | Fair       |
| 21-40          | Bad        |
| 0-20           | Very Bad   |

Source: Suharto (2008)

Based on the needs analysis findings, the researcher developed 11 Educaplay Video Quiz activities covering topics from the Grade 7 English for Nusantara textbook. The preliminary product was then submitted to the two design experts for validation, after which the researcher revised the materials according to expert feedback before finalizing the product.

## RESULTS

### Needs Analysis Results

The needs analysis questionnaire was distributed to 32 seventh-grade students and analyzed across four sections. In the Target Needs section, the majority of students agreed that listening skills are important for their English learning (87.50%) and

recognized the need to improve their listening comprehension for academic purposes (84.38%). In the Present Situation section, students reported limited opportunities to practice listening using digital materials (68.75%) and noted that their teacher focused more on reading and grammar than on listening practice (65.62%). The Target Wants section showed strong preference for multiple-choice questions over essay formats (81.25%) and for video-based rather than audio-only materials (78.12%). Finally, the Learning Needs section revealed that most students preferred learning in a fun and interactive atmosphere (84.38%) and identified as visual learners who benefit from accompanying images or video (75.00%); 71.88% of students also preferred quizzes containing 5–10 questions per session. A summary of the dominant findings across all four sections is presented in Table 2.

**Table 2. Needs Analysis Results**

| Section                    | Dominant Finding                                                    | Percentage (%) |
|----------------------------|---------------------------------------------------------------------|----------------|
| Target Needs (Necessities) | Listening skills are important for English learning                 | 87.50%         |
| Present Situation (Lacks)  | Limited opportunities to practice listening using digital materials | 68.75%         |
| Target Wants (Desires)     | Preference for multiple-choice over essay questions                 | 81.25%         |
| Learning Needs             | Preference for a fun and interactive learning atmosphere            | 84.38%         |

Based on these findings, 11 Educaplay Video Quiz activities were developed, covering the topics of Rooms and Household Furniture, Household Chores, Cleanliness Instructions, Sorting Waste, School Subjects and Class Schedules, Study Tips, Making Polite Requests, Habits and Study Habits, Crafting Recycled Materials, Time and Stating Time, and Adverbs of Frequency, all aligned with the Grade 7 English for Nusantara textbook.

### Expert Validation Results

The developed materials were validated by two design experts, an English education lecturer and an in-service English teacher, across four aspects: content appropriateness, consistency, practicality, and effectiveness. As shown in Table 2, all four

aspects fell into the Very Good category, with Consistency receiving the highest average score (93.33%) and Content Appropriateness the lowest (88.00%), though still well within the Very Good range. The overall validation score was 90.83%, categorized as Very Good according to Suharto's (2008) criteria, indicating that the developed materials met the required quality standards for classroom implementation.

**Table 3. Expert Validation Scores**

| Aspect                              | Percentage (%) | Category         |
|-------------------------------------|----------------|------------------|
| Content Appropriateness (Relevance) | 88.00%         | Very Good        |
| Consistency                         | 93.33%         | Very Good        |
| Practicality                        | 92.00%         | Very Good        |
| Effectiveness                       | 90.00%         | Very Good        |
| <b>Overall Assessment</b>           | <b>90.83%</b>  | <b>Very Good</b> |

In addition to the quantitative scores, the experts provided qualitative feedback. The lecturer validator noted that the listening videos had not yet been supplemented with on-screen text and recommended adding captions to help students follow the vocabulary used. The teacher validator found the materials attractive and suitable for classroom use, and recommended that teachers be provided with clear guidance on how to use the media. Based on this feedback, the researcher added text captions to all video content and prepared a teacher guidance document explaining how to access, assign, and monitor student progress on the platform.

## DISCUSSIONS

The findings of the needs analysis revealed that seventh-grade students at UPT SMP Negeri 17 Medan required engaging, technology-based listening materials incorporating video content and interactive questions. This result is consistent with previous research indicating that conventional listening materials often fail to sustain learner engagement in Indonesian EFL contexts (Nadhira & Warni, 2021) and that digital tools remain underused in actual classroom practice despite their availability (Maulina et al., 2022). The strong student preference for a fun, interactive learning atmosphere and for video-rather than audio-based materials also reflects the broader pattern identified by Afana et al. (2025), whose study found that limited exposure to digital listening materials left students struggling to comprehend authentic spoken English.

The preference for interactive, gamified learning experiences observed in this study aligns with Lee and Hammer's (2011) view that digital gamification provides immediate feedback and lowers learning anxiety while boosting engagement, and with Sepyanda et al.'s (2022) finding that mobile-assisted language learning improves listening outcomes through flexible, self-paced practice. These converging results suggest that the needs identified in this study reflect a broader, recurring challenge in EFL listening instruction at the junior high school level in Indonesia rather than an isolated case.

The expert validation results, with an overall score of 90.83% categorized as Very Good, are consistent with comparable studies evaluating Educaplay-based learning materials. Ayu et al. (2025) similarly reported a Very Valid rating for Educaplay-based media developed for elementary science instruction, while Fitriyana and Rosy (2024) documented validation percentages exceeding 92% for Educaplay materials used in vocational education, closely paralleling the practicality score obtained in the present study. The high effectiveness score (90.00%) further supports Sulastri et al.'s (2025) observation that the interactive, gamified nature of Educaplay activities sustains student engagement, and reflects Field's (2008) process-oriented view of listening comprehension, in which embedding questions at specific points within a video transform listening from a passive activity into a structured, metacognitively engaged process. Taken together, these findings provide strong support for the Educaplay Video Quiz as a valid, practical, and effective tool for enhancing English listening instruction at the junior high school level.

## CONCLUSIONS

This study developed listening materials using Educaplay Video Quiz for seventh-grade students at UPT SMP Negeri 17 Medan through a six-stage Design and Development Research process based on Borg and Gall's (2003) model. The needs analysis confirmed that students required engaging, technology-based listening materials incorporating video content, interactive questions, and immediate feedback, findings that directly shaped the development of 11 Educaplay Video Quiz activities aligned with the Grade 7 English for Nusantara textbook. Expert validation across four aspects, content appropriateness, consistency, practicality, and effectiveness, yielded an overall score of

90.83%, categorized as Very Good, confirming that the developed materials are valid, practical, and appropriate for classroom use. Based on expert feedback, the materials were revised by adding text captions to the videos and preparing a teacher guidance document.

Despite these positive outcomes, the study is limited by its dependence on stable internet connectivity, without which students may struggle to access the Educaplay platform consistently. As a free-tier account, the platform also restricted the number of activities that could be created and required students to view advertisements during use, which may have interrupted their focus. Future researchers are encouraged to consider these constraints and to explore alternative platforms, such as EdPuzzle, that may offer broader functionality.

Overall, this study provides evidence that Educaplay Video Quiz is a valid, practical, and curriculum-aligned tool for supporting listening instruction among seventh-grade EFL students, and offers a useful reference for teachers seeking to integrate technology into listening instruction and for future researchers developing similar digital listening materials.

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