



HOTS-Based Learning Supplementary Book for Teaching English at First Semester of Seventh Grade Students

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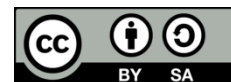
ABSTRAK

Guru belum menerapkan pembelajaran berbasis HOTS dengan baik, belum adanya buku pengantar yang bervariasi apalagi sumber tambahan yang menunjang proses pembelajaran di abad 21. Hal ini sangat penting untuk diperhatikan mengingat anak-anak sudah memasuki bangku sekolah menengah pertama dan sudah menginjak jenjang pembelajaran yang lebih tinggi. Penelitian ini bertujuan untuk mengembangkan buku pembelajaran tambahan berbasis HOTS untuk siswa kelas 7 semester satu. Desain penelitian ini menggunakan model ADDE (Analysis, Design, Development, and Evaluation), dimana objek penelitiannya adalah buku pembelajaran bahasa Inggris berbasis HOTS. Pengembangan buku ini didasarkan pada silabus pembelajaran bahasa Inggris yang digunakan. Observasi, wawancara, studi dokumen, dan penilaian ahli digunakan untuk mengumpulkan data dalam penelitian ini. Seorang guru di sekolah menengah pertama menjadi partisipan dalam penelitian ini. Hasil penelitian menemukan bahwa buku materi tambahan ini memberikan kepuasan kepada sasaran penggunaannya. Selain itu, jika dilihat dari kualifikasi ahlinya, produk ini tergolong LKS yang sangat baik sehingga diharapkan dapat bermanfaat bagi siswa dan guru kelas 7.

ABSTRACT

The teachers had not implemented HOTS-based learning well, moreover there were no varied introductory books let alone additional sources that support the learning process in the 21st century. This is very important to note considering that children have entered junior high school and have stepped on a higher level of learning. This study aims to developing a HOTS-based supplementary learning book for 7th graders in the first semester. This research design used the ADDE (Analysis, Design, Development, and Evaluation) model, in which the object of the research was a HOTS-based English learning book. The development of the book was based on the English learning syllabus used. Observations, interviews, document studies, and expert judgments were used to collect data in this study. A teacher in in junior high school was a participant in this study. The study found that this supplementary material book gave satisfaction to the target user. In addition, judging from the qualifications of experts, this product was referred to as a very good worksheet so that it was expected to be useful for 7th grade students and teachers.

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1. INTRODUCTION

In the 21st century, people are required and encouraged to become individuals who are able to master many aspects of life, one of which is critical thinking. Critical thinking is one of the fundamental things in this era (Daud, 2017; Szabo et al., 2020). In this era, information, science, and technology are developing so fast and rapidly and of course it affects many sectors of life, one of which is the education sector. Education in the 21st century is expected to be able to shape students to face the times (Rosdiana et al., 2020; Taufan, 2022). In Indonesia itself, currently the 2013 curriculum has been implemented and continues to be developed in accordance with this country's vision to form individuals who have high critical thinking, are independent, creative, superior, and based on 'Pancasila' (Fahmi & Bitasari, 2020; Susanto et al., 2020). The implementation of the 2013 curriculum is one of the efforts made to face the massive developments of the times in order to prepare a generation that is competitive, innovative, and creative to be able to contribute to the nations and world civilizations (Rumahlatu et al., 2016; Salim & Hanif, 2021; Wicaksono & Sayekti, 2020). Seeing the development of the times and the naturalness of English as an international language, the Indonesian government has also provided and provided English language teaching at various levels of education in Indonesia, one of which is the junior high school level which has been started since students were in grade 7. Communicate globally, solve problems, think critically, exchange opinions and thoughts, and of course encourage each individual to have good integrity (Lee & Drajadi, 2019; Salim & Hanif, 2021; Siswandi, 2018).

There are two types of thinking as a human being, those are LOTS (Low Order Thinking Skill), which is the fundamental thing needed before having a higher skill. C1 or Remembering, C2 or Understanding, and C3 or Applying are the three main parts of LOTS (Lingfeng & Nair, 2021; Prakash & Litoriya, 2022). HOTS (High Order Thinking Skill) is the second type. It was derived from the Bloom's Taxonomy. C4 or Analyzing, C5 or Analyzing, and C6 or Creating are the main stages in this type (K. Atiullah et al., 2019; Johansson, 2020). Seeing the development of the times and the demands demanded, it is necessary to emphasize and improve the HOTS itself. HOTS is considered capable of being used to think more critically and able to handle more complex situations in the future (Anasy, 2016; Driana et al., 2021). HOTS took an important role as the major implementer because it encouraged teachers to take place as the facilitator for students to develop their thinking skills through the learning activities and others supporting materials to establish their critical thinking in solving the problem (Sani, 2019; Sukatiman et al., 2020). Previous study stated that the implementation of HOTS-based learning can direct the students to think in various perspective and higher skills that will help students overcome their problems in lives without burdening others (Pratama & Retnawati, 2018). There are many ways can be used to implement HOTS learning in the class for the students, such as by using text books or supplementary books (Soleha et al., 2017; Winarni et al., 2022). However, there are still some weaknesses found in the current English textbook. According to previous study many textbooks have currently labelled their activities based on HOTS-based learning, further analysis shows that the exercises included in the book still frequently fall under the LOTS (lower-order thinking skills) category (Febriyani et al., 2020). They only focus on the answering multiple-choice questions and translating word for word. In addition, other study mentioned there were some factors that caused the HOTS-based textbook still problematic in promoting higher order thinking skill including the design of the textbook (illustration, picture, etc.), textbook instructions, learning activities, and teaching materials that were still unclear and make the students have the low motivation of learning and the teachers cannot show the interesting and various learning activity (Anasy, 2016). This became so urgent, especially when researcher conducted observations and interviews in junior high schools in Buleleng regency. The results found that the teachers had not implemented HOTS-based learning well, moreover there were no varied introductory books let alone additional sources that support the learning process in the 21st century. This is very important to note considering that children have entered junior high school and have stepped on a higher level of learning, especially in learning English to prepare themselves to compete globally so this is necessary to find a solution. Based on the foregoing, this research was conducted with the aim to develop English supplementary book HOTS-based learning for seventh grade first semester students of junior high school.

2. METHOD

The aim of the research was to develop an English supplementary book that integrated with HOTS-based learning activity, the research used design and development research (D&D) that consist of analysis, design, development, and evaluation to create instructional and non-instructional products, tools, or enhanced model related to the certain area that developed (Branch, 2009). The research was conducted in Senior High School at Buleleng Regency that focused on the 7th grade students. The object of the research was English supplementary book HOTS-based learning activity for seventh grade first semester students of Junior High School. It would be developed based on the C4 (analyze), C5 (evaluate), and C6 (create). In collecting the data, there were some instruments needed to be prepared. Those were prepared based to the situation carried out in the initial observation when the researcher conducted research permission at the school chosen. They were including the form of observation sheet, interview guide, syllabus, checklist and rubric of product's quality. The researcher prepared and made a list of questions in accordance with the situation and conditions that occurred. The researcher also conducted consultations to obtain instrument validation from the supervisor after the points for observation and analysis were made. In analysing the data conducted, there were two methods used as a result of two types of data found. For the qualitative data the analysis was finished by describing the activities that are able to develop the product, the data were gained from syllabus, lesson plan analysis, and observation. On the other hand, for the qualitative data that found from evaluation sheet by the experts, it was analysed by using formulas to rate the quality of the product. The criteria in rate the quality of the product is show in Table 1.

Table 1. The Criteria in Rate the Quality of the Product

Score	Criteria
$X \geq Mi + 1.5 Sdi$	Excellent Worksheet
$Mi + 0.5Sdi \leq X < Mi + 1.5 Sdi$	Good Worksheet
$Mi - 0.5Sdi \leq X < Mi + 0.5 Sdi$	Average Worksheet
$Mi - 1.5Sdi \leq X < Mi - 0.5 Sdi$	Below Average Worksheet
$X < Mi - 1.5 Sdi$	Poor Worksheet
$X \geq Mi + 1.5 Sdi$	Excellent Worksheet

3. RESULT AND DISCUSSION

Result

The result of this research was a supplementary book of HOTS-based English learning activities. The book was designed for 7th grade students in the first semester with four main topics as the focus to be discussed and developed in the book that were more focused on emphasizing students' high-order thinking.

Analysis Stage

This is the first stage that must be done in developing the product. The researcher analyzed the information that found through the interview and observation processes. The interview aimed to get and analyze the direct information about the implementation of HOTS based learning in the teaching and learning process. It was found that the 2013 curriculum were implemented there, English was a subject that already taught since the students in the first semester of grade 7. They had 2 times for English in one week, and because of the pandemic situation the students learn through online and only got one hour for one meeting. It was found that the lessons given by the teacher all based to the syllabus used but it was found that the implementation of learning based on LOTS or HOTS had not yet been fully accomplished. The students had lack motivation of learning especially when joining the online learning, the students acted passively and were not supported by the learning tools and internet connection. On the other side, for the observation result, the researcher analyzed and found that the teachers did monotonous and dull activities, the exercises in the book tend to be less appealing to students because of the lack of supporting visuals (illustrations/pictures), and the majority of the tasks were more geared toward skills C1 & C2 (remember and comprehend). The teacher provided lack activities of HOTS, those almost kind of LOTS activities.

Design Stage

After doing the analysis process, the researcher started to design the product based on the syllabus and curriculum used analyzed. The designing process begun with the blueprint and based on the HOTS-based learning activities. There were four topics as the focus of the book development in the first semester of the seventh grade including “at school, my family, time, and things around me”. There were five sections described in the blueprint: topic, language functions, language expressions, Bloom Taxonomy (thinking skills), and activities descriptions. The use of a blueprint here will be the researcher's main guideline in developing the book in the next step and of course in accordance with the guideline from the supervisors to develop the appropriate product.

Development Stage

After designing the product, the researcher started to develop the blueprint in term of book. The book developed based on the HOTS-based learning for grade seven. The author of the book (researcher and supervisors) used two kinds of application such as “Adobe Illustrator and Freepik” to create the book, design, and develop the illustration. The process here also included the layout of the book (color selection, illustrations used, font type and size), grammar, book’s activities instructions and descriptions, and the activities content developed in each section based on the guideline of the supervisors. The book at the first was included an introduction and instructions on carrying out the tasks, the supervisor then directed the researcher to not add the grade information since it was already introduced on the front cover. Then, the supervisor advised making the order of instructions clearer and easier. Revision of Activities Instruction and Description is show in [Figure 1](#).

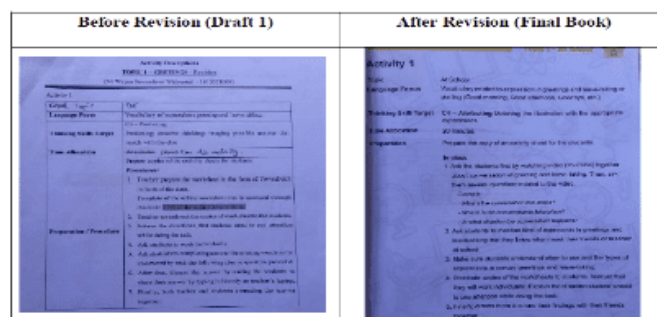


Figure 1. Revision of Activities Instruction and Description 1

After making the description of the activities, the researcher started to make the learning activities draft. There were some revisions from the supervisors. The researcher needed to adjust the kind of activity with students' grade and level, they still had many gaps of English learning, especially vocabularies. Revision of content activities is show in [Figure 2](#).

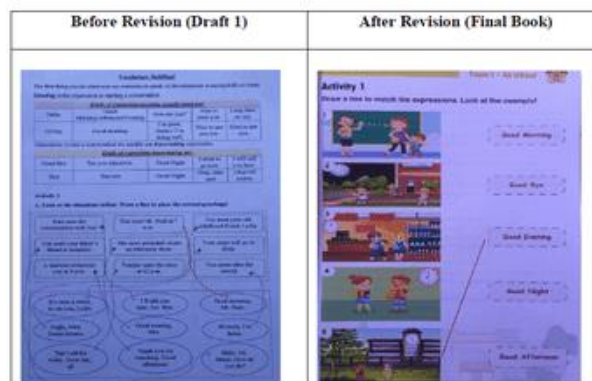


Figure 2. Revision of Content Activities 1

Grammar was a very important aspect in language, especially for teaching students, it must be ensured that there are no errors. Supervisors found some errors and errors in the use of grammar in the preparation of books and activities, so that some input and revisions were given. Revision of grammatical aspects is show in Figure 3.

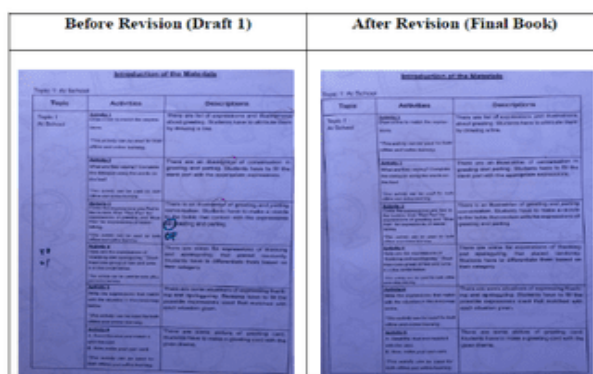


Figure 3. Revision of Grammatical Aspects 2

In this section there were revisions to the colours' selection section, the illustrations used, the type and size of the font, as well as the layout of the activities. These were a fundamental aspect to attract the attention of students to be happy and happy when learning, especially when using this book so that it will increase students' interest in learning. Revision of book's layout is show in Figure 4.

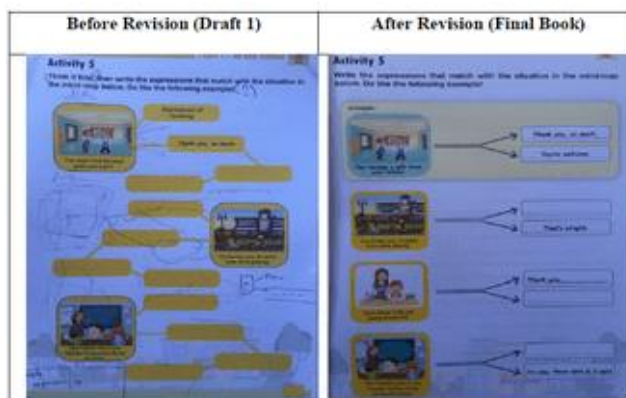


Figure 4. Revision of Book's Layout

Evaluation Stage

The evaluation stage was the evaluation stage of the developed product. The assessment was carried out by experts, which in this study was conducted by Prof. Dr. Putu Kerti Nitiasih, M.A. as the first expert, the second expert was Luh Gd. Rahayu Budiarta, S.Pd, M.Pd., and the third expert Ni Luh Putu Era Adnyayanti,

S.Pd, M.Pd. Each expert filled out the evaluation form regarding the quality of the book that had been developed. This stage aimed to assess and see how appropriate the product developed is with the syllabus, curriculum, and learning needs of students in the classroom. At this evaluation stage there was a formula used to analyze the products and categories obtained. There were 38 items total in the rubric in evaluation statements. There were five levels in the grading column. Each point's stated criteria indicate product quality from 1 as the lowest until 5 as the highest. The rubric's maximum total score was 190, while the rubric's total minimum score was 38. After that each criterion were determine by the formula, whether it was excellent worksheet, good worksheet, average worksheet, below average worksheet, and poor worksheet. The final score of categories rating of the worksheet were presented in [Table 2](#).

Table 2. The Total of Final Scores from the Experts

Expert	Score	Criteria	Meaning
1	185	$X \geq 171$	Excellent Worksheet
2	188	$X \geq 171$	Excellent Worksheet
3	188	$X \geq 171$	Excellent Worksheet

Base on [Table 2](#) as a result, considering to most of the scores that are greater than the Mi value ($X \geq 171$), it could be inferred that the book that has been developed are classified as "*Excellent Worksheet*."

Discussion

In this study, especially in the analysis stage for the implementation of teaching and learning process based on HOTS were not fully well implemented in the seventh-grade class students due to the internal and external factors from the students and teachers. This study a bit different with previous study that usually used research and development design than using design and development design. It made the researcher to be more focus on the analyzing, designing, developing, and evaluating the product to make sure it was totally proper for the learning. The learning was still oriented to lower order thinking skills (LOTS) ([Aisah et al., 2021](#); [Kurnia Atiullah et al., 2019](#)). It also said that designing the product in term of blueprint was the best way before developing the product, it was a great guideline for the researcher to create the supplementary book product ([Surtikanti et al., 2020](#); [Torlakson & Bonilla, 2014](#)). In the development stage also found that the researcher already finished the stage and focus on the students' activities, students learning objectives, syllabus used, book design and illustration that were really important for the accordance learning and improve students learning motivation based on the real-life situation, as the previous study ([Anggraini et al., 2020](#); [Margana & Widyantoro, 2017](#)). It is in line with the previous study that studies the use of textbooks based on HOTS to guide students through HOTS-related activities ([Sofyan & Ratumanan, 2019](#)). The result of the study found that a textbook based on HOTS also assists students since it includes exercises that are easy for students to grasp. It is reinforced by another researcher that employed blooming taxonomy in building HOTS-based textbooks ([Mrah, 2017](#)). It was revealed that stages of learning were the improved version of the original taxonomy, owing to the focus on better learning and assessment objectives in students' learning. New categories have been added: Low Order Thinking Skill (LOTS) and High Order Thinking Skill (HOTS), the former of which includes cognitive levels C1, C2, and C3, and the latter of which includes cognitive levels C4, C5, and C6. Creativethinking, problem-solving, and higher-order thinking abilities may all be improved by using this HOTS book offering.

Since this HOTS book may be utilized for both online and offline instruction, students have the flexibility to complete their homework assignments whenever and wherever they want. It is strongly recommended that teachers use HOTS books as a teaching tool. Because of the numerous appealing visual representations, it can assist teachers in inspiring pupils to apply their creativity in grasping the content ([Dahlan, 2020](#); [Muthmainnah et al., 2022](#)). The learning activity will be more appealing as a result. Besides that, this study's findings may be utilized to aid prospective instructors in producing worksheets, particularly those that involve higher-order thinking abilities to help students learn ([Darmayanti et al., 2022](#); [Fanny, 2019](#)). The development process also included the evaluation to see how proper the product was. By following the proper stage, observation results, previous study, and based on the HOTS-based learning, it was expected that the product developed can assist students in increasing their critical thinking skills as well as creativity and problem-solving ability. The teacher also expected to be able to create the more creative learning processes in the class. And it is recommended that other researchers continue this study by developing the prototype into a product that may be used by instructors for their professional growth, as this item is only a prototype. Teachers and others who are in need may benefit from this because of the positive impact it has on their professional growth.

4. CONCLUSION

Based on the results and findings from this research mentioned above, it can be inferred that the development of English supplementary book for junior high school students in the first semester of seventh was developed to focus on the activities based on HOTS and completed with attractive illustrations that can attract students' attention in learning to improve their critical thinking skills. Moreover the development of the supplementary book HOTS-based learning categorized as an excellent worksheet.

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