THE ANALYSIS OF ENGLISH TEXTBOOKS FOR SENIOR HIGH SCHOOL TOWARD THE CHARACTERISTICS OF MICROLEARNING

Sartika Dwi Ariyanti¹, Fenny Yutika Seli²
¹, ²Universitas Media Nusantara Citra, Jl. Panjang No.1, Jakarta, Indonesia
Email: ariyantisarika01@gmail.com

Abstract. The COVID-19 pandemic has fundamentally changed the face of English language teaching, creating both obstacles and opportunities for students and teachers. Since textbooks play an important role in providing organized and complete learning materials, this study aims to examine the requirements of English textbooks for twelfth-grade high schools that use microlearning features. The goal is to investigate the feasibility of using microlearning as an effective strategy for textbook use in English language teaching for twelfth-grade students in Indonesia. This study is an analytical study that focuses on several aspects of textbooks. The alignment with the curriculum, the relevancy of material, the appropriateness of teaching techniques, and the fit for the requirements and characteristics of twelfth-grade high school students are all key topics of inquiry. Furthermore, the study investigates the extent to which these textbooks meet local cultural norms and expectations, ensuring that Indonesian English learners have a meaningful learning experience. The outcomes of this study shed light on the strengths and shortcomings of the selected textbooks, offering useful insights into their effectiveness in supporting English language acquisition. Moreover, the report makes pertinent recommendations for prospective enhancements and future research paths.

Keywords: Microlearning, English Textbook, Post-Pandemic Education

INTRODUCTION

The COVID-19 pandemic has significantly impacted Indonesian English education, presenting challenges and opportunities. The COVID-19 pandemic has offered us a chance to pave the way for the implementation of digital learning (Dhawan, 2020; Pokhrel & Chhetri, 2021). The shift to online learning has impacted students' learning methods, teachers' instructional approaches, and assessment methods. However, students face obstacles like poor internet connectivity and lack of guidance from teachers. English textbooks are crucial for student learning and curriculum linkage, but there is limited information on their usage. Indonesia's government places a high value on education and sets strict standards for textbook development, ensuring the quality of education. Textbooks are officially issued and considered essential for education in Indonesia.

Textbooks continue to play a crucial role in English education, providing a foundation of knowledge and resources for both students and teachers. Gunantar (2015) stated that Textbooks have played a very crucial component in the teaching and learning process. They offer a structured approach to learning and help students understand the material and improve their language skills. Textbooks also serve as a consistent source of information and resources, which is especially valuable in virtual learning environments where access to support may be limited. According to Tamrin et al., (2017), The instructor should provide effective learning tools. All of these are required for the educator to properly communicate learning material. Teachers can utilize textbooks to guide their lessons, ensuring a well-organized and focused approach to learning.

In the post-pandemic era, teachers need new approaches to help students comprehend learning materials, and microlearning has emerged as an effective method. It presents instructional content in small, easily digestible chunks, allowing learners to absorb information quickly. Microlearning divides complex information into manageable pieces, making it easier for students to understand and complete tasks. It has become an efficient technique for facilitating teaching and learning processes, particularly in the digital age. Microlearning offers a time-efficient and effective choice for delivering the most up-to-date knowledge to learners, allowing them to access information in a format and location of their choice.

Microlearning is a teaching strategy that delivers small, focused information in an easily digestible manner, complementing textbooks and addressing technological difficulties in online learning. According to Giurguu's (2017) research, microlearning can be an effective method for increasing the act of learning and applying new knowledge. Short, targeted lessons can be utilized to review and reinforce crucial topics to assist students in better comprehending
the material. It is accessible through digital platforms and can be used on mobile devices. Microlearning offers advantages such as effective comprehension, internalization, and choice of learning speed. It is an alternative learning strategy with seven essential design characteristics: time, content, curriculum, form, process, medially, and learning type.

The analysis of English textbooks for twelfth-grade senior high school using microlearning characteristics is a research gap that needs to be addressed. By examining the requirements of textbooks and their compatibility with microlearning, this study aims to determine the effectiveness of microlearning as a technique for English language education in Indonesian grade 12 classrooms. This research will focus on analyzing English textbooks for senior high school towards the characteristic of Microlearning. Those textbooks are considered relevant and suitable as the focus of this research.

METHOD

This study employed descriptive qualitative research through document analysis method. According to Gall & Borg, (2007) Descriptive research seeks to explain a phenomenon and its characteristics. This study was basically concerned with what happened than how or why it happened. As a result, observation and survey technologies are frequently utilized to collect data (Nassaji, 2015). This study described the analysis of English textbook for twelfth grade senior high school towards the characteristic of microlearning. Therefore, it will apply a content analysis approach. According to Gheyle & Jacobs (2017) Content analysis (CA) is a research methodology to make sense of the (often unstructured) content of messages – be they texts, images, symbols, or audio data. In short it could be said to try to determine textual meaning. In this case the researcher makes inferences of the analysis of English textbook.

This study was a document analysis, the researcher is using several English textbooks that use in twelfth grade for senior high school from 30 senior high schools around Jabodetabek. The study took place between March until May of 2023. It includes the process of collecting data, analyzing data, and writing report. The subject of this study are several English textbooks for the twelfth grade in senior high school that were analyzed considering the characteristics of microlearning. The textbooks will be in the form of a contextual book and an e-book.

The main instrument of the research was the researcher herself. According to Suhandoyo (1996), the qualitative research method was used to investigate natural object conditions, where the researcher was the key instrument. Data analysis was inductive, and the research results emphasized meaning rather than generalization. The researcher was involved in all processes of the research, including data collection, analysis, and interpretation. This proposition was
particularly pertinent in qualitative research because the researcher was regarded as a component of the data collection instrument (McGrath, Palmgren & Liljedahl, 2019; Johnson, Adkins & Chauvin, 2020; Adosi, 2020).

In this research, the researcher used table analysis Microlearning to collect the data. By using the table analysis Microlearning, the table assisted the researcher in organizing the data and making it easier to analyze. The data sampling technique that was used was purposive sampling. According to Turner (2020), purposive sampling was a sampling approach employed by researchers when they already had a target population of persons with traits relevant to the inquiry. This statement was also backed up by Palinkas et al. (2015), stating that purposive sampling was frequently employed in qualitative research for the identification and selection of information-rich examples relevant to the phenomena of interest. Purposive sampling was a means of selecting specific individuals for a study based on their distinctive traits pertinent to the research subject. This method was often used in qualitative research to choose instances that provided a wealth of information about the topic under research.

**Table 1. Analysis of microlearning characteristics in english textbook**

<table>
<thead>
<tr>
<th>Name of the teaching material</th>
<th>Bahasa Inggris Kelas XII</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School name</strong></td>
<td>SMA ....</td>
</tr>
<tr>
<td>Are the learning objectives of teaching materials separated into micro-competencies?</td>
<td>Yes</td>
</tr>
<tr>
<td>Can the learning objectives on teaching materials be achieved in a short time (3/5/7 minutes)? Does the teaching material contain a specific purpose?</td>
<td></td>
</tr>
<tr>
<td>Is every learning content activity on teaching materials delivered in a short time so that students stay engaged and avoid excessive cognitive load?</td>
<td></td>
</tr>
<tr>
<td>Can the learning content on teaching materials be completed within 3/5/7 minutes?</td>
<td></td>
</tr>
<tr>
<td>Do learning content units include various forms of content, such as illustration and multimedia, to increase student engagement and retention?</td>
<td></td>
</tr>
<tr>
<td>Does the content of the teaching materials use interesting and fun activities to retain the attention of learners?</td>
<td></td>
</tr>
<tr>
<td>Is the learning content in teaching materials arranged based on one micro-learning objective?</td>
<td></td>
</tr>
<tr>
<td>Are the lesson phases of the learning content determined based on the specific objective of the learning module?</td>
<td></td>
</tr>
</tbody>
</table>
Can learners access learning content in any learning environment or situation, during or after learning?

Can students choose which learning content to access based on their individual learning needs or interests?

Can students choose the learning stage on the learning content that suits their individual needs and preferences?

Are students free to access learning content on teaching materials at any time, without time limits?

Is the learning content searchable by students easily?

Can a learning exercise be completed by students in 3/5/7/minutes?

Are the learning exercises presented in a form that grabs students’ attention?

Are the learning exercise separated by specific goals?

Can learners access learning exercises in any learning environment or situation, during or after learning?

Can the learning exercises be chosen by students according to students' learning needs?

Are learning exercises easily searchable by students?

RESULTS

The researchers conducted a study in 30 schools in Jakarta and surrounding areas, analyzing the usage of four English textbooks: "Bahasa Inggris Kelas XII," "Pathway to English XII," "Cambridge English Mindset for IELTS XII," and "English Alive XII." They applied six characteristics of microlearning to these textbooks, including small, engagement, specific outcomes, flexible, self-paced, and traceable.

Small

In the textbook "Bahasa Inggris Kelas XII" Learning objectives are not separated into small sub-competence micro. Learning objectives in this book do not contain specific objectives and are developed in general, with just two to three learning objectives in each chapter. Because this book has multiple sub-skills, one learning target cannot be fulfilled in a short period of time that were showed below.
The book "Bahasa Inggris Kelas XII" focuses on microlearning "small" by dividing learning objectives into micro sub-competencies. The content covers skills like speaking, listening, reading, and writing. However, the time required to complete each aspect is longer due to the different difficulty levels of each skill. This microlearning approach may not be suitable for short-term learning, as each aspect has its own level of difficulty. The picture below is an example of learning content contained in Buku Bahasa Inggris Kelas XII.

Learning exercises in the textbook “Bahasa Inggris Kelas XII " has been presented separately according to skill aspects, such as speaking, listening, writing, and reading. Although the learning exercise has been in the form of a small piece of sub-competence for completion and work still takes a relatively long duration of time. So, the learning content and
learning exercises in this book have applied the characteristic microlearning “small” because it has been in the form of small pieces of micro sub-competencies but has not covered short-term learning because the learning content and learning exercises cannot be completed in a short time.

The books "Pathaway to English XII," "Cambridge English Mindset for IELTS," and "English Alive XII" all apply microlearning characteristics, dividing learning objectives, content, and exercises into small micro sub-competencies. These small learning materials make it easy for students to understand the material quickly, and the exercises are designed to be brief and separate each aspect of the skill. The Cambridge English Mindset for IELTS also uses microlearning, presenting learning objectives, content, and exercises separately, reducing the cognitive burden and allowing for quick completion. However, "English Alive XII" has generalized learning objectives and longer completion times for each skill aspect, resulting in a more complex and time-consuming approach to learning.

**Engagement**

The learning content in Bahasa “Inggris Kelas XII” is presented with a variety of colors, animated pictures, and illustrations so that students do not get bored easily. Even though this book does not feature multi-media information, students may still actively engage in the learning process since the learning content in this book is in the form of pair work or group work, which requires students to actively communicate with other students. The picture below is an example of learning content contained in Class XII English Book. The learning content presented in this book has a variety of illustrations that can attract students' attention.

**Figure 3.** The example of the used of picture and illustration in Learning content
‘Fill in the blank’, determine the meaning of certain vocabulary terms, listen to a song and fill in the lyrics, and many other variations are included in this book's activities. Furthermore, the book's colourful look is not monotonous, which keeps learners engaged. The book "Pathway to English XII" is repetitive and text-heavy, with minimal multimedia and visual aids. The book's learning material focuses on text and images, making it difficult for students to actively engage. The exercises are divided into small pieces but lack variety and are presented in a monochrome format, making them less engaging and easily bored. The book's lack of interactive displays makes it easy for students to become bored as had been showed below.

![Figure 4. The example of learning exercises](image)

In Figure 4, the learning exercises in this book are only in the form of completing the text, listening to the recording and fill in the blank, answering some questions, and group work and discussion of a topic. It is easy for students to get bored because there is no interactive display to attract students' attention. The third book is Cambridge English Mindset for IELTS. This book is presented in a form that attracts students' attention as it offers many interesting learning variations and includes test banks and online modules. Cambridge English Mindset for IELTS is a captivating book with engaging learning variations, test banks, and online modules. It features multimedia content, engaging exercises, and clear instructions to reduce cognitive load and enhance student engagement.
The fourth book, "English Alive XII," offers varied learning content but lacks multimedia and interactive elements, potentially making students bored and struggling to participate. Exercises involve answering questions, completing dialogs, matching text, and correct grammar, making it difficult to keep students' attention.

**Specific Outcome**

Two of the four books examined by the researchers had learning objectives and learning content arranged around a specific goal: Cambridge English Mindset for IELTS XII and Pathway to English XII. Because the learning objectives and learning content are arranged and involve objectives and learning activities that are split down into small pieces of micro-competencies, these two books have specific outcomes. While the other two books; English class XII and English alive XII do not have specific outcomes because they contain learning objectives that are made in general and not composed of a micro-competence. However, the learning content and learning exercises have been broken down based on specific objectives.

**Flexible**

Flexibility is one of the characteristics of microlearning, which means that learning media can be adapted as needed. This gives students the ability to access learning content and exercises in any learning environment or situation, both during the learning process and outside of learning hours. Students can easily access these four books; Bahasa Inggris Kelas XII' Pathway to English, Cambridge English Mindset for IELTS XII, and English Alive XII, because these books are student handbooks that are used throughout the year, so students can easily access the learning content and exercises in these books. Students have the freedom to
access the content and exercises in any environment and situation, both during the learning process and outside of learning hours

**Self-Paced**

One of the characteristics of microlearning is “self-paced”. This means that the learning media used by the students can be chosen independently according to their needs and preferences. In the English textbook Bahasa Inggris Kelas XII, Pathway to English XII, Cambridge English Mindset for IELTS XII and English Alive XII, students can choose which learning stages of the content and learning exercises they want to access according to their preferences and needs. However, this concept only applies when students study independently outside of school hours, because when they enter English class time, the learning process follows the learning stages provided by the teacher according to the applicable curriculum.

**Traceable**

English textbooks Bahasa Inggris Kelas XII, Pathway to English XII, Cambridge English Mindset for IELTS XII and English Alive XII can be easily searched and accessed by students because these books are provided by schools for students to use as learning media to support the learning process. These books are also available and sold in bookstores and online stores, making it easier for students to obtain these books. For the textbook English Class XII and Pathway to English XII is also available in PDF format so that students can easily access this book.

**DISCUSSION**

The research aimed to analyze the characteristics of microlearning covered in English textbooks for twelfth-grade senior high school students. The study examined four textbooks commonly used in 30 schools in Jakarta and surrounding areas: "Bahasa Inggris Kelas XII," "Pathway to English XII," "Cambridge English Mindset for IELTS XII," and "English Alive XII." The researchers applied six characteristics of microlearning to these textbooks, which included small, engagement, specific outcomes, flexibility, self-paced, and traceability. "Cambridge English Mindset for IELTS XII" was found to encompass all six characteristics, demonstrating its alignment with microlearning characteristics. "Pathway to English XII" covered five of the six characteristics, and "Bahasa Inggris Kelas XII" covered four. However, "English Alive XII" only covered three characteristics, lacking micro-divided learning content and interactivity. The expression "small size" refers to microcontent or learning elements that
are ordered and cannot be broken into smaller parts, as well as having a specific emphasis. (Leene, 2006). Peters, (2021) agrees that Microlearning is described as brief, little chunks of knowledge used to achieve a specific learning goal.

Regarding “engagement”, Kimani et al., (2017) stated that Microlearning information is similarly compact and targeted enough to accomplish a specific goal. It might be a video, an essay, a blog, an eBook, an audio clip, or any other sort of material that can be simply indexed and accessible. "Bahasa Inggris Kelas XII" textbook employed various illustrations and images to attract students' attention, while "Cambridge English Mindset for IELTS XII" stood out with engaging learning variations and multimedia elements. Microlearning is described as short, small chunks of knowledge used to achieve a specific learning objective. (Allela, 2021; Mayer & Moreno, 2003).

However, "Pathway to English XII" and "English Alive XII" lacked multimedia content, potentially leading to decreased engagement. In terms of specific outcomes, "Cambridge English Mindset for IELTS XII" and "Pathway to English XII" demonstrated structured microlearning objectives, while the other two textbooks lacked this characteristic.

All four textbooks provided flexibility in terms of accessibility and adaptability to various learning environments, allowing students to access content during the learning process and outside of class time. According to (Jomah et al., n.d.) Its success is due to the perfect combination of little chunks of learning information and the flexibility of technology. For self-paced learning, students could choose their learning stages and exercises independently in all textbooks when studying outside of school hours. Lastly, all textbooks were traceable, as they were easily accessible through schools, bookstores, or online platforms.

Finally, "Cambridge English Mindset for IELTS XII" and "Pathway to English XII" were found to best align with microlearning characteristics, offering engaging, specific, and flexible content. However, "Bahasa Inggris Kelas XII" and "English Alive XII" showed potential shortcomings in specific objectives and engagement, respectively. These findings can provide valuable insights for educators and curriculum developers to enhance the quality and efficacy of English language education using microlearning techniques.

CONCLUSION

The researchers conducted a thorough analysis of four English textbooks used in 12th-grade senior high schools in Jakarta and surrounding areas. They applied six characteristics of microlearning to these textbooks and found that "Cambridge English Mindset for IELTS XII" and "Pathway to English XII" demonstrated the most alignment with these characteristics,
offering engaging, specific, and flexible learning content. These two textbooks effectively utilized micro sub-competencies, and interactive elements, and provided structured learning objectives. On the other hand, "Bahasa Inggris Kelas XII" and "English Alive XII" showed some limitations, with the former lacking specific objectives and the latter missing multimedia engagement. The study revealed that all four textbooks provided flexibility and traceability, allowing students to access the content easily in various learning environments. Moreover, the self-paced characteristic allowed students to choose their learning stages and exercises independently, benefiting their learning process outside of school hours.

In conclusion, "Cambridge English Mindset for IELTS XII" and "Pathway to English XII" emerged as the most suitable textbooks for aligning with microlearning characteristics, enhancing students' engagement, and providing specific learning outcomes. The findings highlight the importance of implementing microlearning elements to create effective and engaging learning materials for senior high school students.

**RECOMMENDATIONS**

The recommendation for the future researcher is analysis of textbooks can be an alternative in determining research, this research can also be developed on the scope of research and other specific expertise. Furthermore, the time spent on this research can be added because there are still many aspects that need to be studied more deeply.

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