QUALITY OF INSTRUCTIONAL MEDIA OF MULTILINGUAL THEMATIC DIGITAL DICTIONARY FOR ELEMENTARY SCHOOL STUDENTS

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Abstrak
Abad 21 dan era globalisasi yang mendunia membawa perubahan dalam berbagai aspek. Titik awal penerapan teknologi dipengaruhi karena fokus pengembangan kualitas manusia. Titik tolak perkembangan teknologi dalam pendidikan dapat dilihat dari penggunaan media dalam proses belajar mengajar di segala jenjang, tak terkecuali di tingkat Sekolah Dasar. Mewujudkan penerapan dari teknologi melalui penggunaan media pembelajaran seperti PowerPoint, video, lagu atau ilustrasi juga penting untuk membantu proses belajar. Hal ini berdampak positif baik guru maupun siswa dalam proses pembelajaran. Oleh karena itu, pengembangan kamus digital tematik multilingual berbasis Power Point yang telah dikembangkan sebelumnya dapat menjadi media yang baik dalam membantu keterampilan literasi siswa, karena dikembangkan berdasarkan kurikulum, terlibat dengan teknologi dan menyediakan kosakata dalam Bahasa Inggris, Bahasa Indonesia dan Bahasa Bali sebagai konten utama. Selain itu, penelitian ini bertujuan untuk mengetahui kualitas kamus digital multibahasa berdasarkan bentuk evaluasi kualitas dan validitas produk dengan hasil uji kualitas oleh dua orang ahli. Penelitian ini berhasil mendapat presentase nilai sebuah produk media kamus digital multibahasa yang dapat tergolong media yang sangat layak dengan nilai validitas sebesar 0.91 poin dengan kualitas sangat baik.

Abstract
This 21st century and globalization era bring changes in various aspects. The starting point of the implementation of technologies is affected due to human development focus. The starting point of technological developments in education can be seen from the media use in the teaching and learning process. Manifesting technology through the use of instructional media, such as PowerPoint, video, song or illustration is also important to help both teachers and students in the process of learning. Therefore, the development of a Multilingual thematic digital dictionary of PowerPoint-based that has been produced can be a good media in assisting students' literacy skill since it develops based on the curriculum, is involved with technology, and provide vocabulary as the main content. In addition, this research aimed on finding the quality of a multilingual digital dictionary based on the evaluation form of quality and validity of the product by expert judgment. This research resulted in digital dictionary media product produced is considered very decent media of 0.91 point with excellent quality.

Keywords: *Instructional media, literacy, digital Multilingual Thematic dictionary, quality*

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INTRODUCTION

Some researchers recommend teaching English to young learners. Many researchers conducted a study on how important English is to be taught from an early age. In line with that, Ratminingsih et al. (2021) found that children have language acquisition devices that make them easier to learn a new language. Cameron's study in language teaching believes that introducing young learners to a new language may benefit other language skills (Apriliana, 2018). This issue brings phenomena in effective and efficient learning media. The term media is only a good media. Still, it also deals with the way teachers optimize the utilization of the media, especially for instructional media in the teaching and learning process.

According to a study conducted by Wulandari et al. (2021), dictionaries are a good media for accessing students' language skills. Taking the previous study, it may take utilization of technology also. The growing era makes the increase of the use of technology in our environment, especially in this 21st century. Besides, the 21st century is considered a globalization era. Globalization is best described as a change in many aspects and fields (Gunarwan cited in Prijambodo, 2017). Moreover, new cultures appear as the impact of globalization. The use of digital media in many aspects is becoming wider. One of the fields that are affected by globalization is in education. There is no doubt that integrating technology may bring immense benefits in the education field.

The use of digital media as a media in the teaching and learning process is obvious. Looking at the contribution of digital media today, students can use this media to help their learning process. On the other side, teachers may get the positive benefit of utilizing digital media in the language classroom. Some experts found that digital media is successfully helping the learning process in language skills, especially in vocabulary mastery which is impeccable to students' literacy skills. The uses of digital media are given benefits. According to Andeska (2019), there are three benefits of

using digital media. First, digital media may stimulate students' learning motivation. Second, digital media helps in constructing learners' target language and sometimes can create relationships with the culture of the target language. Third, digital media can provide experience in teaching and learning English foreign language significantly. From those benefits, it is believed that digital media is one of the useful media for teaching foreign languages.

The study conducted by Suniyasih et al. (2020) found that many elementary school teachers are difficult to deliver the material, especially in English language learning. They add, most of the teachers deliver the material in a boring situation. It makes the material cannot transfer effectively because of teacher skill or media in use. A case study on utilizing instructional media in teaching English for young learners by Sukmahidayanti (2015) also states that many teachers think that good media is the expensive one and needs to be learned in extra time. However, Sukmahidayanti (2015) emphasizes that good media is reusable and give a big impact on building effective instruction in the classroom.

Many research hold on the best media use for mastering vocabulary. The study conducted by Rohmatillah (2016) suggests dictionaries as the learning media for mastering vocabulary. Dictionaries are considered as learning media that provide grammar, usage, status, synonym, and other language tools. In line with that, Suniyasih et al (2020) and Ratminingsih et al (2021) emphasize that dictionaries can help students by facilitating them with word, meaning, pronunciation, and, of course, helping them to become vocabulary masters. Through using a dictionary, someone can understand the different concepts from one word. People can find out information about words in dictionaries and suggest using a dictionary as a media to support students' language learning.

The current study is related to the quality of utilizing digital learning media in the form of a digital multilingual thematic dictionary in order to improve students' literacy skills. The aim of this study is to describe the quality of the development of multilingual thematic digital dictionary in helping students to improve their literacy skills.

METHOD

Research Design

This study is a descriptive research which aims to describe the quality of the developed product, that is Multilingual Thematic Digital Dictionary. Prior to the quality judgment, the instrument used to access was validated by two experts in the fields of English education and technology and Balinese language in order to investigate the content validity of the instrument.

The technique of Analysis Data

The data was analyzed quantitatively to determine the validity and quality of the product. The Gregory Formula was used in this study which refers to the judge results from the experts. Obtaining the quantitative data from instrument results by changing the data into this following table

Table 1. Guidelines for the Scoring of Validity Judgment

Range	Quantitative Data
0.8-1.00	Very decent
0.6-0.79	Feasible
0.40-0.59	Quite decent
0.20-0.39	Less feasible
0.00-0.19	Not feasible

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Table 2. Cross Tabulation by Gregory Formula

Tabulation Result		Expert 1	
		irrelevant	relevant
Expert	irrelevant	A	B
2	relevant	C	D

Formula V = validity

$$V \frac{D}{(A+B+C+D)}$$

A = both experts disagreed

B = 1st expert agreed,
   2nd expert disagreed

C = 1st expert disagreed,
   2nd expert agreed

D = both experts agreed

Table 3. The Categories in Rating the

Quality of Media by Nurkancana &

Surnartana (2004)

Score	Criteria
X ≥ Mi +1.5Sdi	Excellent
Mi + 0.5Sdi ≤ X < Mi +1.5Sdi	Good

Mi − 0.5Sdi ≤ X < Mi + 0.5Sdi	Average
Mi −1.5Sdi ≤ X < Mi −0.5Sdi	Below Average
X < Mi −1.5Sdi	Poor

FINDINGS AND DISCUSSION

Findings

In this research, validation results by two experts was focused on content, design, and technical of the product. Assessment using a questionnaire was analyzed with Gregory Formula and has maximum scale range from 1 until 5. The result of the assessment of expert aspect can be seen in the following table 4.

Table 4. Expert media validity result

Tabulation Result		Expert 1	
		irrelevant	relevant
Expert 2	irrelevant	0	0
	relevant	2	21

The result is:

$$V \frac{21}{(0+0+2+21)} = 0.91$$

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Based on the results of cross-tabulation using Gregory Formula, the content validity level obtain 0.91 with very decent validity criteria. This score is greater than the minimum score of 0.60. Therefore, it can be concluded that the instrument above has met the content validity criteria.

The quality judgment rubric consisted of twenty-three criteria (Islam & Purkayastha, 2015; Setyawan, 2016; Saptani, 2016; Asista & Karim, 2015; Pick, 2019, and Sharif, 2012) combine with evaluation digital media theory by Owen & Lee (2004) and had minimum and maximum quality scores. The minimum score shows with 1 score and 5 for maximum score. The maximum and minimum scores were accumulated in order to get the result. It can be inferred that the maximum score was 115 and the minimum score was 23. The calculated minimum and maximum scores would be used to measure Mi and Sdi based on the Nurkancana and Sunartana formula theory. The results are as follows.

$$Mi = \frac{1}{2} \text{(score Max + score Min)}$$
$$= \frac{1}{2}(115 + 23)$$
$$= \frac{1}{2}(138)$$
$$= 69$$
$$Sdi = \frac{1}{3} \text{(Mi)}$$
$$= \frac{1}{3}(69)$$
$$= 23$$

Based on that, the calculation for each category is further as follows.

Excellent category

$$X \geq Mi + 1.5Sdi$$

$$X \geq 69 + 1.5(23)$$

$$X \geq 69 + 34.5$$

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$X \geq 103.5$

Good category

$\text{Mi} + 0.5\text{Sdi} \leq X < \text{Mi} + 1.5\text{Sdi}$

$69 + 0.5(23) \leq X < 69 + 1.5(23)$

$69 + 11.5 \leq X < 69 + 34.5$

$80.5 \leq X < 103.5$

Average category

$\text{Mi} - 0.5\text{Sdi} \leq X < \text{Mi} + 0.5\text{Sdi}$

$69 - 0.5(23) \leq X < 69 + 0.5(23)$

$69 - 11.5 \leq X < 69 + 11.5$

$57.5 \leq X < 80.5$

Below average category

$\text{Mi} - 1.5\text{Sdi} \leq X < \text{Mi} - 0.5\text{Sdi}$

$69 - 1.5(23) \leq X < 69 - 0.5(23)$

$69 - 34.5 \leq X < 69 - 11.5$

$34.5 \leq X < \text{Mi} - 57.5$

Poor category

$X < \text{Mi} - 1.5\text{Sdi}$

$X < 69 - 1.5(23)$

$X < 69 - 34.5$

$X < 34.5$

After calculating the value on each category, the criteria by Nurkancana and Sunartana could be presented as the Table 5 below.

Table 5. Result of Quality Criteria based on the theory by Nurkancana & Sunartana (2004)

Score	Criteria
$X \geq 103.5$	Excellent
$80.5 \leq X < 103.5$	Good
$57.5 \leq X < 80.5$	Average
$34.5 \leq X < Mi -57.5$	Below Average
$X < 34.5$	Poor

The range of categories value of the digital dictionary above is used as the indicators to determine the product quality. The total judgment by the first and second experts was 108 and 114. The results of both scores were above 103.5 which means that the quality of the product was regarded as an excellent category. Hence, experts' perceived that the multilingual thematic digital dictionary was an excellent instructional media for improving elementary school students' literacy skills.

Discussion

Based on the that instructional media can help students improve their literacy skills. It also helps the teacher side to implement this media in the teaching and learning process to build a good class atmosphere. Since this multilingual thematic dictionary was arranged based on curriculum, it can also be used to accommodate the curriculum's needs. There were two judgments conducted to value the dictionary. Those judgments were content validity judgment and quality judgment. There were two experts who judged the content validity of the dictionary, namely English-Indonesian experts and

Balinese experts. The result of the judgments showed that the dictionary fulfilled the criteria of a good multilingual thematic picture dictionary which were adapted and modified from Islam & Purkayastha, 2015; Setyawan, 2016; Saptani, 2016; Asista & Karim, 2015; Pick, 2019, and Sharif, 2012 combined with evaluation digital media theory by Owen & Lee (2004).

The preliminary study proposed by Rohmatillah (2016) emphasized that media is important to be utilized in teaching and learning process. She suggest that dictionary is the one of the supportive media that can be utilized in the classroom. Regarding to the Rohmatillah study, Wulandari, et al. (2020) conduct a study which developed a media in the form of dictionary. It was consisted with three different languages and arranged with themes. However, the product not enough take an interest of the development of technology. Considering those statement, utilizing digital media in teaching and learning process is a way which are suitable with 21st century skills. The development of multilingual thematic dictionary was a continued process of the study conducted by Wulandari, et al. (2020) and need to be evaluated.

Based on the result, the dictionary is needed to be revised on the navigation, menu, and instruction aspect. Quality judgment is conducted to know the quality of the product. All of the expert's judgments got scores of 108 and 114, and both scores were categorized as excellent and got the coincident value. The content validity judgment showed that the development of multilingual thematic digital dictionary was very decent with the criteria of a good dictionary. Conclusively, the multilingual thematic digital dictionary is categorized as the attractive media for assisting students' literacy skills.

Those result were related with the study proposed by Rohmatillah (2016) and Suniyasih, et al. (2020) which stated that multilingual thematic dictionary is a media which provide the users with word, examples of the sentences, pronunciation through

voice or sound, good appearances of layout though the animation and pictures which is helped to increase literacy skills.

CONCLUSION AND SUGGESTION

Conclusion

Multilingual thematic digital dictionary of PowerPoint-based that has been produced can be the media in providing a vocabulary of International, National, and Local language. In addition, this product is involved with voice features in each vocab that are helpful for users. It makes users produce their communicative skills properly and correctly. Thus, the use of a multilingual thematic dictionary (English-Indonesian-Balinese) provides a solution due to literacy, especially in the degradation of the use of local and the development of international language. This type of dictionary is also categorized as attractive media since it involves colorful design and pictures.

Through the result of evaluation based on expert's judgment. The evaluation was done through content validity judgment and quality judgment. It was judged by two experts, of English-Indonesian expert and an Indonesian-Balinese expert. This evaluation test is based on several aspects, including content and design, navigation and menu, technical procedure, and voice text. The validity judgment results were analyzed using the Gregory formula, while the quality judgment was analyzed using Nurkancana and Suhartana theory. It was concluded that instructional media in the form of multilingual thematic dictionary is very decent media with excellent quality.

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Suggestion

Based on the explanation above, it is suggested that both teachers and students implement this type of dictionary in the teaching and learning process since it is suitable with 21st century skills in assessing students' literacy skills. This product will support students in the teaching and learning process, especially in acquiring three different languages. Students will enjoy implementing this media because simple to operate the media. Besides, this media will develop students' vocabulary mastery and gradually develop and expand students' literacy skills. Moreover, it is suggested for other researchers to develop this dictionary into an application, not only on PowerPoint-based media.

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