DEVELOPING SUPPLEMENTARY MATERIAL FOR VII GRADE OF AVERAGE LEARNERS IN HONOURS CLASS AT SMP NEGERI 2 UBUD

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ARTICLE INFO	ABSTRACT
Article history: Received July 15, 2024 Revised September 05, 2024 Accepted September 18, 2024 Available online December 13, 2024	The objective of this study was to create additional educational resources in English, specifically tailored for students in the VII grade who have average learning pace in the honours class. This investigation was conducted at SMP Negeri 2 Ubud. The software incorporates learning activities that are based on problem-based learning (PBL), project-based learning (PjBL), and discovery-based learning (DBL) methodologies. The product was developed using the
Keywords: Supplementary material, Average learners, Junior high school	D&D approach recommended by Richey and Klein (2007). The ADDE procedures encompass the stages of analysis, design, development, and evaluation. The participants in this study consisted of an English teacher and 70 VII grade students from SMP Negeri 2 Ubud. The data obtained from the analysis technique is gathered through the means of observation, interviews, questionnaires, and document analysis.
This is an open access article under the <u>CC BY-SA</u> license. Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha.	The outcome of the analysis technique was followed by the creation of the blueprint for additional material. The plan was utilized in the product development process. The supplemental material was incorporated into the VII grade course of the <i>Merdeka</i> Curriculum. The evaluation found that the additional material is suitable for the teacher to utilize as educational media for students with average learning abilities.

INTRODUCTION

During the current era of the 4.0 industrial revolution, digital technology has been integrated into all areas, including education. Hence, in order to thrive in the modern day, one must possess a diverse range of talents to effectively navigate the progressively intricate challenges that arise in daily life. The talents required in the 21st century can be categorized into four distinct areas, namely critical thinking, communication, collaboration, and creativity. These skills are widely recognized as the 4C Skills, and it is essential to fully grasp the curriculum in order to develop and apply these skills effectively. In early 2020, the Ministry of Education in Indonesia announced a new policy that has the purpose to remove detentions and create equal and meaningful learning. This policy is referred to as independent learning, or *Merdeka Belajar* in Indonesia. *Merdeka Belajar* is a component of the *Merdeka* Curriculum, a new educational strategy that mandates all educational institutions, from kindergarten to higher education, to adhere to it (Abidah et al., 2020).

The *Merdeka* Curriculum is applicable to 21st-century skills as it promotes the cultivation of the essential 4C talents required in contemporary life. To enhance students' learning abilities in the current period of industrial revolution 4.0, it is essential to implement three suitable learning approaches: problem-based learning, project-based learning, and discovery-based learning. According to Wartono et al. (2018), problem-based learning is an educational method that enhances students' capacity to solve intricate real-world problems by using them as learning tools while also giving them complete autonomy over their learning process. Project-based learning is an educational method that allows students to participate in completing projects aligned with specific learning goals (Smith and Dodds, 1997). In this era of technological advancement, it is imperative to adopt the concept of discovery-based learning. Discovery-based learning is an educational method that requires students to actively engage in the learning process by independently exploring and discovering. This strategy enables students to acquire new knowledge and retain it in their long-term memory (Bruner, 2006).

There are three categories of students that are classified according to their learning aptitude, namely slow learners, average learners, and fast learners. Students' varying aptitude for learning necessitates the use of diverse instructional methods and materials. Landis and Reschly (2013), as cited in Ramos et al. (2021) described average learners as students who do not fall into the slow or fast learning categories.

Average learners tend to find challenges in such materials that are beyond their level of learning. Ramos et al. (2021), argue that although average learners are intelligent, they occasionally struggle to understand subjects that are beyond their level of learning. Thus, teachers must offer creative learning media and procedures that are tailored to the learning aptitudes and features of average learners. The variations in students' learning aptitude during the learning process, particularly among average learners who require additional time to comprehend such learning content above their level, require the provision of special resources to facilitate their learning journey. Supplementary material not only assists teachers in providing suitable learning resources for students but also supports students in their learning process and potentially enhances the development of critical thinking, collaboration, communication, and creativity skills.

Several prior studies have examined the beneficial effects of creating additional resources tailored to individual student criteria, particularly for students with average learning abilities. Fauziah et al. (2021) have created extra English materials specifically designed to enhance speaking skills. These materials are based on communicative language training and are intended for 8th grade students at MTs Putra Putri Lamongan. The creation of this additional content was highly beneficial as an instructional tool, particularly in facilitating rapid acquisition and improvement of students' speaking skills. Conversely, as per Kusuma (2020), teachers expressed that their primary difficulty resided in creating and presenting additional educational resources. They were required to demonstrate heightened creativity and innovation in developing and delivering these materials, ensuring they aligned with the curriculum and learning goals, in order to foster a lively and captivating classroom atmosphere.

LITERATURE REVIEW

The implementation of the *Merdeka* Curriculum aims to enhance students' academic achievement during the learning process. Within this curriculum, students are required to attain the Learning Outcome/*Tujuan Pembelajaran (CP)* for each subject matter. According to the Ministry of Education and Culture (2022), the government's Learning Outcomes/*Capaian Pembelajaran (CP)* will be further enhanced by educational institutions into Learning Objectives/*Tujuan Pembelajaran (TP)* and Learning Objective Flow/*Alur Tujuan Pembelajaran (ATP)*. The Learning Objective Flow/*Alur Tujuan Pembelajaran (ATP)* serves the same purpose as the syllabus, which is to provide guidance in lesson planning. Moreover, the Learning Objectives/*Tujuan Pembelajaran (TP)* and Learning Objective Flow/*Alur Tujuan Pembelajaran (ATP)* serve as directives for creating the Teaching Module/Lesson Plan.

Materials may encompass various formats such as textbooks, workbooks, films, photocopies of handouts, or other resources that serve to explain or convey information pertaining to the language being studied (Tomlinson, 2001). Tomlinson (2001) outlines several essential principles for developing language teaching materials. These principles include ensuring that the material has a significant impact on students, helps them feel at ease, boosts their self-confidence, is perceived as useful and relevant, encourages their active involvement, raises their awareness of linguistic features, exposes them to authentic language, provides communicative purposes, takes into account their individual learning styles, caters to students with diverse learning behaviours, and maximises their learning potential. Tomlinson (2001) defines supplementary materials as teaching aids that supplement the core textbook. Spratt et al. (2011:161 in Nurliana, 2019) list many reasons for creating extra content. These include giving content not covered in the main textbook, material not matched with the book, relevant material that suits students' needs and interests, language training, and knowledge and communication skills enhancement. Supplementary materials can also vary instructional resources and prevent learners from getting bored. In this study, three types of strategies in teaching will be implemented, such as problem-based learning (PBL), project-based learning (PJBL), and discovery-based learning.

Problem-based learning is student-centered and challenges students to solve open-ended issues in groups, according to Boud and Felleti (1991). Student concerns are real-life-related. The problems will be chosen and prepared to fulfill student criteria and learning objectives. Meanwhile, project-based learning, according to Pratiwi et al. (2020), places students at the core of the learning process. This method allows students to actively engage in gathering data, recognizing issues, looking through educational materials, developing plans, establishing deadlines, and assessing their learning objectives. Hence, engaging in project-based learning endeavours has the potential to captivate students' attention, stimulate their critical thinking abilities, and facilitate the practical application of newly acquired knowledge. Furthermore, discovery-based learning, stated by Hosnan (2014), as cited in Rahayu et al. (2019), is learning that arises from students' organization and data modification to uncover fresh information and remember it for the long term. These activities, when incorporated into the learning process, can enhance students' critical thinking skills. All of these strategies were the most used strategies in 4th century learning.

The focus of the students in the development of the supplementary material in this study is average learners. Ramos et al. (2021), define average learners as students that exhibit lower learning proficiency and depth in obtaining such materials that are up to their level of learning ability, compared to their peers who are considered as fast learners. According to Wati and Trihantoyo (2020), creating a favourable learning environment, evaluating the teaching and learning process, and developing cooperation between students are all crucial for improving students' learning accomplishments, particularly for average learners. Teachers might employ an approach to assist average learners by affording them the chance to engage in classroom activities.

METHOD

The research design utilized in this study was the design and development (D&D) approach proposed by Richey and Klein (2007). The project utilized a design and development research methodology to create additional materials, incorporating the 21st century learning model. The DnD research approach employed in this study has four distinct stages: analysis, design, development, and evaluation (ADDE). This study recruited 70 junior high school students in the VII grade and an English teacher as the focus of the study at SMP Negeri 2 Ubud. The study utilized three instruments: an observation sheet, an interview guide, and a questionnaire. Additionally, the study also incorporated the Alur Tujuan Pembelajaran (ATP), or Learning Objective Flow, a blueprint of the Supplementary Material, and an expert judgment sheet. The researcher utilized Nurkancana and Sunartana's (1992) formula to assess the quality of the supplementary content that was generated.

Table 1. Nurkancana and Sunartana's (1992) Formula

No.	Formula	Qualification
1.	$X \ge Mi + 1.5 \text{ Sd}i$	Excellent
2.	Mi + 0.5 Sd <i>i</i> ≤ X < M <i>i</i> + 1.5 Sd <i>i</i>	Good
3.	Mi - 0.5 Sd <i>i</i> ≤ X < M <i>i</i> + 0.5 Sd <i>i</i>	Average
4.	Mi - 1.5 Sd <i>i</i> ≤ X < M <i>i</i> - 0.5 Sd <i>i</i>	Below Average
5.	X < Mi-1.5 Sdi	Poor

RESULT AND DISCUSSION Result

The researcher employed the Design and Development (D&D) approach outlined by Richey and Klein (2007) to create additional educational resources for VII grade junior high school students identified as average learners during the first semester. The process consisted of four sequential stages: analysis, design, development, and evaluation. The next section presents a discussion of the results:

Result on Analysis Phase

Using an observation sheet, the curriculum, syllabus, teaching materials, and teacher's pedagogical approach were examined. The observation suggests SMP Negeri 2 Ubud uses the VII grade *Merdeka* Curriculum. The teacher used the same materials and methods for all students. The teacher did not use supplemental materials to improve learning, especially for average learners. All students use the same school-provided texts, which lack creative, inventive, and diversified learning approaches that apply to real-world challenges. Thus, children with poorer learning abilities must be able to adapt and keep up with their peers in class. So, a supplementary book was designed to help sluggish learners. SMP Negeri 2 Ubud hosted a well-organized interview with eight Bahasa Indonesia questions. Teacher questions covered curriculum, teaching resources, and pedagogy. After the interview, the teacher introduced the *Merdeka* Curriculum in grade VII in 2022/2023. Teaching module design was new to the teacher. Additionally, the classroom exclusively uses project-based learning, a 21st century educational paradigm. Due to limited learning materials, the instructor has learning obstacles. The school only provided textbooks and workbooks, and the teacher only used brief YouTube videos to complement the class, even for average learners. Unfortunately, sluggish learners would not benefit from this. The teacher mixed fast and average learners into one group.

The questionnaire was distributed to gather student educational needs. The questionnaire showed that students wanted to try more learning activities and talk to their classmates about their academic struggles. This was one of the extra material development aims. After interviews and surveys, the researcher analysed the course outline. SMP Negeri 2 Ubud used Learning Objective Flow (ATP) curriculum. This curriculum was based on *Merdeka*. The ATP consisted of Learning Achievement (CP) and Learning

Objectives (TP). The researcher used analytical results to organize extra content. According to the study, the ATP has three chapters: About Me, Culinary and Me, and Home Sweet Home. All three chapters covered these chapters.

Result on Design Phase

In this stage, the blueprint for the supplemental material was created using an analysis of the syllabus. The blueprint encompassed various components, specifically the acquisition of knowledge, the establishment of learning goals, the selection of suitable instructional techniques, and the implementation of learning tasks. Upon submitting and revising the blueprint and taking into account the comments provided by specialists, the researcher commenced the development of the additional content product.

Result on Development Phase

During the development phase, the researcher created the additional material using Microsoft Word. The material encompassed various elements, including the learning topic, teaching techniques, grade or semester, time allocation, learning objectives, syntax, and learning exercises. Furthermore, the researcher utilized Adobe Photoshop to create the layout and visual elements of the book, including the cover, preface, table of contents, and content pages. The learning exercises were derived from sources such as Pinterest, Google, and YouTube videos, while the pictures and illustrations were sourced from Freepik. Multiple recommendations were obtained from the experts who evaluated the product.



Figure 1. Step of Designing the Cover



Figure 2. Step of Designing the Content of the Book



Figure 3. Step of Designing the List of The Content of the Book

Upon completing the supplemental material, the researcher provided the initial evaluation sheet to two experts from Ganesha University of Education and one English instructor, who served as assessors. The results of the expert judgement sheet were quantified using the formula developed by Nurkancana and Sunartana (1992).

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Table 2. Score from First Expert Judgment					
Number	Judges	Scores			
1.	Expert 1	107			
2.	Expert 2	92			
3.	Teacher 1	110			

Based on the outcome, it can be concluded that three assessors deemed the supplementary material book to be average and are not suitable yet for the teacher to use.

Result on Evaluation Phase

The evaluation stage is the last step of the ADDE technique. During this phase, the researcher made revisions to the product based on the ideas supplied by the experts. Following the product revision, the subsequent stage undertaken was the assessment of validity, which involved the input of three experts. The initial two experts were professors from Ganesha University of Education, while the third expert was an English instructor from SMP Negeri 2 Ubud.



Figure 4. Result of the Revision

Furthermore, the researcher distributed a questionnaire, known as the expert judgment sheet, to the panel of experts. This questionnaire comprised a total of 32 items. The evaluation findings were analysed using the formula developed by Nurkancana and Sunartana (1992).

Table 3. Result of The Second Expert Judgment					
Number	Judges	Scores			
1.	Expert 1	146			
2.	Expert 2	160			
3.	Teacher 1	153			
Э.	Teacher 1	133			

The results show that three reviewers thought the supplementary materials book was excellent and would be a good fit for the classroom.

Discussion

According to the results, there are multiple aspects that require additional discussion. This study involved the construction of extra materials for VII grade average learners, namely at SMP Negeri 2 Ubud. The ultimate outcome of this research was the creation of a book containing the aforementioned materials. The resulting product was named the *Merdeka* Curriculum, which mandates teachers to implement the suitable instructional approaches, including problem-based learning, project-based learning, and discovery-based learning, all of which align with the principles of 21st century education. Every learning method consists of stages that both the teacher and students must successfully navigate. Problem-based learning encompasses five distinct components: student orientation to the problem, organization of students, individual and group research guidance, development and presentation of work, and analysis and evaluation of the problem-solving process. Furthermore, project-based learning encompasses six distinct phases, specifically preparation, planning, research, conclusions, presenting, and evaluation. Furthermore, discovery-based learning encompasses five distinct syntaxes: orientation, hypothesis testing, conclusion, and regulation. The product was developed using the D&D design provided by Richey and Klein (2007). The design encompassed four distinct procedures, specifically analysis, design, development, and evaluation, collectively referred to as ADDE.

According to the results, there are multiple aspects that require additional discussion. This study involved the construction of educational materials specifically designed for VII grade students with learning difficulties, particularly those attending SMP Negeri 2 Ubud. The ultimate outcome of this research was the creation of a supplementary book. The resulting product is known as the *Merdeka* Curriculum, which mandates teachers to implement suitable instructional approaches, including problem-based learning, project-based learning, and discovery-based learning, in alignment with 21st century educational principles. Every learning method consists of stages that both the teacher and students must successfully navigate. Problem-based learning encompasses five distinct components: student orientation to the problem, organisation of students, guidance for individual and group inquiry, development and presentation of work, and analysis and evaluation of the problem-solving process. Furthermore, project-based learning encompasses five distinct phases, specifically preparation, planning, research, conclusions, presenting, and evaluation. Furthermore, discovery-based learning encompasses five distinct syntaxes, which include orientation, hypothesis testing, conclusion, and regulation.

The product was developed using the D&D design provided by Richey and Klein (2007). The design encompassed four distinct procedures, specifically analysis, design, development, and evaluation, collectively referred to as ADDE. Furthermore, the educational exercises included in this book were created with consideration for students' learning preferences, incorporating a variety of multimedia resources such as videos, images, and graphics sourced from platforms such as YouTube, Pinterest, Freepik, and Google. Furthermore, the majority of the educational exercises in this book are genuine and not present in the teacher's current English textbook. The generated extra content is anticipated to be advantageous for both students and teachers in the learning process. This extra material was intended to serve as a practical learning source and medium for teachers to assist students with average learning abilities in improving the quality of their education to attain their objectives in English language acquisition. It aims to encourage their active engagement in the learning process and prioritize the enhancement of their 21st century capabilities. The English additional material that was generated remained imperfect. The product exhibited deficiencies in terms of grammatical corrections and the development of learning activities. As the outcome progresses, the learning activities can be refined and improved in subsequent iterations.

CONCLUSION

This study employed the D&D design described by Richey and Klen (2007). The design process consisted of four stages: Analysis, Design, Development, and Evaluation. The acronym ADDE represents these four steps. Several conclusions were derived regarding the findings of this investigation. The learning activities included in the supplementary material align with the syllabus for the first semester of the *Merdeka* Curriculum for VII grade in junior high school. Furthermore, the development of the product took into account the specific traits, preferences, and requirements of individuals with average learning abilities. This encompassed the provision of clear, concise, and uniform instructions, visually appealing worksheets featuring appropriate images and illustrations, as well as engaging educational activities such as games and

videos. Furthermore, the learning activities for each topic were structured around the syntaxes of three suitable learning methods: problem-based learning, project-based learning, and discovery-based learning. This additional book contains information on various aspects, including the learning topic, learning technique, grade or semester, time allocation, learning purpose, syntaxes, and learning activities. Furthermore, three experts have examined this book of extra material to assess its quality. The ultimate outcome was 146, 160, and 153, which was classified as an outstanding average. In conclusion, this extra book was highly appropriate for instructing underperforming students in the VII grade of a junior high school that implemented the *Merdeka* Curriculum.

Future researchers conducting similar studies are advised to create additional resources for students with average learning abilities in the second semester of VII grade in junior high school. This can be achieved by incorporating various 21st century teaching approaches and using creative and new learning activities.

REFERENCES

- Abidah, A., Hidaayatullaah, H. N., Simamora, R. M., Fehabutar, D., Mutakinati, L., & Suprapto, N. (2020). The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of "Merdeka Belajar." *Studies in Philosophy of Science and Education (SiPoSE)*, 1(1), 38–49. <u>http://sciejournal.com/index.php/SiPoSE</u>
- Boud, D., & Feletti, G. (2013). *The Challenge of Problem-based Learning*. Routledge. https://doi.org/10.4324/9781315042039
- Bruner, J. S. (2006). In Search of Pedagogy Volume I. Routledge. https://doi.org/10.4324/9780203088609
- Bryan, S., & Bob, D. (2017). *Developing Managers Through Project-Based Learning*. Routledge. https://doi.org/10.4324/9781315258041
- Fauziah, M., & Huda, K. (2021). Developing a Supplementary English-Speaking Material Based on the Communicative Language Teaching Method. JOURNAL OF ENGLISH EDUCATION AND TECHNOLOGY, 02(03), 464–483. <u>http://jeet.fkdp.or.id/index.php/jeet/issue/current</u>
- Kementrian Pendidikan, K. R. dan T. (2022). Kajian Akademik Kurikulum Merdeka.
- Kusuma, D. I. (2020). Developing Supplementary Reading Materials for Senior High Students in English Course Program. In *LangEdu Journal* (Vol. 9, Issue 2).
- Nurhidayah, I. J., Wibowo, F. C., & Astra, I. M. (2021). Project Based Learning (PjBL) Learning Model in Science Learning: Literature Review. *Journal of Physics: Conference Series*, 2019(1), 012043. <u>https://doi.org/10.1088/1742-6596/2019/1/012043</u>
- Nurkancana, W., & Sunartana. (1992). Evaluasi Hasil Belajar. Usaha Nasional.
- Nurliana, N. (2019). Developing a Model of Supplementary English Materials Based on Local Content. *Journal of English Language Studies*, 4(1), 86. <u>https://doi.org/10.30870/jels.v4i1.4834</u>
- Pratiwi, T., Marsidin, S., Syarif, H., & Yahya. (2020). The Effectiveness of the Directed Project Based Learning Model in Improving the Learning Outcomes of Class VIII Students at Junior High School. *Proceedings of the 2nd International Conference Innovation in Education (ICoIE 2020)*. <u>https://doi.org/10.2991/assehr.k.201209.250</u>
- Rahayu, I. P., Tyas, A., & Hardini, A. (2019). Penerapan Model Discovery Learning untuk Meningkatkan Keaktifan dan Hasil Belajar Tematik. *Journal of Education Action Research, 3*, 193–200. <u>https://ejournal.undiksha.ac.id/index.php/JEAR/index</u>
- Ramos, A., De Fraine, B., & Verschueren, K. (2021). Learning goal orientation in high-ability and averageability students: Developmental trajectories, contextual predictors, and long-term educational outcomes. *Journal of Educational Psychology*, 113(2), 370–389. <u>https://doi.org/10.1037/edu0000476</u>
- Richey, R. C., & Klein, J. D. (2005). Developmental research methods: Creating knowledge from instructional design and development practice. *Journal of Computing in Higher Education*, 16(2), 23–38. https://doi.org/10.1007/BF02961473
- Tomlinson, B. (2011). *Materials Development in Language Teaching* (B. Tomlinson, Ed.). Cambridge University Press. <u>https://doi.org/10.1017/9781139042789</u>
- Wartono, W., Diantoro, M., & Bartlolona, J. R. (2018). Influence of Problem Based Learning Learning Model on Student Creative Thinking on Elasticity Topics A Material. *Jurnal Pendidikan Fisika Indonesia*, 14(1), 32–39. <u>https://doi.org/10.15294/jpfi.v14i1.10654</u>
- Wati, A. R. Z., & Trihantoyo, S. (2020). Strategi Pengelolaan Kelas Unggulan Dalam Meningkatkan Prestasi Belajar Siswa. *Jurnal Dinamika Manajemen Pendidikan*, 5(1), 46. <u>https://doi.org/10.26740/jdmp.v5n1.p46-57</u>