Readability Test Analysis of Halal Digital Module in Vocational Students of PoliMedia

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Abstract. Halal certification is one of obligation for culinary product to be distributed in market in Indonesia. This research was conducted to analyse the readability of halal digital module developed as one of learning tools for vocational students to gain competence in halal certification. The research was conducted in art culinary study program of Politeknik Negeri Media Kreatif. The readability test conducted in term of material content, visual appearance, and language. The analysis conducted using questionnaire method using 5 scale Likert chart toward 30 students. In term of material content, it was found that overall score of material content was considered very good with overall acceptability score 4.1167/5; the highest point being easily understood by vocational student. In term of visual appearance, overall it considered as good with overall acceptability 4.0067/5, with highest point being visually suitable for vocational student. In term language, it scored 4.1333/5 and considered as good. The highest point in language was being easily interpreted by vocational student. Overall, the halal digital module having a good readability with score 4.1056/5...

Keywords: Halal, Digital module, Readability

1 Introduction

A learning module is a structured unit of instructional content designed to teach a specific topic or skill. It typically includes various educational resources and activities such as readings, exercises, quizzes, and discussions. Learning modules are often part of a larger curriculum or educational program, and they can be delivered in various formats, including online platforms, printed materials, or a combination of both [1]. Learning modules is very important of learning process. Learning modules break down complex subjects into manageable parts, making it easier for students to grasp and retain information. Each module focuses on a specific aspect of the subject, which helps in systematic learning and ensures that all necessary topics are covered [2].

A digital module in the context of education refers to an interactive, electronic unit of instruction designed to facilitate learning through digital means. These modules can include a range of multimedia elements such as text, video, quizzes, and simulations, all delivered via online platforms. The effectiveness of digital modules lies in their ability to offer flexible, self-paced learning opportunities that cater to various learning styles. They can enhance student engagement by incorporating interactive and multimedia elements, which often lead to improved retention of information. Moreover, digital modules can provide immediate feedback, allowing learners to assess their understanding and adjust their study strategies in real-time. The

importance of digital modules is underscored by their role in making education more accessible and adaptable, particularly in diverse or remote settings. They support lifelong learning by providing resources that can be revisited and updated, thereby fostering continuous skill development and knowledge acquisition [3]. Unfortunately, in term of halal study, the availability of digital halal modules are still very limitted. Some digital modules exixst only for paid training which highly cost.

A readability test is a tool used to assess how easy or difficult a piece of text is to read and understand. These tests evaluate various aspects of the text, including vocabulary complexity, sentence length, and overall structure, to determine its suitability for a specific audience. The goal is to ensure that the material is appropriate for the intended readers, whether they are students, professionals, or general readers [4]. Readability tests help ensure that the content is written at an appropriate level for the target audience. By evaluating factors such as sentence length, word complexity, and overall text structure, these tests can identify whether the material is accessible and understandable to learners [5]. Content that is easy to read and comprehend is more likely to engage learners. If the material is too complex or difficult to understand, students may become frustrated or disinterested. Ensuring readability helps maintain engagement and motivation [6]. Readability tests can help accommodate diverse learning needs, including those of non-native speakers, learners with different educational backgrounds, and individuals with varying levels of literacy. By tailoring the readability of content, modules can be made more inclusive [7]. Readability tests can help minimize cognitive load by ensuring that the text is concise and well-organized. This allows learners to process information more efficiently without being overwhelmed by dense or convoluted language [8]. Readability tests provide valuable feedback for content developers and educators. By assessing the readability of their material, they can make informed adjustments to improve clarity and effectiveness before the module is published [9]. Overall, incorporating readability tests into the development of new learning modules ensures that the content is clear, engaging, and accessible, which enhances the overall learning experience and outcomes [10]. In this research, digital halal module was developed. To test the effectivity of the module, readability test is important to be conducted. In this research readability test was conducted to evaluate the development of halal digital modules. This research was important since there's still limited digital reference in halal supervisor scheme. The research is beneficial as one of footstep for further development of learning materials regarding halal certification.

2 Methods

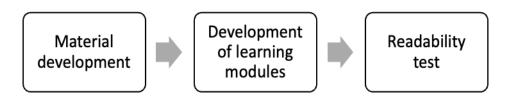


Fig. 1. Flowchart of readability test analysist.

Before readability test was conducted, material of module was developed referring to Indonesian National Standard of Working Competence (SKKNI) of halal supervisor scheme. The module was developed using adobe illustrator. Segmentation of the module was for vocational higher students. Readability was conducted in term of material content, visual appearance, and language. In term of material, the comprehensive of the material, modernity, and the delivery of the material was analyzed. In term of visual appearance, the attractiveness, the suitability with the target, and the ability of the visual appearance to motivate the readers was measured. In term of language, the ability of the language used to be understood, simplicity, and intrepertative of language used was measured. 30 students from art culinary study program was randomly selected as respondents for the measurements. The measurements was analysed using 5 scale likert chart with description as bellow,

Table 1. Likert Chart Description.

Score	Description
1	Very bad
2	Bad
3	Neutral
4	Good
5	Very Good

The interval of interpretation was analysed using formula bellow

$$Interval = (Highest \ value - lowest \ value) / number \ of \ respondents.$$
 (1)

The amount of interval was described in table below,

Table 2. Likert Chart Description.

Score	Description
1.0 – 1.7	Very bad
1.8 – 2.5	Bad
2.6 – 3.3	Neutral
3.4 – 4.1	Good
4.2 – 5.0	Very Good

3. Results and Discussion

This research aimed to evaluate the effectivity of halal digital module as one of alternative for education media especially for vocational student. The component that being validated in this research was material content, visual appearance, and language. The results of the analysist were bellow,

3.1. Readability of material content

Table 3. Readability analysist result of halal digital module.

	Score	Description
Modernity	4.1	Good
Comprehens ive	4.15	Good
Delivery	4.1 Good	
Overall readability	4.12	Good

The material content is very important in development of learning module. High-quality content ensures that learners receive accurate and up-to-date information. This is vital for building a solid foundation of knowledge and avoiding the spread of misinformation [11]. Well-chosen material that is relevant to learners' interests and needs can significantly boost the effectivity of learning module [12]. It also able to help inspire and motivate students [13]. In this research, it was found that overall the material content of module scored 4.1167/5. It can be concluded that it has good readability. The module material can give clarity to students, understood easily by students, and help them retain information [14]. The material content is adaptable and can meet the diverse needs of students [15].

3.2. Readability of visual appearance

Table 4. Readability analysist result of halal digital module visual appearance.

	Score	Description
Attractivene ss	4.0	Good
Motivation	4.0	Good
Suitability with readers	4.2	Good
Overall readability	4.0667	Good

A well-designed module that is visually appealing and easy to read enhances the overall user experience. Users can quickly understand and interact with the module, reducing frustration and improving satisfaction [16]. Good readability and visual design can help minimize misinterpretation in students. The visual appearance of a module reflects the quality and professionalism of the product or service [17]. In this research overall readability of visual appearance of module was 4.0667/5. It categorized as good. In summary, visual appearance of digital module can help students to study properly about halal certification.

3.3. Readability of language used in module

Table 5. Readability analysist result of halal digital module language.

	Score	Description
Interpretation	4.15	Good
Ability to be understood	4.15	Good
Attractiveness	4.1	Good
Overall readability	4.1333	Good

The primary goal of a learning module is to convey information effectively. Using clear, straightforward language ensures that learners understand the content without confusion. Complex or ambiguous language can obscure the message and hinder comprehension. In this research it was found that the language readability was good (4.1333/5). It can be easily interpreted and understood by students. Good readability in language proven as one of proof that the design process of module already in accordance with student's background and proficiency [18]. It also proofs that the module can communicate properly with the readers.

Language that resonates with the learner's level and background helps maintain their interest and motivation. If the language is too advanced or too simplistic, learners may become disengaged or frustrated [19]. Learners are more likely to retain and apply information presented in a language they understand well. If the language is tailored to their needs and familiarity, they can better grasp and use the concepts taught [20].

4. Conclusion

Overall, the halal digital module performed a good readability. In term of material, the strongest point of the module was the comprehensive of the module. In term of visual, the strongest point of the module was it suitability with users. In term of language, it was easily interpreted and understood by students.

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