

# Need Analysis of Hots-Based English Materials Development for the Ten Grade Learners of Coastal School in Bangka Selatan

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**Abstract.** This research investigates the need assessment of the ten grade learners of coastal school in Bangka Selatan regency, Bangka Belitung Islands Province, concentrating on HOTS – based materials need which aims to acknowledge the needs of HOTS – based materials development for senior high school students. The data were collected using a questionnaire with four aspects; 1) HOTS knowledge aspect, 2) learning materials and learning media needs, 3) English Skills aspect, and 4) English needs aspect. This research was conducted to the 65 students of senior high school in Bangka Selatan regency. Based on the analysis of need assessment, it revealed that 1) out of 51% of the learners have not known yet about HOTS in learning materials; 2) out of 70% of the learners assumed that developing HOTS – based English teaching and learning materials are needed; 3) out of 72% of the learners assumed that the English writing skill is an easy task to do, and 4) out of 90% of the learners need to improve their English skills through HOTS – based materials. The outcomes of these findings are required to serve as a guide for HOTS – based English learning materials production.

**Keywords:** *need analysis, HOTS, English materials*

## INTRODUCTION

High-quality human capital is needed in tackling 21<sup>st</sup>-century demands. One of the aspects needed in achieving human quality is education, as education is the core for people can reach their competences. The changing of the 21<sup>st</sup> century affects the new situation in economic, business, technology, and education. In the education field, people have to master their language competence as language is a basic needed in communicating with others. This 21<sup>st</sup> century or as called 4.0-era is synchronized to global requirements. People have

to master language, especially English to communicate around the world. English is one of the languages widely used throughout the world. In Indonesia, English learning is taught from elementary level to higher education level. In English learning, the learners speak, listen, read, and write; these activities deal with four English skills. English language teaching in higher school, senior high school, is critical to attempt 21<sup>st</sup>-century challenges in facing the global market [1], [2], [3]. As supported in the previous study by [4] stated that learners need to master their English language skills because in the future they will face their career needs which require fluency in English communication. Proposing English teaching materials that relate to the newest era needs the development of English materials continually.

Related to 4.0-era, English materials also have to be developed to adjust to their needs. Connected to 4.0-era, students are required to build their HOTS (high order thinking skill). Having high order thinking skills (HOTS) gains the students' competence. Students need to create their competence, relate to high order thinking skills; the competencies needed are critical thinking, creative and innovative, communication skill, collaboration, and confidence. Characteristics of higher-order thinking skills: higher-order thinking skills encompass both critical thinking and creative thinking [5]. Critical and creative thinking are both basic human competences, and those will encourage a person to always look at every critical issue and try imaginatively to find the solution for a new thing is better and more valuable for his life. Furthermore, [6] in the previous study stated that HOTS proposed the students' competence in analyzing, evaluating, and creating as the learning objectives, but in reality, works on HOTS issues in English learning are still small. The supported study by [7] applying HOTS in the teaching and learning process will be useful for the students and teachers. In developing the teaching and learning process based on HOTS activities, some phases proposed by [4] beginning from C1 to C6, are Remembering,

Understanding, Applying, Analyzing, Evaluating, and Creating. But the fact, implementing the HOTS-based on English teaching materials is difficult. The problem that occurred in Bangka Selatan on the tenth-grade learners of the two senior high schools is there are many students experiencing difficulties in understanding HOTS materials, and students are less prepared to solve HOTS- measuring problems; also there are few books of English materials that explain HOTS-based material. Therefore, analyzing the students' needs will be an alternative solution in developing HOTS- based English materials.

Analyzing the students' needs is supported by the previous study that stated needs analysis plays a major role in teaching because through the need analysis lecturers/teachers, students, teaching materials, and teaching procedures can be related in harmony to enhance the students' learning process [8]. Besides, need analysis is very useful in assessing learning goals which can be used later to establish resources, tasks, and tests. By analyzing students' needs, teaching materials will be more easily adapted, developed, and used. In understanding students' needs, teachers can find it easier to pick, adapt, and create instructional materials that are relevant to students' needs so that learning goals can be more easily completed [9]. Supported in related studies by [10] need assessment is a valuable method for identifying the needs of the students and supporting to enforce educational policies. Also, according to [11] producing the English topics should provide the aspects based on students' necessities and the key roles of stakeholders in this section.

From the review above, the target of this study was to conduct the students' necessities in the form of students' need analysis to investigate the need assessment of the ten grade learners of coastal school in Bangka Selatan regency, focusing on HOTS – based materials which purpose to admit the needs of HOTS – based materials development for senior high school students. The final information of these findings is taken to assist for HOTS – based English learning materials production.

## METHOD

This research was intended to reveal the students' necessities in the form of students' need analysis. It is classified into descriptive quantitative, which is investigated to describe HOTS knowledge aspect, learning materials, and learning media needs, English Skills aspect, having English skills need aspect. According to Berwick in [12] needs analysis can be carried out in several different ways which can be classified as either inductive (case studies, observations, etc.) or deductive (questionnaires, surveys, etc.). There were 65 students of the ten grade of senior high school as

the participants from two different schools in Bangka Selatan. In collecting data about the students' necessity in producing the English materials based on HOTS activities, the researchers used the questionnaire; it framed into 20 questions. The researchers conceived the questionnaire based on the related literature and previous studies. The participants had to respond to the questions and pick the answer, which offered some choices. After delivering the questionnaire to the participants, the instrument then analyzed used descriptive quantitative analysis. The questionnaire had four aspects; HOTS knowledge aspect, learning materials and learning media needs, English Skills aspect, English needs aspect.

## RESULTS AND DISCUSSIONS

The results of the measurement of need assessment that consists of several aspects, and it describes in the discussion below:

### 1. Students' Knowledge on HOTS aspect

The first aspect is related to students' understanding of HOTS competence. The result showed that 51% of the students have not known yet about HOTS knowledge. HOTS- based English materials must be introduced to the learners to build their critical thinking and enforce their creative skills. It meant that the HOTS-based materials that would be proposed also needed to be implemented in the teaching-learning process. The important on HOTS-based materials here is also related to the study by [13] the research indicated that the subjects' research has a high perception in applying HOTS in the 21<sup>st</sup>-century learning, some students are capable of solving the problem or HOTS question, while some still get difficulties; therefore, the participants have to consider the kind of HOTS activities that implemented in the learning process.

### 2. Learning Materials and Learning Media Needs

The second is assessing students' needs for learning materials and learning media. Based on the measurement of descriptive analysis, the results draw in the figure below:

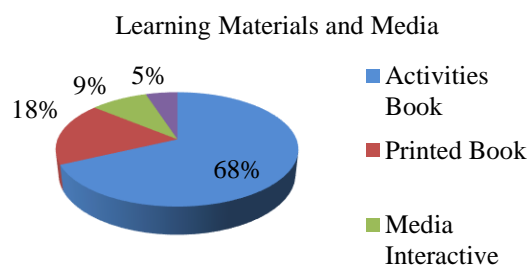


Figure 1. Learning Materials and Media Analysis

From figure 1 above, it can be showed that the students' needs in learning media aspect to support English teaching-learning process 68% students need activities books regarding in HOTS materials, 18% students need printed book or supported book from teachers, 9% students need media interactive, and 5% students need worksheet. And also, 70% of students assume that the usefulness of HOTS-based English teaching materials to be produced. The students need on producing English materials described in the figure below:

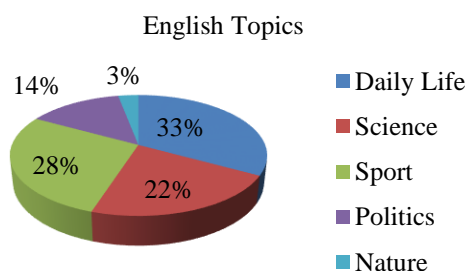


Figure 2. English Topics Analysis

The description on figure 2 above that 33% students need daily life topic, 28% students want sport as English topic, 22% students want science to perform in English material, 14% students need politics topic, and the rest is 3% students need nature topic to perform in developing English material. Based on the results of the analysis, students need the proper media and material to support enhancing English language skills. Media that contains teaching materials that are designed to stimulate and improve students' HOTS as well as can be used to help the learning process either independently or guided. It is supported in a previous study from [14] the developed learning materials and media allow students to study the learning process and provide opportunities for students to communicate with each other as well as promote high-level thinking skills for the students.

### 3. English Skills Aspect

The third assessment describes the English skills aspect. Based on the descriptive analysis of English skills aspect was obtained in the figure below:

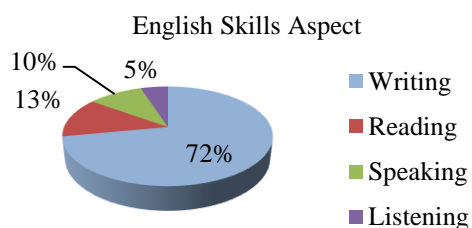


Figure 3. English Skills Aspect Results

Figure 3 above, described that 72% of students assume that having writing skills is needed and quite easy tasks to do because students study writing often. The students' writing skill is in quite good, it was proved based on the analysis result that 55% of students capable of writing English. However, students still face obstacles in writing, the problems are the common problems that faced in writing skill; they are 1) difficulties in choosing the proper vocabulary match in the context, 2) difficulties in using grammar properly, 3) difficulties in making a good sentence, 4) difficulties in understanding the genre text, 5) difficulties in organizing text. In producing the English materials, it is useful to know the learners' needs. But, still, English skill material cannot be separated, it is important to integrate the four skills in the learning process; because all productive and receptive English skill has an important role. According to [15] in his previous study stated that most higher education-related books are written in English; many people are studying English because of advantages to achieving positive results in their respective fields. Furthermore, he assumed that students need to construct sentences on their own and learn several issues related to grammar, vocabulary, and sentence structure.

### 4. Having English Skills Need Aspect

The fourth aspect is the need for having English skills. From the result of the descriptive measurement, it can be described that 90% of learners feel important to have English language skills. The learners' objectives from the English materials and English activities are 51% of students want to master grammar, 30% of students want to improve the understanding of genre texts, 19% of students want to produce good articles and enrich vocabulary. The way students want and need to carry out the English learning activities is 45% of students want individual activity, 28% of students want small group activity, 23% of students want in-pair activity, and 14% of students choose the large groups. Students in this subject research 90% feel that having English language skills is useful. Developing students' future need English as a tool in international communication and also become an advantage when students master English well. It relates to the study conducted by Khader & Mohammad in [16] they wrote that English is a global language that can be used to communicate with native and non-native speakers around the world, particularly in the field of education, so that all university students can search for information and gain knowledge; consequently, many universities worldwide need to use English as one of their educational resources.

Based on the results and discussions above, it describes that need analysis on students' assessment dealing with the development of HOTS-based

English materials consists of four findings; they are 1) 51% of the students have not known yet about HOTS knowledge. HOTS- based English materials must be introduced to the learners to build their critical thinking and enforce their creative skills; 2) 70% students assume that the usefulness of HOTS-based English teaching materials to be produced; 3) that 72% students assume that having writing skills is needed and quite easy tasks to do because students study writing often; 4) 90% learners feel important to have English language skills.

### CONCLUSION

Distributing needs assessment for the first step in developing English materials makes an important contribution. The analysis study reveals that new HOTS-based English materials should be produced for the tenth-grade students of senior high school in Bangka Selatan. Moreover, English materials focusing on HOTS activities are urgent for the students in senior high education. Learning English materials with the chosen topics that related to the students' wants will make them more motivated. The HOTS-based English materials will involve HOTS-based activities from remembering (C1) to creating (C6). The new HOTS-based English materials product will create students' awareness and build their experience and logical explanation. HOTS-based English learning must continue to be practiced; beginning with preparation and execution, where the instructor/teacher will attempt to improve teaching capable of handling HOTS in class.

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