Need Analysis for English Reading Teaching Materials in Vocational School Based on Digital Applications

Oktariyani¹, Yumna Rasyid², Ratna Dewanti³, Hyunbim Im⁴, Larra Semyanov⁵

¹Postgraduate of Universitas Negeri Jakarta, Jl. Rawamangun Muka Jakarta Timur 13220, Jakarta, Indonesia
E-Mail: oktariyani_9906921025@mhs.unj.ac.id

²Postgraduate of Universitas Negeri Jakarta, Jl. Rawamangun Muka Jakarta Timur 13220, Jakarta, Indonesia
E-Mail: yumna.rasyid@unj.ac.id

³Postgraduate of Universitas Negeri Jakarta, Jl. Rawamangun Muka Jakarta Timur 13220, Jakarta, Indonesia
E-Mail: rdewanti@unj.ac.id

⁴Seoul Technic High Schoool, Korea, Republic of
E-Mail: imhyunbin@gmail.com

⁵Yakutsk City Lyceum, 14 Yaroslavsky Street (Ulitsa Yaroslavskogo) Yakutsk, Russian Federation
E-Mail: larrasemyanov49@gmail.com

Corresponding author: oktariyani_9906921025@mhs.unj.ac.id

Abstract—This study aims to determine the need for English reading teaching materials for Vocational High School students majoring in Fashion Design, and to determine the need for English reading skills in the world of work. Data were obtained from questionnaires and interviews. The subjects studied were students of SMK Rahmatutoyibah Gunung Kaler, grade X majoring in Fashion Design, and grade X English teaching materials for SMK. This research was conducted with a mixed-method design. The data were collected through questionnaires and structured interviews. This questionnaire is based on the SMK English learning curriculum. The results of this study indicate that Vocational High School students majoring in fashion need teaching materials that are by their majors, namely reading materials related to the fashion department as well as material that introduces a lot of the industrial world and can support the field they are engaged in. Furthermore, Grade X Vocational School students majoring in Fashion Design need English reading learning media to encourage easy understanding of English reading material, namely media in the form of interesting and contemporary digital applications. Furthermore, the need for the world of work for their English reading skills requires skilled workers who have good English reading skills, which include the ability to read manual books, the ability to read company regulations, the ability to read travel documents, the ability to read English messages, the ability to reading notes, the ability to read e-mails, the ability to read employment contracts, and the ability to read cooperation agreements.

Keywords—Needs Analysis; Teaching Materials; Reading English; Fashion Design Vocational School

I. INTRODUCTION

Learning to read English in vocational schools is the main skill in English language competence. Reading is generally considered to be one of the most basic skills and accounts for a considerable amount of instruction in the field of English language education. In the article [1], it is explained that reading still holds an important position in English education because it acts as the main input source in obtaining information from reading sources. [2] explains that reading is a complex, purposeful, interactive, and flexible activity that requires a lot of time and resources to develop. Meanwhile, reading comprehension is the
process of getting meaning from and bringing meaning to a text.

In teaching reading, one of the main concerns of the teacher is how to make students have the ability to understand the content of the reading and be more active during the process of reading English texts. To encourage readers to read more actively to understand English reading texts, teachers need to guide in helping students to be involved in the reading process through the teaching materials used, as well as effective learning techniques or strategies. In addition, teachers must be able to set reading goals, utilize previous knowledge, prepare teaching materials or develop models or strategies for learning to read.

Indicators of reading skills according to a reference (FB Davies, 2010), reading skills include: identifying the meaning of words, drawing conclusions, identifying the author's technique, recognizing the mood of the passage, and finding answers to questions. Reading skills can also include: recognizing language texts; inferring meaning, use of unfamiliar lexical items; understanding information that is stated explicitly and non-explicitly, conceptual meaning, the communicative value of sentences, relationships within sentences and between parts of a text through lexical cohesion devices; identify indicators and key information in the discourse; distinguish the main idea from supporting details; selective extraction of relevant points from the text; basic reference skills; skimming, scanning, transcoding information from diagrams/graphs.

Meanwhile, according to [5], reading skills are as follows: understanding the meaning of words in context, literal understanding, drawing conclusions, interpreting metaphors, finding main ideas, and forming judgments. Reading skills, as in [6], also involve automatic recognition skills, vocabulary and structure knowledge, formal discourse structure knowledge, world content/background knowledge, synthesis, and evaluation skills/strategies, metacognitive knowledge, and monitoring skills.

There are many problems experienced by SMK students in learning to read English, as confirmed in research [7] which explains that many EFL/ESL students have "big difficulty" with understanding reading English even after years of reading, learn English. This often results in them facing difficulties in various fields such as entrance examinations for top universities, and also finding better jobs. They can read the text but recognizing or understanding the author's message often has difficulty. An article was written by [8], where the results of his research show that students' reading ability has not been able to achieve the learning objectives that have been set as seen from the lack of students' understanding of the English reading subject matter they have learned. From the results of the documentation study conducted by the researcher, it was found that almost the average grade XI students obtained an average score of 60, and if viewed from the results of the acquisition of each individual, it can be seen from 74 students only about 28 students (37.83%) who were able to achieve the Minimum Completeness Criteria while the remaining 46 people were under the KKM. These results if translated based on the range of values obtained, namely 13 people (17.56%) who obtained high scores with a range of values of 85-100. While 15 students (20.27%) got a moderate score with a range of 70-80, and. 46 students (62.16%) got a low score with a range of values between 10-65.

It is also revealed in this article that several factors affect the ability to read English in high school students, namely internal factors and external factors. Internal factors are related to motivation. External factors include; the role of parents, environment, teachers, teaching materials, learning media, facilities, and infrastructure (Wifi, laboratories, libraries, and others). The motivational factor explained by Liu [9] is that the motivation to read English at the SMK level is lower than at the SMA level. this is due to a lack of interest and motivation in learning English, as well as a lack of basic understanding of English [10],[11], [12]. Regardless of the contest, previous research has shown that learning and learning motivation can be enhanced when learners interact with teaching materials, resources, and computer applications rather than experiencing them passively [9]. Previous research has shown that if students have stronger learning motivation, this leads to better learning outcomes [13], [14].

There have been many previous studies that have investigated how to solve the problem of weak students' reading comprehension. Research conducted by Reza Ahmadi [7] his research aims to find out whether "awareness of metacognitive reading strategies can improve reading
comprehension of EFL students and detect the relationship between awareness of metacognitive reading strategies and reading comprehension. His research focuses on four main problems. First, discussing the definition of metacognitive reading strategies, and the importance of metacognitive reading strategies. Second, reviewing the process of metacognitive reading strategies. Third, the definition of reading comprehension and different reading comprehension models. Fourth, is the relationship between metacognitive reading strategies and reading comprehension. Literature review and based on data analysis showed that metacognitive strategies are very important and very beneficial to improving the metacognitive reading comprehension skills of EFL learners. Metacognitive reading comprehension skills have a positive effect on second language learners and learners. students can acquire the skills they need for effective communication in English.

Furthermore, research by Pratiwi [15] applied the method of interpretation and inference using common reading. [16] Astuti apply the strategy of reading English with comic media. Afrina [17] [17] applies the talking stick type cooperative learning method. [18] focused his research on how teachers integrate reading activities that support reading comprehension, the shared teaching model used, and the frequency with which each teacher leads classroom instruction. [19] conducted research related to teaching reading can improve students' writing performance.

In addition to how teachers provide learning strategies in learning to read English, students are also examined how their strategies are in understanding English reading texts, as in research [20] which analyzes English reading strategies, especially the type and frequency of reading English. used by students majoring in Indonesian language education at Jambi University. The results showed that the most widely used strategy by students in pre-reading, while-reading, and post-reading was the cognitive strategy. Therefore, students in this study were categorized as users of cognitive reading strategies. Gender-based analysis of the reading strategy category revealed that female students were cognitive users, while male students were users of metacognitive strategies.

However, these previous studies require further development to provide an appropriate solution for how the needs of vocational students for English reading material should be. Therefore, this article will try to cover this research gap by taking the views of vocational students, teachers, parents of vocational school graduates, and the world of work. This research will help policymakers, educators, instructors, and administrators of the English curriculum, especially in reading materials to have broad ideas to modify and adapt their teaching. This research will also help SMK students acquire good English reading skills to prepare them for the world of work in the future.

The purpose of this research is to find out the need for English reading teaching materials for Vocational High School students majoring in Fashion Design and to know the need for English reading skills in the world of work.

The research questions are; (1) What kind of English reading materials do students of Vocational School of Fashion need? (2) How do SMK students respond to Android-based English reading materials? (3) What kind of English reading skills are needed in the world of work?

II. LITERATURE REVIEW

Bojovic (2010) explains that the purpose of reading is to balance reading skills with language that can affect the teaching of reading in English for special purposes. There are two very important contributions to the reading approach in English for Special Purposes (ESP), namely the first shift from the text as a linguistic object to text as a vehicle for information. A key principle for ESP learners is that extracting information accurately and quickly is more important than detailing the elements of a language. This means that the understanding of macrostructure comes before the study of language appears, and the application of the information in the text becomes very important. The reader first processes language and then relates ideas to prior knowledge.

The second contribution, namely, teaching reading at SMK is an acknowledgment that good reading requires language and skills. According to C. Hosenfeld [2], less successful foreign language learners have a fragmented approach to the text, while successful learners will look for the overall meaning, guess, or miss language and information. As mentioned by JC Alderson, [2], several hypotheses were tested about the role of language
and skills showing that students whose reading skills are weak in reading foreign languages are partly due to poor reading in their first language reading skills (L1). In addition, it is influenced by their inadequate knowledge of foreign languages. Learners must reach a threshold level for their L1 before they can transfer L2 skills to others.

A. Syllabus of English Materials at SMK

Syllabus design is one aspect of curriculum development [21]. A syllabus is a specification of course content and a list of what will be taught and tested. Meanwhile, according to the learning material [22] is part of the contents of the formulation of Basic Competence (KD), is the object of the learning experience that is interacted between students and their environment to achieve basic abilities in the form of behavior change as a result of learning from the subject. Learning materials are very influential on the level of success or achievement of students in learning. Competency Achievement Indicators (GPA) is a formulation of abilities that must be carried out or displayed by students to show the achievement of KD. Learning objectives are formulated based on KD from KI Knowledge and KD from KI Skills by linking the dimensions of the attitude to be developed. Strengthening Character Education (PPK) in extracurricular activities is the embodiment of character values through strengthening materials and learning methods according to the applicable curriculum content.

Learning materials are developed from the Competency Achievement Indicators (GPA) by the KD demands from KI-3 (Knowledge) and KD from KI-4 (Skills), adapted to the syllabus.

Learning materials can come from textbooks and teacher guide books, other learning resources in the form of local content, current materials, and learning contexts from the surrounding environment which are grouped into materials for regular, enrichment, and remedial learning.

Apart from being based on GPA, the development of learning materials also considers the relevance to the needs of students and environmental demands. Considering the level of physical, intellectual, emotional, social and spiritual development of students. Consideration of usefulness for students. Consideration of scientific structure. Consideration of various learning resources (relevant and up-to-date references). Consideration of strengthening character values. Consideration of time allocation.

The development of learning materials can be in the form of content knowledge and or dimensions of knowledge (pedagogical knowledge). Learning material development activities are carried out to produce the scope of learning materials. The scope of the subject matter is structured to provide concrete and abstract experiences to students.

B. English Reading Skills

English reading skills are always related to writing, listening, and speaking skills and including vocabulary mastery, this is confirmed in research [23]. Kaya [24] explains that reading is a part of our daily life. This is done both for fun and for information. Meanwhile Castles [25] emphasized that learning to read is life-changing. Reading is the basis for acquiring knowledge, cultural engagement, democracy, and success in the workplace.

Reading skills are important for individuals because they foster understanding in reading. If students do not know reading skills, they cannot be expected to become successful readers. As such, they are unable to reach the level of understanding required to pass the exams in their school. For this reason, reading skills must be taught to students to be able to overcome problems of reading comprehension. Kaya [24] also explains that reading in a foreign language is closely related to thinking in that language. If students want to read well in English, students must think in English while reading. If students think in other languages and translate into English, students will usually have difficulty in reading comprehension.

C. The level of proficiency of SMK graduates in reading English

Indeed, vocational school graduates aspire after graduating from vocational school they can immediately be accepted for work in large companies. Ahmmed [26] assert that in countries such as Vietnam, Indonesia, Taiwan, and China, their vocational school graduates rarely meet industry requirements. It is emphasized in survey research conducted Dirgayasa [27] that vocational school graduates have not been able to meet the requirements of the standard of English proficiency they need. They are not able to compete for good positions because of their weak English skills. Therefore, in line with student needs, expectations from the perspective of
entrepreneurs also need to be seen so that vocational students who are apprentices or vocational graduates can understand and meet the requirements according to industry needs.

D. Analysis of the need for English reading materials for SMK students

Need Analysis according to [28] is very necessary because of the disparity that exists between what students think needs to be learned and what stakeholders perceive as their needs. Therefore, it is emphasized by [29] that, no needs analysis means no ESP. According to [29] an analysis of ESP needs is carried out for curriculum development, determining the level of proficiency of students and avoiding ready-to-use materials that are produced commercially. English reading skills in SMK as one of the skills that must be possessed by SMK students, then English in SMK is included in the category of English for special purposes or ESP. Research on English reading skills for vocational students requires addressing the needs and levels of reading proficiency in the profession of workers who work in companies.

E. Analysis of the Needs of Vocational High School graduates

The need for English reading skills of SMK graduates requires greater attention because through this needs analysis they can be prepared to have more professional English reading skills while working in companies. Several needs analysis studies in English for SMK have contributed some literature to this research. A needs analysis study conducted in Indonesia [30] identified elements of an English learning approach including teaching materials and the application of needs analysis based on English Patterns for Special Purposes in 21st-century education. The problem raised from this study refers to several findings that the implementation of needs analysis in SMK has not been fulfilled. The study used a qualitative method using questionnaires and interviews as data collection instruments. While the learning approach was found to be ICT-based and modern learning, the use of teaching materials was based on a centralized K13 curriculum adjustment where the use of English textbooks was similar to that used in public schools. In addition, the analysis of student needs is based on the description in K13 which is carried out only by assessment and evaluation, while the essence of the Needs Analysis (NA) cycle of the ESP Model in five stages is not carried out in detail based on the pattern.

English reading skills are also very important among other English skills, such as speaking, listening, and writing. The needs and requirements that become standard for companies will always change from time to time, therefore this study re-investigates the need for English reading skills in the context of SMK graduates and according to the views of companies.

III. METHOD

A. Respondents and Profile of SMK Rahmatuttoyibah Gunung Kaler

SMK Rahmatuttoyibah Gunung Kaler is one of the private vocational schools under the auspices of the Rahmatuttoyibah Gunung Kaler foundation. Located in the village of Kandawati, District Kresek Tabupaten Tangerang, Banten Province, students who become respondents are students of class X majoring in Fashion Design. Researchers visited this school in July 2021, and will now conduct research at the school. Students majoring in fashion consists of 5 female students and 16 male students.

B. Instruments

This research was conducted with a mixed-method design because it has several advantages. First, using a mixed-methods study that works best for competency-based learning research, M. Searle, et al in [26] Second, the combination of the two methods helps to form a clear understanding of needs analysis studies and leads to better research. Third, mixed methods is an innovative and applied research design in dealing with big data that contribute to discoveries and diversity. Fourth, English as a foreign language is a qualitative or quantitative and mixed type of research that is very popular in social science research and education to gain deeper insights and perspectives. The data in this study were collected by questionnaires and structured interviews because these are the most commonly used data collection methods in needs analysis research [31]. This questionnaire is based on the SMK English learning curriculum. This questionnaire was distributed to 21 students of SMK RTI Gunung Kaler, Tangerang Regency, then the second questionnaire was distributed to 3 companies. The
questionnaire was also reviewed by English learning experts.

The interview questions were also modified by adding additional questions that were more relevant to the ongoing conversation. Interview questions for vocational students focused on the need for learning English reading materials on the job, strategies for learning to read English, and the need to have English reading skills. Interview data to the company’s HRD related to the question of what English reading skills the company needs, and what positions will be occupied by employees who have good English reading skills.

C. Data analysis

Data analysis in this study used a Likert Scale consisting of five categories, ranging from 'Required' to 'Not needed' as illustrated in table 1 below. The categories applied in this category are 5 points needed, 4 points needed, 3 points needed enough, 2 points less needed, and 1 point not needed. The data were analyzed with Microsoft Excel. The boundary line between the two scales is defined in the middle (eg 4 'needed' and 5 'very much needed, so 4.5 is the boundary line between these two scales). Interview data were analyzed by coding and key concepts derived from words.

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Level of Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0-1.50</td>
<td>Not needed</td>
</tr>
<tr>
<td>2</td>
<td>1.51-2.50</td>
<td>Less needed</td>
</tr>
<tr>
<td>3</td>
<td>2.51-3.50</td>
<td>Enough needed</td>
</tr>
<tr>
<td>4</td>
<td>3.51-4.50</td>
<td>Required</td>
</tr>
<tr>
<td>5</td>
<td>4.51-5.00</td>
<td>Is indispensable</td>
</tr>
</tbody>
</table>

IV. RESULTS AND DISCUSSION

A. Responses to the needs of SMK students regarding English reading materials

The results of student responses obtained from questionnaires distributed to 21 students of SMK Rahmatutotibah Gunung Kaler showed that, firstly, related to questions student responses to questions related to reading English learning material is difficult or not, 50 percent of them considered the English reading material to be normal.

In the second question related to reading learning methods so far, 50% responded pleasantly, and 50% responded normally.

Furthermore, it relates to the question of how to deliver the desired English reading material. 100% of them answered briefly and clearly.

The next response was related to examples of application after the English reading material was delivered. 50% answered very necessarily 50% answered necessary.
The next response is related to learning objectives that need to be conveyed in English reading material. 50% responded very necessarily, and 50% responded necessarily.

Next is related to the English reading material that is studied by their majors in SMK. 70 percent answered they didn't know, 10 percent answered yes, and 20 percent said they didn't.

Analysis of the English reading material that they have studied so far, namely in Basic Competence (KD) 3.4, it is explained that reading functions, linguistic elements, and the structure of descriptive texts. Students study descriptive texts and for example, the texts have been included in the descriptive text category, but for the content of the readings, it is still more general not to focus on the student's major. Likewise KD 3.5 on announcement text, KD 3.7 on recount text, KD 3.8 on narrative text, and KD 3.9 on procedure text. All examples of reading content given are still very general.

Therefore, the researcher concludes that students of Vocational School of the Department of Fashion Design in class X need English reading material, which is by the existing KD SK and by the syllabus studied in Fashion Design. However, based on the results of interviews and questionnaires distributed, it was stated that the needs of Vocational High School students majoring in Fashion Design in English reading material were those that introduced the industrial world a lot, manual book reading skills, reading applicable regulations, the ability to read work contracts, the ability to read messages. -English messages, the ability to read emails, the ability to read English notes. Next is the need for Class X Vocational High School majoring in Fashion Design, namely that they need English reading material that is by their major and can support the field they are engaged in.

B. Responses to the Needs of Vocational High School Students related to Digital Application-Based Reading Learning Media

The results of the responses of class X Vocational High School students related to Android-based English reading learning media, namely, the first is about the question of the availability of media to learn English reading material. 50% responded don't know 50% responded is adequate.

Next response is about how students respond to media in the form of digital applications in learning to read English. 100% answered necessary.

The next question is whether learning English material using an android application can improve students' reading skills. Student response 50% answered yes 50% answered mediocrely.
Fig. 8 Student responses regarding Android applications can improve students' understanding abilities. Thus, it is concluded that students need learning media to help students understand English reading material more easily, namely, students need interesting and contemporary learning media in the form of digital applications that they can learn through their smartphones/Androids.

C. The Needs of the World of Work for the ability to Read English

The results of interviews with 3 companies in Tangerang Regency related to the need for English reading skills that must be possessed by SMK graduates. That is in Table 3 below:

<table>
<thead>
<tr>
<th>Reading Skills</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doing TOEFL Test</td>
<td>Needed</td>
</tr>
<tr>
<td>Reading manual book</td>
<td>Needed</td>
</tr>
<tr>
<td>Read the applicable regulations</td>
<td>Needed</td>
</tr>
<tr>
<td>Reading the letter of the Way</td>
<td>Needed</td>
</tr>
<tr>
<td>Reading English Messages</td>
<td>Needed</td>
</tr>
<tr>
<td>Reading Notes in English</td>
<td>Needed</td>
</tr>
<tr>
<td>Reading English Emails</td>
<td>Needed</td>
</tr>
<tr>
<td>Reading the Employment Contract</td>
<td>Needed</td>
</tr>
</tbody>
</table>

These companies explain that to recruit employees they will take a TOEFL test. From the results of this test, they will see how the level of the prospective employee's ability in English language skills is. For this administrative position, employees are expected to have the ability to read English in the categories of ability to read manual books, ability to read company regulations, the ability to read travel documents, the ability to read English messages, the ability to read notes, the ability to read emails, the ability to read contracts work, as well as the ability to read cooperation agreements.

V. CONCLUSIONS

Based on the purpose of this study, namely knowing the need for English reading teaching materials for Fashion Design Vocational High School students, and knowing the need for English reading skills in the world of work, it can be concluded that Fashion Design Vocational High School students need teaching materials that are by their majors, namely: reading material related to the Department of Fashion Design as well as material that introduces a lot of the industrial world and can support the field they are engaged in. Furthermore, Class X Vocational School students majoring in Fashion Design need English reading learning media to encourage easy understanding of English reading material, namely media in the form of interesting and contemporary digital applications.

Furthermore, the need for the world of work for their English reading skills requires skilled workers who have good English reading skills, which include the ability to read manual books, the ability to read company regulations, the ability to read travel documents, the ability to read English messages, the ability to reading notes, the ability to read e-mails, the ability to read employment contracts, and the ability to read cooperation agreements.

Therefore, teaching materials are needed that are truly by the needs of Vocational High School students majoring in fashion, to prepare them to be ready to compete in the world of work.

REFERENCES


