



## Developing Supplementary Materials for Fast Learners in 7th Grade Based on the Merdeka Curriculum

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**Abstract.** *This study aims to develop supplementary English teaching materials for seventh-grade fast learners based on the Independent Curriculum. This study uses the Design and Development (DnD) method proposed by Richey and Klein, which includes four stages: analysis, design, development, and evaluation. The research subjects involved an English teacher and seventh-grade students at SMP Negeri 6 Singaraja, Buleleng Regency. Data collection was conducted through observation, interviews, questionnaires, and document analysis. The supplementary teaching materials developed used three learning approaches: problem-based learning, project-based learning, and discovery-based learning. The results of expert assessments showed that the developed teaching materials were in the very good category and were declared suitable for use in classroom learning. The findings of this study indicate that the supplementary teaching materials are able to meet the needs of fast learners and support the implementation of the Independent Curriculum. This research contributes to the development of teaching materials that are appropriate to the characteristics of fast learners and support more effective and enjoyable learning.*

**Keywords:** *Design and Development (DnD), Fast Learners, Junior High School, Merdeka Curriculum, Supplementary Materials.*

### 1. INTRODUCTION

The implementation of the Merdeka Curriculum in Indonesia represents a major transformation in the national education system, emphasizing flexible, student-centered, and differentiated learning. This curriculum prioritizes learner autonomy, contextual learning, and the development of competencies based on students' readiness, interests, and learning characteristics (Direktorat SMP, 2022). In English language teaching, the Merdeka Curriculum requires teachers to design instructional practices that accommodate learner diversity, including differences in learning speed and cognitive ability. In practice, however, the implementation of differentiated learning remains challenging. Many English teachers still rely predominantly on government-issued textbooks as the main learning resources. Although these textbooks are aligned with curriculum standards, they are generally designed for average learners and offer limited opportunities for enrichment or extension. Consequently, students with higher learning capacities, particularly fast learners, often experience boredom, reduced motivation, and limited academic challenge during classroom activities.

Fast learners are commonly defined as students who are able to understand learning materials more quickly, complete tasks earlier, and demonstrate higher levels of cognitive processing compared to their peers (Yildirim & Akcayoglu, 2019). They tend to require

enrichment activities, complex problem-solving tasks, and opportunities for independent exploration to maintain engagement and develop higher-order thinking skills. Without appropriate instructional support, fast learners may not reach their full potential and may disengage from the learning process. One pedagogical approach to addressing the needs of fast learners is the provision of supplementary learning materials. Supplementary materials refer to additional instructional resources designed to complement main textbooks by offering extended content, varied learning activities, and contextual tasks (Tomlinson, 1998). In English language learning, supplementary materials can function as enrichment tools that promote creativity, critical thinking, and learner autonomy. Within the framework of the Merdeka Curriculum, supplementary materials are particularly relevant as they support differentiated instruction and flexible learning pathways.

Material development refers to a systematic process of creating, adapting, and organizing instructional materials to facilitate learning. To ensure effectiveness, teachers need a comprehensive understanding of learners' characteristics, which can be identified through classroom observation, interviews, analysis of students' work, interactive classroom strategies, and communication with families (Ismajli & Morina, 2018). Such understanding is particularly important when addressing learner diversity, including students who demonstrate higher learning capacities than their peers. Within this context, supplementary materials play a crucial role in enriching the learning process. Supplementary materials are not intended to replace textbooks, but rather to support and extend curriculum content through additional resources such as videos, audio materials, audio-visual media, and varied reading texts (Tomlinson, 1998). This enrichment function is especially relevant under the Merdeka Curriculum, which emphasizes flexibility, differentiation, and student-centered learning.

The provision of supplementary materials is particularly beneficial for fast learners. Fast learners are students who demonstrate above-average learning potential, rapid comprehension, strong academic performance, and high self-confidence in expressing ideas (Yildirim & Akcayoglu, 2019). They tend to be independent learners who are capable of utilizing learning resources autonomously, adapting learning strategies to their needs, and engaging actively both inside and outside the classroom (Oxford, 1990). As gifted learners, fast learners often exhibit strengths in intellectual ability, creativity, leadership, and problem-solving skills (Marland, 1972, as cited in Yildirim & Akcayoglu, 2019). Consequently, they require learning materials and activities that provide sufficient challenge and opportunities for deeper cognitive engagement. To address these needs, innovative learning models such as problem-based learning, project-based learning, and discovery-based learning have been widely promoted in

21st-century education. Problem-based learning emphasizes the use of real-life problems as a starting point for learning, encouraging students to develop critical thinking and problem-solving skills through collaborative and individual inquiry (Henderson, 2020). Project-based learning engages students in designing and producing meaningful projects through a series of structured stages, allowing them to apply knowledge creatively while developing collaboration and communication skills (Efstratia, 2014; Triana et al., 2020). Meanwhile, discovery-based learning positions students as active knowledge seekers who construct understanding through exploration, data analysis, and reflection, thereby fostering curiosity, creativity, and long-term cognitive development (Svinicki, 1998; Sofeny, 2017).

Previous studies have consistently shown that supplementary materials play a significant role in enhancing English language learning across educational levels. Bajrami (2020) found that the use of supplementary materials in EFL classrooms increased students' motivation, engagement, and interaction, particularly when the materials were aligned with curriculum objectives. Similar findings were reported by Kusuma (2020) and Paputungan et al. (2018), who demonstrated that supplementary materials improved students' reading interest, vocabulary mastery, pronunciation, and grammatical accuracy through visually attractive and context-specific content. Studies by Efrizal (2020) and Darmawan et al. (2023) further confirmed that supplementary materials function effectively as companions to main textbooks, especially when designed using interactive platforms or skill-focused approaches, such as speaking and grammar enrichment.

Other empirical studies have emphasized the importance of contextualized and learner-centered supplementary materials. Rinardi et al. (2019), Seli et al. (2022), and Djamil et al. (2021) highlighted that locally based content and real-life contexts significantly increased students' motivation and learning effectiveness. Meanwhile, Dewi et al. (2024) and Pebriana et al. (2024) stressed that curriculum-oriented supplementary materials are essential to address learner diversity and overcome the limitations of monotonous textbooks, particularly within the Merdeka Curriculum framework. Although these studies confirm the effectiveness of supplementary materials, most focus on general learner populations without specifically addressing fast learners. This indicates a research gap in developing English supplementary materials that explicitly target fast learners at the junior high school level, which the present study seeks to address.

Despite these findings, empirical research that specifically addresses the development of English supplementary materials for fast learners at the junior high school level within the context of the Merdeka Curriculum remains limited. Most existing studies focus either on

general differentiated instruction or on material development without explicitly targeting fast learners. This gap highlights the need for research that integrates theoretical perspectives on fast learners with curriculum demands and classroom realities. Therefore, this study aims to develop English supplementary materials for fast learners in seventh grade based on the Merdeka Curriculum. The materials are designed using problem-based learning, project-based learning, and discovery-based learning approaches to provide meaningful challenges and promote higher-order thinking skills. This study is expected to contribute theoretically by enriching the literature on differentiated material development and practically by providing teachers with validated supplementary materials that support the effective implementation of the Merdeka Curriculum.

## **2. RESEARCH METHOD**

This research employed a Design and Development (DnD) approach proposed by Richey and Klein (2007). The development process consisted of four stages:

1. Analysis: Identifying students' needs, curriculum demands, and gaps in existing teaching materials through observation, interviews, questionnaires, and document analysis (ATP and textbooks).
2. Design: Developing a blueprint of the supplementary materials aligned with learning objectives, topics, and learning models.
3. Development: Creating the supplementary materials incorporating problem-based learning, project-based learning, and discovery-based learning activities.
4. Evaluation: Validating the product through expert judgment and revising it based on feedback.

The participants of this study were one English teacher and seventh-grade students at SMP Negeri 6 Singaraja. Data analysis used both qualitative and quantitative methods. The quality of the product was measured using expert judgment criteria adapted from Nurkancana and Sunartana (1992).

## **3. FINDINGS AND DISCUSSION**

The findings of this study are discussed based on the four stages of the Design and Development (DnD) model proposed by Richey and Klein (2007), namely analysis, design, development, and evaluation. Each stage provides important insights into the process of developing supplementary English materials for fast learners in seventh grade based on the Merdeka Curriculum.

## Analysis Stage

The analysis stage revealed several critical issues related to the implementation of the Merdeka Curriculum in English classrooms. Observation and teacher interviews indicated that although the Merdeka Curriculum emphasizes differentiated and student-centered learning, the teaching materials used were still limited to general textbooks and worksheets. These materials were designed for mixed-ability learners and did not specifically address the needs of fast learners.

Questionnaire data showed that most fast learners experienced boredom during English lessons because the materials were perceived as too easy and repetitive. Approximately 83% of students stated that they felt bored when teachers relied solely on textbooks. Furthermore, 67% of students emphasized the importance of having supplementary materials that provide more challenging tasks and real-life problem contexts. These findings indicate a mismatch between students' learning characteristics and the instructional materials provided.

## Design Stage

To clarify the structure of the supplementary materials, Table 2 summarizes the topics and learning approaches used in the developed product.

**Table 1.** Topics and Learning Approaches in the Supplementary Materials.

Topic	Subtopics	Learning Approaches
About Me	Self-introduction, hobbies, daily activities	PBL, DBL
Culinary and Me	Favorite food, recipes, cooking procedures	PBL, PjBL
Home Sweet Home	Describing rooms, household activities	DBL, PjBL

Based on the results of the needs analysis, a blueprint for the supplementary materials was designed. Based on the results of the needs analysis, a blueprint for the supplementary materials was designed. The materials focused on three main topics for the odd semester: *About Me*, *Culinary and Me*, and *Home Sweet Home*, which were aligned with the Alur Tujuan Pembelajaran (ATP) and Capaian Pembelajaran (CP) for Phase D of the Merdeka Curriculum. The design incorporated three learning approaches: problem-based learning, project-based learning, and discovery-based learning. These approaches were selected because they encourage higher-order thinking skills, collaboration, and independent learning, which are suitable for fast learners. Each topic included clear learning objectives, structured activities, and worksheets designed to gradually increase task complexity.

## Development Stage

Figure 1 shows an example of the layout design of the supplementary material, including worksheets, illustrations, and QR-code-linked learning resources.



**Figure 1.** Sample Layout of the Supplementary Material.

In the development stage, the supplementary materials were created based on the approved blueprint. In the development stage, the supplementary materials were created based on the approved blueprint. The materials included contextual problems, group projects, discovery tasks, and supporting learning resources such as QR-code-linked videos. Visual elements and illustrations were added to enhance students' engagement and comprehension.

The development process also considered students' preferences for group learning and interactive activities. Many tasks required collaboration, discussion, and presentation, which helped fast learners develop not only cognitive skills but also communication and social skills. This finding supports previous studies suggesting that fast learners benefit from challenging tasks combined with collaborative learning environments.

## Evaluation Stage

To present the expert judgment results clearly, Table 3 summarizes the evaluation scores before and after revision.

**Table 2.** Expert Judgment Results.

Evaluation Phase	Expert 1	Expert 2	Teacher	Category
Phase 1 (Before Revision)	110	104	108	Average
Phase 2 (After Revision)	156	160	151	Excellent

The evaluation stage involved expert judgment conducted by two university experts and one English teacher. The evaluation stage involved expert judgment conducted by two university experts and one English teacher. In the first evaluation phase, the materials were categorized as average, indicating the need for revision. Feedback focused on improving layout design, clarifying instructions, enhancing real-life relevance, and enriching learning resources.

After revision, the second evaluation phase showed significant improvement. All evaluators rated the materials in the excellent category based on content relevance, instructional design, language use, and visual presentation. This result indicates that the supplementary materials are valid, feasible, and appropriate for supporting fast learners under the Merdeka Curriculum.

Overall, the findings demonstrate that well-designed supplementary materials can effectively address the learning needs of fast learners and support differentiated instruction in junior high school English classrooms.

#### 4. CONCLUSION

This study concluded that English supplementary materials for fast learners in seventh grade can be effectively developed using a Design and Development approach aligned with the Merdeka Curriculum. The developed materials successfully addressed the needs of fast learners by providing more challenging, engaging, and contextual learning activities. The expert validation results confirmed that the materials were of high quality and feasible for classroom implementation. It is recommended that teachers use supplementary materials to support differentiated instruction, and future researchers further develop similar materials for different grades or learning contexts.

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