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Development of an English module based on Bugis' local wisdom

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ABSTRACT

Article history: This study aims at developing high school English learning modules Received: Jun 01, 2023 based on Bugis culture. This research applied Development Design Research (DDR) approach and involved several parties related to the Revised: Jun 07, 2023 & development of the EMBOS module, namely high school English Jul 20, 2023 teachers and experts. Data were collected by using Focus Group Accepted: Aug 14, 2023 Discussion. The data were analyzed qualitatively using the N-VIVO Keywords: software, and the quantitative data were analyzed using the Fuzzy **Bugis** Delphi and Aiken's V methods. Needs analysis using the Group Culture Interview method or Focus Group Discussion resulted in several issues English or themes. The results of expert approval using the Fuzzy Delphi method Local wisdom found that the Mappadendang topic received approval in the *Conflict of interest:* song/narrative material with a Threshold (d) value of 0.038 and an None average of Fuzzy Number 0.787. The topic of Mappadinding received Funding information: approval on the Explanation Text/ Description Text material with a None Threshold (d) value of 0.038 and an average fuzzy number of 0.787. Nene *Malomo's* topic on Traditional Story/Narrative Text/Reading Correspondence: Comprehension material with a Threshold (d) value of 0.038 and an Mujahidah, English average of Fuzzy Number 0.787. Developing an English learning module Department, Tarbiyah based on Bugis Local Wisdom consists of the beginning, content and the Faculty, State Islamic end. Experts have validated the EMBOS module. The results of expert Institute of Parepare, validation indicate that this module is generally suitable for use in **INDONESIA** learning English at the high school level or equivalent. An English mujahidah@iainpare.ac.id learning module based on Bugis local wisdom can be implemented as an alternative to bring students closer to their environment or contextual learning. ©Mujahidah, Wahyu Hidayat, Muhamad Zuhri Dj, Ishak

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Mujahidah, Hidayat, W., Dj, M.Z., Ishak. (2023). Development of an English module based on Bugis' local wisdom. *JOALL (Journal of Applied Linguistics and Literature)*, 8(2), 454-487. https://doi.org/10.33369/joall.v8i2.27894 **English** proficiency is one of the success factors for a country to compete in the international world. In the era of free market competition and the 4.0 revolution, English proficiency and the ability to use technology are necessary to compete with other countries. In the 2018 report, the English Proficiency Index placed Indonesia at number 51 (Education First, 2018). This ranking has decreased from the previous ranking of 39 out of 80 countries in 2017. Indonesia is ranked 13th in Asia below Singapore, the Philippines, Malaysia and Vietnam. The English Proficiency Index or EPI is one of the indicators in examining the English skills of junior high school (SMP) and senior high school (SMA) students; one of the skills measured is reading and listening. The report also states that, in general, junior and senior high school students in Indonesia have low reading and listening skills in English.

In the Program for student assessment (PISA) to assess reading literacy, mathematical ability and scientific ability organized by the Organization for Economic Cooperation and Development (OCED), for scientific ability, Indonesia ranks 62 and Mathematics ability ranks 63. Meanwhile, reading skills ranked 64th out of 70 countries in 2015 (OCED, 2016). Even in Southeast Asia, Indonesia still loses to Singapore, Malaysia and Thailand.

Based on the EPI indicator, it shows that the quality of our students' English is still far from that of other countries. Likewise, in the context of reading literacy as measured by PISA, the reading quality of Indonesian students, especially those who read texts in English, still needs to improve. Reading the English text is an uninteresting activity for some students, so they are not motivated. Therefore, it is necessary to work hard to improve the English skills of Indonesian students. One of the popular approaches lately is the emphasis on learning high-order thinking. Thinking skills are the most essential skills that can be developed in the classroom and are the key to success in students' learning abilities (Nessel & Graham, 2007). Higher-order thinking skills are one part of the components of thinking skills. Higher-order thinking skills (HOTS) are skills students possess using the knowledge, skills and values obtained to solve problems, make decisions and create something original (Brookhart, 2010; Schraw & Robinson, 2011). Based on Bloom's revised taxonomy, the cognitive stage of higher-order thinking includes analysis, evaluation and creation (Anderson & Krathwohl, 2001). High-level thinking skills are fundamental in the government's efforts to produce creative and innovative students in the face of the 21st century and the 4.0 revolution (Ulger, 2018).

Encouraging students to be interested in learning English requires a paradigm shift from the teacher. The learning paradigm needs to be changed from teacher-centred learning to student-centred learning. In addition, learning English needs to be more contextual. Learning English should be more accurate and not cut off from the local culture. It is then better known as contextual learning. According to Berns & Erickson (2001), contextual learning is a learning model that connects student material with real situations. Contextual teaching and learning is a concept that can help teachers relate learning materials to students' real situations and encourage students to connect their knowledge with student life applications (Muslich, 2007). One of the characteristics of the contextual approach, according to Johnson (2012), is critical and creative thinking and achieving high standards. It aligns with learning efforts oriented to higher-order thinking skills, one of which is critical and creative thinking, which is included in the level of analysis, evaluation and creation in the cognitive domain. Contextual learning can also be related to real life in the context of the culture in the student's environment (Ramdani, 2018).

One approach to contextual learning can be made by introducing students to the culture and local wisdom in the environment where students live (Shufa, 2018). According to Utari et al. (2016), local wisdom is intelligence towards the wealth of an area in the form of knowledge, beliefs, norms, customs, culture, and insights inherited and maintained as an identity and guide in teaching us to act appropriately in life. Local wisdom-based learning is significant because it can bring students closer to their immediate environment, often encountered by students in everyday life (Utari et al., 2016). The values of local wisdom can help students understand a concept or material in learning. According to Choudhury (2014), language learning is cultural learning and language teaching is cultural teaching. However, learning a new culture does not mean we forget our previous culture. Culture-based English learning can also increase students' cultural awareness and improve communication competence (Choudhury, 2014).

In learning English in schools, it is suspected that they have ignored the values of local wisdom as contextual learning (Damayanti & Mundilarto, 2017). Awareness of cultural diversity and local wisdom of students is low; on the other hand, primordialism and fundamentalism movements that can threaten the nation's disintegration are getting stronger.

Local wisdom is the community's cultural wealth, including Bugis' local wisdom. Local wisdom is an unwritten value or rule that becomes a principle from generation to generation and inspires a person. Local wisdom is an accumulation of the results of cultural activities in responding to and treating the environment, describing the way a society behaves and acts to respond to changes that are typical of the physical or cultural environment. So that local activity can be used as a way to implement the curriculum of 2013, which has specificity in the application of education obtained by students in schools in specific community environments.

The Ministry of Education and Culture calls local wisdom with the term local excellence. Besides that, learning based on local excellence has several juridical foundations, including Government Regulation or *Peraturan Pemerintah* (PP) number 19 of 2005 Chapter II article 14 paragraph 1 states that "for SMA / MA / SMALB or other forms of other equals can include education based on local excellence. Therefore, this becomes the basis for integrating or internalizing local wisdom values in learning, including English learning, which is highly recommended. Internalization or integration of local wisdom values to be included in high school English learning or the equivalent is an urgent matter to do because some valuable values brought by local wisdom are starting to fade in our lives, especially students who live in the Bugis cultural environment.

Several studies related to the importance of culture, one of which is Liu (2011), states that students' understanding of cultural reading material is influenced by their cultural background. Understanding reading material related to their own culture is better than foreign cultures. The study of Sabatini and O'Reilly (2013) shows that there is a statistically significant performance difference in reading comprehension between subjects who have cultural background knowledge and those without knowledge, where the average score of the class of students who have cultural background knowledge is compared to the average score class of students who do not know.

In addition to the importance of the millennial generation staying in their cultural roots, students also need to be familiar with technological developments. The use of technology in learning is also part of contextual learning. In today's developments, the use of technology cannot be separated from the lives of students and teachers. The world of education in the 21st century is constantly changing. Technology-based inventions and innovations have changed the world view of students and teachers as a substitute for the teaching and learning process. The traditional didactic style in the classroom tends to be inefficient, irrelevant and ineffective, related to students' learning and learning styles (Kenna, 2014). Then came an approach to learning called flipped learning. The flipped learning approach is an activity of loading content in class and consolidating that content in class. Content learning is done outside the classroom with the help of digital technology and the Internet. The salient feature of the Flipped learning approach is that students are agents of their learning and are student-centred learning (Hamdan et al., 2013).

Several studies show that the flipped learning approach is more effective than the traditional approach and gets students' responses (Deslauriers et al., 2011; Pierce & Fox, 2013; Roehl et al., 2013). According to Milman (2012) and Ash (2011), one flipped learning approach is using video.

Improving higher-order thinking skills by connecting learning with real life and utilizing technology is a 21st-century challenge for teachers. Therefore, an alternative way is needed to improve student's English skills, especially in South Sulawesi, using a local wisdom-based learning module with a flipped learning approach. As an illustration of English proficiency, English junior and senior high school students in South Sulawesi were ranked the lowest of the 11 provinces measured in 2018 with an average score of 43.51 and categorized as low (Education First, 2018). Based on the explanation above, the researchers endeavoured to design an educational product, namely a senior high school (SMA) English learning module or equivalent based on Bugis local cultural wisdom and higher-order thinking skills with the Flipped Learning approach. This module was named "EMBOS" (English Module Based on Bugis Local Culture).

This research generally aims to produce high school English learning modules based on local Bugis cultural wisdom. Specifically, this study aims to answer the following research questions: (a) what are the values of Bugis local wisdom that can be used as topics in high school English learning modules based on Bugis local cultural wisdom based on needs analysis? (b) how is the high school English learning module based on Bugis' local cultural wisdom? (c) how is the expert's assessment of the product of high school English learning modules based on Bugis' local cultural wisdom?

METHOD

Research Design

The research design refers to the design or strategy in research (Fraenkel & Wallen, 2006; Plomp, 2007; Van den Akker et al., 1999; Wiersma, 2000). Development Design Research (DDR) is applied in this study. According to Richey and Klein (2007), DDR aims to design a program, strategy and learning materials and products to solve problems in education.

The approach in this study uses a mixed approach. This approach combines qualitative and quantitative approaches (Creswell, 2013; Cresswell & Plano, 2011; Leech & Onwuegbuzie, 2009; Uprichard & Dawney, 2016). This approach has advantages such as 1) complementing qualitative and quantitative data, 2) balancing the weaknesses between quantitative and qualitative approaches (Cresswell, 2013; Cresswell & Plano, 2011; Kleanthous, 2009), 3); Research is more comprehensive than just one approach (Creswell & Plano, 2011). A quantitative approach is used in the needs analysis and expert approval phases. In comparison, the qualitative approach is carried out in the development or manufacturing phase of the module product.

Research Procedure

The procedure for developing the EMBOS module following the explanation



text and report text materials is described as follows:

Figure 1. Research Procedure

Subject of the Research

This study involved several parties related to the development of the EMBOS module, namely high school English teachers in Pinrang, senior high school students of X grade in Pinrang, teachers who are members of the MGMP in Pinrang, experts including English language education experts, Bugis culture experts. The sample in this study is purposive sampling. Through this sampling technique, the best subject can provide a source of information to help researchers understand the phenomenon to be studied (Creswell, 2009).

Focus Group Discussion Informant

The number of participants in a group is sufficient for 7-10 people. However, it can be reproduced for up to 12 people, thus allowing each individual to have the opportunity to express his opinion and get enough views from varied group members (Krueger, 1988). A more significant number of participants can also provide other benefits, namely broadening the perspectives and experiences of participants that may arise. However, although the number of participants is not significant and the time for expressing opinions is not limited, participants have a specific time limit for speaking because the focus of attention is not only on one respondent but all participants. It distinguishes the FGD qualitative data collection technique from the one-by-one interview technique. Participants must have the same or homogeneous characteristics. These common characteristics are determined by the purpose or topic of discussion while respecting and paying attention

to differences in race, ethnicity, language, literacy, income and gender (Krueger, 1988).

The criteria used in selecting experts are those who have relevant experience in the issues discussed, can contribute views, make judgments and make decisions to reach an agreement (Avella, 2016). There are several opinions regarding the sample size in the Delphi study. Wiersma and Jurs (2009) confirmed that the sample size was 10 to 30 people. Avella 2016; Delbecq et al. (1975) also suggested that 10 to 15 people would suffice as a sample if the background were homogeneous. Witkin and Altschuld (1995) argue that the sample is usually fewer than 50, and those involved must have experience and have worked in a particular field. Boonon (1979) offers a more practical way of sample selection based on reducing errors, as shown in Table 1.

Panel Size	Error Reduction	Net Change
1-5	1.20 - 0.70	0.50
5-9	0.70 - 0.58	0.12
9-13	0.58 - 0.54	0.04
13-17	0.54 - 0.50	0.04
17-21	0.50 - 0.48	0.02
21-25	0.48 - 0.46	0.02
25-29	0.46 - 0.44	0.02

Source Boonon (1979)

Table 1 presents the consistent nine to 13 and 13 to 17-panel error reductions at 0.04, in contrast to only 0.02 net changes for pools 17 to 21, 21 to 25 and 25 to 29 panels. The difference in the reduction in error remains at 0.02 even though the expert number increases. In addition, it was noted that the larger the number of experts, the smaller the level of agreement reached (Meijering et al., 2013). With the criteria that have been stated, this study consists of at least 14 panels of Fuzzy Delphi experts. There are eight content experts: practitioners (teachers) and English education experts.

Instrument

EMBOS Module Development

The development of this module refers to the design of the ADDIE module development (Gagne et al., 2005). This model was chosen because this model provides flexible and structured guidance and is suitable for teaching and learning situations in the classroom.



FDG Protocol

The researcher uses the Focus Group Discussion technique in the needs analysis procedure. According to Krueger and Casey (2000), FGDs can be used in various domains and objectives, for example, 1) decision-making, 2) needs analysis and 3) product or program development.

Focus Group Discussion (FGD) is one of the qualitative data collection techniques that is widely used, especially by decision-makers or researchers, because it is relatively quick to complete and cheaper. The FGD technique makes it easier for decision-makers or researchers to understand attitudes, beliefs, expressions and terms commonly used by participants regarding the topics discussed, so it is beneficial to understand the reasons that are not revealed behind participants' responses. With FGD, new findings and explanations will be quickly obtained, which may not be detected if using other techniques.

The purpose of the FGD is to explore specific problems which are related to the topics discussed. This technique is used to avoid the wrong meaning of the researcher to the problem under study. FGDs are used to conclude inter-subjective meanings that are difficult for researchers to give meaning to themselves because they are hindered by the motivation of the researcher's subjectivity (Kresno S. et al., 1999).

The FGD instrument using the FGD protocol includes several questions concerning the analysis of needs in the development of the EMBOS module, such as Bugis local wisdom that can be integrated into English learning and English learning materials that can be integrated with Bugis local wisdom. The topics of discussion are determined in advance and arranged in order. Questions are arranged so that they are understood by the discussion participants (Krueger, 1988).

Questionnaire

In this phase, the EMBOS module is assessed by English education experts, lecturers, experienced teachers and students. The instrument was used to find the assessment data the experts/experts provided on the developed supplement module. The instrument used is a Guttman scale questionnaire. This type of measurement scale will get a firm answer, namely "yes-no", in the form of a checklist. The five indicators used in this supplement module use the knowledge and skills enrichment book assessment component issued by the Curriculum and Books Center of the Research and Development of the Ministry of Education and Culture (2014), which includes several aspects, namely material aspects, presentation aspects, language aspects and graphic aspects.

The Technique of Analyzing the Data Qualitative

Qualitative data were obtained through FGDs and content assessment in terms of language. The FGD method used in this study is the thematic method. Where the researcher has determined the themes in the FGD, the data analysis method is the thematic method (Siti Uzaerah, 2013). The model of Miles et al. (2014) for the thematic analysis process consists of three stages, namely data reduction, data exposure and data conclusions

Quantitative

Quantitative data was obtained from data from several expert assessments using questionnaires. The results of the questionnaire are qualitative data which is transformed into quantitative data. This quantitative data was analyzed using Fuzzy Delphi analysis and module validation using Aiken's V formula.

FINDINGS

Need Analysis

Based on interview analysis using focus group, the themes or issues that developed related to the development of this supplement book were obtained, namely:

The topic of Discourse Text from outside South Sulawesi/Bugis

English textbooks for the high school level, both printed and electronic, are from publishers of the Ministry of Education and Culture and other publishers from outside South Sulawesi, especially from publishers in Java.

"kalau dari budaya lokal bugis barangkali tidak ada, karena buku-buku yang kita pake dari jawa makanya isinya itu rata rata dari sana" (T1).

Many discourses on reading texts in high school English subjects come from Java, such as the "Gunung Bromo" discourse, even though there are also many discourses or stories from Bugis.

"selama saya menjadi guru bahasa Inggris SMA, topik-topik dalam wacana atau teks bacaan di buku bahasa Inggris lebih banyak dari wacana-wacana di Jawa seperti budaya Jawa, atau tempat-tempat wisata yang ada di Pulau Jawa" (T3).

Figure 3 is one of the "Expressing Intention" materials that display themes outside the Bugis environment, such as Mountain (Semeru) and Beach (Kuta Bali), which are found in English books for class X SMA.

English teachers need help finding English books that present topics of Bugis' local wisdom in discourse texts. Materials such as recount text/biography, narrative procedure text and descriptive mostly present topics outside South Sulawesi.



Look at the pictures below. Do you know these places? Why do you think people visit these places? What can they do there? Which one do you prefer to visit? Why? Discuss with your friends.



Source: http://tipsberwisetamursh.com/wp-content/upkeds /2013/07/Wasta-Tereksotis-di-Bali-Paniai-Kuta.jpg Picture 3.2

Beach



Somes: http://www.ancol.com/upload/photo/2012/12/08/ ad5547c29d5402566adb878e846da..PG Picture 3.3

Amusement park



Source: http://gambar-runsh.com/attachments/jakariabanat/20056141354773009-aswa-harian-condominium-mai taman-anggode:2hr-ff-ius-60900220009_hila6ddb67_h.jpg Picture 3.4

Mall



Source: http://wildan220688.files.weedpress.com/2012/10/ 01-gunung-semeru.jpg Picture 3.5

Mountain



Figure 3. Examples of Expressing Intentions (Widiati et al., 2017)

The need for exploration of Bugis culture in learning

The sense of pride and interest in learning Bugis culture among the younger generation is still lacking. Even though they were born and raised in the Bugis cultural environment. "Anak-anak sekarang kurang mengenal budaya nenek moyangnya, padahal mereka lahir dan besar di lingkungan budaya Bugis" (T5).

Therefore, students need to be closer to their culture. One of them is by providing information to students about Bugis' local wisdom. Teachers must explore Bugis' local wisdom through the Bugis learning process, especially in high school English materials mainly related to discourse texts.

"Kadang-kadang siswa itu malas sekali belajar dengan sengaja pengetahuan budaya Bugis kalau bukan secara langsung diberitahu atau diajarkan..." (T5). Internalization of Bugis culture in learning

The topics in English books are still rare that reveal the cultural reality around students, namely Bugis culture. Even the material content that is taught has yet to be much integrated with the local Bugis culture.

"...Saya sebagai guru bahasa Inggris yang sudah mengajar hamper 10 tahunan lebih memang belum pernah mencoba untuk mengintegrasikan konten materi lokal Bugis dengan bahasa Inggris (T4).

"Tidak ada larangan, maksudnya dari, dinas pendidikan, sekolah kalau kita mau bisa menyisipkan atau menambah materi Bugis dalam pembelajaran bahasa Inggris....(T6).

The Ministry of Education and Culture has never prohibited and even recommended teachers to improvise as long as it does not go out of the curriculum theme; at least, it can be a learning supplement.

"...untuk memudahkan, kami sebagai guru bahasa Inggris, kami memerlukan panduan seperti buku, modul pembelajaran bahasa Inggris berbasis kearifan lokal bugis sehingga kami tidak tersesat (T1).

Identification of Bugis local wisdom relating to high school English topics

Based on the results of the FGD interview analysis, there were several findings that some materials or topics for learning English were proverbs, Procedure text, Explanation, Descriptive text, Recount text/Biography and Narrative Text/Reading Comprehension. As stated by one of the English teachers

"...dalam materi seperti Descriptive text, Narrative Text/Reading Comprehension, Explanation, dan Recount text/Biografi sangat memungkinkan untuk disisipkan topik-topik yang berkaitan dengan kearifan lokal bugis (T2).

For the Recount text/Biography material, according to the teacher, local wisdom can be included, one of which is about Bugis figures.

"...biasanya kalau dalam materi Recount text/Biografi topik wacananya tentang tokoh-tokoh terkenal, tetapi bisa diganti dengan tokoh-tokoh lokal Bugis seperti tokoh Petta Lasinrang, Arung palakka, Abdul Rahman Ambo Dalle (T3).

Bugis' local biographical topics can also be internalized with descriptive text material, for example, religious biographies.

..." Abdul Rahman Ambo Dalle, yang religious toh bisa masuk dalam materi descriptive text khusunya tokoh biografi relegius" (T4).

For proverbs material, topics such as Bugis proverbs with life philosophy values can be included.

..."sipakatau sipakalebbi sipakainge', maknanya itu yang proverb nya itu Pak. Maali' siparappe, rebba sipatokkong, malilu sipakainge', saling mengingatkan, saling menegakkan" (T1).

The relevant topic for descriptive text and explanation materials is traditional games, as presented by the teacher.

"...untuk materi procedure text dan explanation, bisa dimasukkan topik Ma'lebba, sama dengan ma'bom, ma'cangke' juga, mangenja'' (T2)

For more details, Table 2 describes the conclusions of Bugis' local wisdom topics relevant to high school English learning materials.

<u> </u>	
Local wisdom	English Material
Petta Lasinrang	Recount text/Biografi
Arung Palakkad	
Abdul Rahman Ambo Dalle	
Ade' Pangampe	narrative
Bombang-bombang.	
Alama Seasea	
Wanua pinrang	
Salo saddang	
Mappadendang	
Barongko,	Procedure Text
Palekko	
Katirsala	
Mappadinding	Description Text/Explanation Text
Ma'lebba	
Ma'bom	
Ma'cangke	
Mangenja	
Nene malomo	Narrative Text/Reading Comprehension
bujung lapakkita	× •
	Petta Lasinrang Arung Palakkad Abdul Rahman Ambo Dalle Ade' Pangampe Bombang-bombang. Alama Seasea Wanua pinrang Salo saddang Mappadendang Barongko, Palekko Katirsala Mappadinding Ma'lebba Ma'lebba Ma'lebba Ma'cangke Mangenja Nene malomo

Table 2. Results of Analysis of the Relationship between Bugis LocalWisdom and English Learning

	Local wisdom	En	glish Material			
	nene pakande					
	Bujung Lapakkita					
Table 3. Analysis of Approval of the Fuzzy Delphi Method						
	Topic	Threshold	Fuzzy	Average of	Rank	
		(d) Value	Evaluation	Fuzzy		
				Number		
Biografi /	Petta Lasinrang	0.141	10.067	0.671	2	
Recount	Arung palakka	0.149	9.800	0.653	3	
text/Biografi	Ambo Dall	0.152	10.400	0.693	1	
Song/ narrative	Ade' Pangampe	0.141	10.067	0.671	5	
-	Bombang-	0.152	10.400	0.693	4	
	bombang.					
	Alama Seasea	0.149	9.800	0.653	6	
	Wanua pinrang	0.163	10.800	0.720	3	
	Salo saddang	0.071	11.600	0.773	2	
	Mappadendang	0.038	11.800	0.787	1	
Food	Barongko,	0.141	10.067	0.671	2	
Procedure Text	Palekko	0.152	10.400	0.693	1	
	Katirsala	0.149	9.800	0.653	3	
					1	
Traditional	Mappadinding	0.038	11.800	0.787	1	
Games	Ma'lebba	0.149	9.800	0.653	4	
Explanation Text	Ma'bom	0.141	10.067	0.671	3	
Description Text	Ma'cangke	0.149	9.800	0.653	4	
	Mangenja	0.152	10.400	0.693	2	
Traditional Story	Nene malomo	0.038	11.800	0.787	1	
Narrative Text/	Bujung lapakkita	0.149	9.800	0.653	4	
Reading	Nene pakande	0.163	10.800	0.720	2	
Comprehension	Bujung	0.152	10.400	0.693	3	
	Lapakkita					

Table 3 shows that on the topic of Biography/Recount text, the topic of religious figure Ambo Dalle received the highest approval with a Threshold (d) value of 0.141 and an Average Fuzzy Number of 0.671. The Mappadendang topic received approval in the song/narrative material with a Threshold (d) value of 0.038 and an average of Fuzzy Number 0.787. The topic of Mappadinding received approval on the Explanation Text/ Description Text material with a Threshold (d) value of 0.787. Nene Malomo's topic on Traditional Story/Narrative

Text/Reading Comprehension material with a Threshold (d) value of 0.038 and an average of Fuzzy Number 0.787.

Development Stage Description

Module development

The structure of the supplement module is generally divided into several parts, namely the beginning, the content and the end. The beginning consists of an introduction and a table of contents. The Sample Module consists of the author and Module Title., as shown in Figure 4. below.



Figure 4. Cover of Bugis Local Wisdom-Based English Supplement Module

This section presents the module identity, Basic Competencies, Learning Objectives and Material Description, as shown in Figure 5.

		[ENGLISH MODULE BASED ON BUGIS LOCAL WISDOM]	I	[ENGLISH MO	DULE BASED ON BUGIS LOCAL WISDOM] 2
E	SUGIS SONG			songs can be a source of comfort and enc	for us to listen to than other songs. Some Bugis ouragement when we are sad. Bugis legend songs anings about life. In this module, you will learn e meaning of the given song lyrics.
A. B.	 Interpreting social teenagers in SMA Capturing the me 	: English : X Even : Social Functions, Linguistic Elements and Meaning of Song Lyrica : 2 Weeks x 2 Hours Lessons @45 Minutes Infortions and linguistic elements of song lyrics related to the lives of VMA'SMKMAK. ming related to social functions and linguistic elements contextually in to the lives of temaggen in SMA/MA/SMK/MAK.	E.	functions and linguistic structures and legend song with the theme of Youth. Plusing the module: 1. This module is accompanied by vi- Bugis songs that have been translat 2. You can study this module either in 3. Learn the lyrics of Bugis songs, then	ndependently or in groups. 1 you practice to translate, interpret into English. ractice and exchange information to have a more ogress.
C.	related to the live • Students are able related to the live • Students are able • Students are able	dentify the social function of the lyrics of Bugis folk songs in English s of teenagers in SMA/MA/SMK/MAK. identify the linguistic elements of Bugis folk song lyrics in English s of teenagers in SMA/MA/SMK/MAK. imitating the lyrics of Bugis folk songs in English orally. apture the meaning related to social functions and linguistic elements wics of Bugis folk songs in Englishrelated to the lives of teenagers in	Le Th add		
D.	Brief Description o	f Material	G.	Learning Activities	

Figure 5. Sample Snippets of the Contents of the Supplementary Module

In this content section, there are also learning activities related to Bugis local wisdom; in the example of Figure 6, this is a Bugis folk song.



Figure 6. Sample Snippets of Module Content (Learning Activities)

The writer also presents lyrics or texts in the Bugis language to bring students closer to Bugis' local wisdom. As presented in Figure 7.

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[ENGLISH MODULE BASED ON BUGIS LOCAL WISDOM] 7	[ENGLISH MODULE BASED ON BUGIS LOCAL WISDOM]
 κτιναι κακαιά δι και καιά καικαι κακαιά δι και καιά καικαι καικαι δι και καιά καινα υτλάλα αλοά καιο του καιναι και και από και και και και και από και και και και και αλομά του του του τολου αλομά του και και και και αλομά του και και και και και και αλομά του και και και και και και και και και και	A series of lyrics that tell the main story of the song and keep the action or thoughts moving forward • Chorus/refrain Meant to be the most memorable part, containing the ultimate message of the piece • Bridge A passage of music that contrasts the verse and the chorus, and is generally used to take the listener from one section to the next. 4. Language Features of a song Figurative language (the use of words, phrases, or sentences to beautify or sometimes to hide the meaning). • Rhyme (a repetition of similar sounds) • Denotation (the real meaning) • and connotation (the hidden meaning) J. Summary The social functions of a song are: • To entertain listeners
 The social function of a song The social functions of a song are: To entertain the listeners To teach moral value through the lyrics of the song To express personal fieling/emotion To motivate/inspire others To appreciate work of art 	To motivate or give inspiration To teach moral values The Generic Structure Song Title Verse Chorus Bridge The language features of a song:

Figure 7. Examples of Lyrics in Bugis Text

The module also has practice questions and evaluations related to Bugi's local wisdom. As shown in Figure 8.

	[ENGLISH MODULE BASED ON BUGIS LOCAL WISDOM] 9		
K.	Exercises	J.	Self Assignment
	Sing the song in the example above (Deerah Bugis Song) then answer the following		Now, please find a Bugis song that you like, sing it out loud. Then you translate the lyrics
ques	tions		of the Bugis song into English. Re-sing the Bugis song that you chose in English, but
	1. Read the lyrics of the song carefully. Identify the parts of the song! [Level 3 -		remember not to lose the meaning of the lyrics, intonation or tone of the song. After you
	Analyzing (C4)].		feel sure Please video the song, can be alone or in groups.
	2. Identification of generic structure song, namely title verse chorus, and bridge for		
	Mappadendang song! [Level 3 - Analyzing (C4)]		
	3. Pirasai nyamengna (Feel the fun), what does the sentence mean and the conclusion of		
	the song? [Level 3 - Evaluating (C5)]		
	4. Analyze the meaning of the song, is it denotation or connotation? [Level 2- Applicating		
	(C3)		
	5. What message can you get from the song? [Level 3 - Evaluating (C5)]		

Figure 8. Sample Snippets of the Exercise Section and Independent Tasks Embossed Module Validation

Expert validation

This section explains the feasibility of a senior high school English supplement module based on Bugis local wisdom as an additional module or book/companion/supplement for teachers in providing more comprehensive insight to readers, especially students. The assessment of expert assessments in the field of English education after reading the module. The expert assessment of this module involved ten teachers and three experts in English education. Validation or assessment analysis related to module aspects used Aiken's formula.

Material aspect

Table 4 presents the material aspects of the module assessed by experts. One of the assessments related to the material aspect, namely the achievement of educational goals, does not cause SARA problems and the suitability of science.

	V	
Material	Aiken's	Decision
	Test	
The material supports the achievement of national	0.96	Accepted
education goals.		-
The material does not conflict with the applicable	0.79	Accepted
laws and regulations in Indonesia.		
The material is an original work (not the result of	0.96	Accepted
plagiarism), does not cause SARA problems and		_
does not discriminate against gender.		
The material has scientific truth following the latest	0.75	Accepted
scientific developments and is valid and accurate.		-
The material maximizes the use of sources	0.86	Accepted
following Indonesian conditions and is closely		-
related to the Indonesian context.		

Table 4. Module Material Aspects

Presentation aspect

Table 5 presents the material aspects of the module assessed by experts. This aspect relates to 1) the presentation of material is coherent, systematic, straightforward, and easy to understand. Presentation of material develops spiritual and social attitudes; 2) Presentation of material develops skills and motivates to create and innovate. 3) Presentation of materials develops skills and motivates to be creative and innovative.

Presentation	V Aiken's Test	Decision
The presentation of the material is coherent, systematic, straightforward, and easy to	0.82	Accepted
understand.		
Presentation of material develops spiritual and	0.86	Accepted
social attitudes.		
Presentation of materials develops skills and	0.82	Accepted
motivates me to be creative and innovative.		

Table 5 Aspects of Module Presentation

Language aspect

The language aspect assessment consists of 1) the language used ethically, aesthetically, communicatively and functionally, according to the target audience, and 2) the language (spelling, punctuation, vocabulary, sentences, and paragraphs) following the standard rules and terms. As presented in Table 6.

Table 6. Language Aspects of the Module

Language	V Aiken's Test	Decision
The language used is ethical, aesthetic, communicative and functional, according to the target audience.	0.68	Accepted
The language (spelling, punctuation, vocabulary, sentences, and paragraphs) follows the standard rules and terms.	0.86	Accepted

Graphic aspect

The assessment of the graphic aspect in this module is related to 1) the Book cover: illustrations represent the content; typefaces have high legibility and meaning; balanced and harmonious composition between the front, back and back skins; 2) The type, font, size, and numbering throughout the book are consistent, 3) The layout is consistent and appropriate between the cover and the content of the module, 4) Illustrations are appropriate for the reader goals and clarify content. As presented in Table 7. **Table 7. Graphical Aspects of the Module**

	\mathbf{V}	
Graphics	Aiken's	Decision
	Test	
Book cover: illustrations represent content, and	0.75	Accepted
typefaces have high legibility, meaning; a balanced		_
and harmonious composition between the skin of		

Graphics	V Aiken's Test	Decision
the front, back and back		
The type, font size, and numbering throughout the	0.86	Accepted
book are consistent		
The layout between the cover and the module's	0.75	Accepted
content is consistent and appropriate.		
Illustrations are appropriate for the target audience	0.75	Accepted
and clarify the content		

Teacher's Response

After conducting expert validation, the next step is to distribute this module to several 8th Semester English Study Program students who have carried out 30 PPL to be read and then asked for their responses or responses to this module – collecting data for this stage using a questionnaire.

Material aspect response

The material aspect responses are shown in Figure 9, which is the output of the Rasch Model analysis using Winstep.



Figure 9. Responses to Material Aspects

su	TOTAL			MODEL	INF	IT	OUTF	
	SCORE	COUNT	MEASURE	ERROR	MNSQ	ZSTD	MNSQ	ZSTD
MEAN S.D. MAX. MIN.	20.0 2.7 25.0 15.0	5.0 .0 5.0 5.0	3.87	1.34 .42 1.92 .88	. 04	-1.6	. 04	-1.6
MODEL	RMSE 1.61 RMSE 1.41 OF Person M	TRUE SD		RATION RATION	2.19 Pers 2.56 Pers		IABILITY IABILITY	.83 .87
	RAW SCORE-T				RELIABILIT	r = .87		

Figure 10. Measurement of Person's Response Material Aspect

Presentation aspect response

The response aspect of the presentation is shown in Figure 11, which is the output of the Rasch Model analysis using Winstep.





SUMMART OF JU MEASURED (EXTREME AND NON-EXTREME) FEISUN	SUMMARY OF	50 MEASURED	(EXTREME AND NON-EXTREM	E) Person
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	TOTAL			MODEL		INFIT	-	UTFIT
	SCORE	COUNT	MEASUR	E ERROR	M	NSQ Z	STD MNSC	Q ZSTD
MEAN S.D.	14.8 2.5	4.0	.5	8.32				
MAX. MIN.	20.0 8.0	4.0 4.0	7.1 -6.0			.03 -	2.3 .03	3 -2.3
MODEL	RMSE 1.38 RMSE 1.20 OF Person ME	TRUE SD		EPARATION EPARATION				
	RAW SCORE-TO				RELIAB	ILITY =	. 82	



Language Aspect Response

The response of the language aspect to the EMBOS module is shown in Figure 13, which is the output of the Rasch Model analysis using Winstep.



Figure 13 Responses to Language Aspects

	SUMM/	ARY OF 50	MEASURED	(EXTREME	AND	NON-EX	TREME)	Pers	on		
		TOTAL SCORE	COUNT	MEASU	JRE	MODEL ERROR	м	INF NSQ	IT ZSTD	OUTF MNSQ	IT ZSTD
ME S. MA	D. X.	6.9 1.4 10.0 4.0	2.0 .0 2.0 2.0	 3. 8. -7.	82 04	2.00 .61 2.82 1.40		.00	-1.4	. 00	-1.4
MOD	AL RMS EL RMS E. OF	5E 2.09	TRUE SD TRUE SD EAN = .55			RATION				IABILITY IABILITY	
Pers	on RAN	SCORE-T	D-MEASURE	ORRELAT	ION	= 1.00					

CRONBACH ALPHA (KR-20) Person RAW SCORE "TEST" RELIABILITY = .67

Figure 14. Measurement of Person's Response Language Aspect *Graphic Response*

The graphical aspect of the response to the EMBOS module is shown in Figure 15, which is the output of the Rasch Model analysis using Winstep.



Development of an English module based on Bugis' local wisdom

Figure 15. Responses to Graphic Aspect

SUMMARY OF 49 MEASURED Person

	TOTAL				MODEL		INF		OUTF	
	SCORE	COUNT	MEAS	URE	ERROR	м	NSQ	ZSTD	MNSQ	ZSTD
MEAN	13.0	4.0		. 28	. 68		. 97	2	. 98	2
5.D.	1.7	.0		. 83	.05		. 99	1.2	1.03	1.2
MAX.	18.0	4.0	_	.10	. 89	-	.76	3.6	6.19	3.8
MIN.	10.0	4.0	-1	. 01	. 62		. 02	-2.6	.02	-2.6
REAL RM	ISE .78	TRUE SD	.29	SEP/	ARATION	.76	Pers	on RELI	IABILITY	. 82
S.E. OF	ISE .69 Person ME	TRUE SD AN = .12	.48	SEP/	ARATION	.70	Pers	ion RELI	IABILITY	.83
	W SCORE-TO ALPHA (KR-									

Figure 16. Measurements of a Person's Response Aspects of Language

DISCUSSION

Need Analysis

The need for an English module based on local wisdom must be based on

considerations of input or suggestions from teachers and parties related to the high school English learning process. Therefore, for researchers to conduct studies on developing a local wisdom-based senior high school English supplement module is through focus group interviews. Moreover, group interviews or FGDs use the thematic interview method (Miles et al., 2014; Uzaerah, 2013), where the themes that are the focus of this research have been determined. In this step, these themes are part of a needs analysis to explore and ascertain the needs of Bugi's local wisdom topics relevant to learning English in high school or equivalent.

In accordance with, whereas following the Regulation of the Minister of Education and Culture (Permendikbud RI Number 69 of 2013), one of the objectives of the implementation of the 2013 curriculum is to produce quality Indonesian people with an education rooted in diverse national cultures to build the life of today's nation and become the basis for the future life of the nation. Implementing the 2013 curriculum requires English teachers to develop students' learning experiences to master the required competencies, and at the same time, students can develop abilities as cultural heirs.

Therefore, the 2013 curriculum allows teachers to add, integrate and internalize subject matter with contextual materials for the environment around students, including materials or topics of local wisdom.

After obtaining the topics of Bugis' local wisdom that can be internalized in learning English, the next step is to determine the approval or consensus of experts/experts. This agreement aims to determine which topics are the priority in the local wisdom-based English supplement that is developed. The Fuzzy Delphi method has been used to determine the topics of Bugis' local wisdom in the developed supplement. Experts in this case are practitioners such as senior English teachers and English education experts (Aiken & Mamat, 2008; Gable & Wolf, 1993).

Development Stage Description

This stage aims to produce an English supplement module based on Bugis local wisdom, which has been revised with expert suggestions and input. This stage consists of module development and validation of supplementary modules from experts. In this stage, there were 3 activities that have been done. They are Module Development, Expert Validation and Analysis of Teachers' Responses. Based on the data, the module was developed by inserting the Bugis' local wisdom. In the expert validation there were four aspects which have been validated. They are material aspects, presentation aspect, language aspect and graphic aspect.

The aspects that are assessed in the material aspect are 1) the material supports the achievement of national education goals, 2) the material does not conflict with the applicable laws and regulations in Indonesia, 3) the material

is an original work (not the result of plagiarism), does not cause problems SARA and not gender discrimination, 4) the material has scientific truth, following the latest scientific developments, valid, and accurate and 5) the material maximizes the use of sources that are following Indonesian conditions and closely related to the Indonesian context.

Based on the opinion of Aiken and Marnat (2008), that aspect validity can be accepted if the index value v 0.75. Based on Table 4.3, it shows that experts have approved all aspects of the material in this module. Moreover, Table 5, related to the module presentation aspect, shows that the validity of the language aspect can be accepted if the index value v 0.75 (Aiken and Marnat, 2008; Hidayat et al., 2020). On the other hand, Table 6 shows that the experts agree or state that this aspect of the language has validity. It is shown in all aspects of the language assessment. The module has an index value of v 0.75 (Aiken and Marnat, 2008; Hidayat et al., 2020). Moreover, Table 7 shows that the experts agree or state that this aspect has validity. It is shown in all aspects of the graphical assessment. The module has an index value of v 0.75 (Aiken and Marnat, 2008; Hidayat et al., 2020). Moreover, Table 7 shows

Figure 9 shows that as many as 32 (64%) people tend to agree or respond positively to the language aspect of this EMBOS module, while about 14 (28%) people tend to respond negatively, while Figure 10 shows that the mean person on the response or perception of material aspects in the EMBOS module is 3.52 logit with a Cronbach Alpha (KR-20) value of 0.87. It shows that the response of the person or respondent to the language aspect of the module is categorized as good (Azrilah et al., 2013; Boone et al., 2014; Hidayat et al., 2019; Sumintono & Widhiarso, 2014).

Based on Figure 11, as many as 30 (60%) people tend to agree or respond positively to the presentation aspect of this EMBOS module, while about 20 (40%) people tend to respond negatively. While Figure 4.11 shows the results of measuring the person or respondent in general from the presentation aspect. Then, Figure 12 shows that the mean person on the response or perception of material aspects in the EMBOS module is 0.54 logit with a Cronbach Alpha (KR-20) value of 0.82. It shows that the response of the person or respondent to the language aspect of the module is categorized as good (Azrilah et al., 2013; Boone et al., 2014; Hidayat et al., 2019; Sumintono & Widhiarso, 2014).

Figure 13 shows that 33 (66%) people tend to agree or respond positively to the language aspect of this EMBOS module, while around 17 (34%) people tend to respond negatively. While Figure 14 shows the results of measuring people or respondents in general from the language aspect, while Figure 14 shows that the mean person on the response or perception of material aspects in the EMBOS module is -0.38 logit with the Cronbach Alpha (KR-20) value of 0.67. This shows that the response of the person or respondent to the language aspect of the module is categorized as sufficient (Aziz et al., 2013; Boone et al., 2014; Hidayat et al., 2019; Sumintono & Widhiarso, 2014).

Based on Figure 15, as many as 30 (60%) people tend to agree or respond positively to the graphic aspects of this EMBOS module, while about 20 (40%) people tend to respond negatively. Then, Figure 16 shows that the mean person on the response or perception of the graphic aspect of the EMBOS module is 0.28 logit with a Cronbach Alpha (KR-20) value of 0.84. This shows that the response of the person or respondent to the language aspect of the module is categorized as good enough (Aziz et al., 2013; Boone et al., 2014; Hidayat et al., 2019; Sumintono & Widhiarso, 2014).

CONCLUSION

Focus Group Discussion resulted in several issues, namely 1) the topic of discourse texts from outside Bugis, 2) the need for exploration of Bugis culture in learning, and 3) the internalization of the values of Bugis local wisdom in English learning materials Senior High School. The module for developing English learning supplements based on local wisdom includes several topics, namely 1) Petta Lasinrang figures, Arung palakka, Abdul Rahman Ambo Dalle for Recount text or Biography material, 2) Bugis songs Ade' Pangampe, Bombang-bombang, Alama Seasea, Wanua pinrang, Salo saddang, Mappadendang for narrative text material, 3) Bugis Barongko, Palekko, and Katirsala food for procedure text material, 4) Bugis traditional games Mappawall, Ma'lebba, Ma'bom, Ma'cangke and Mangenja for Description Text or Explanation Text, 5) The traditional story of Nene malomo, Bujung lapakkita, Nene Pakande, Bujungkita for Narrative Text or Reading Comprehension material.

The results of expert approval using the Fuzzy Delphi method found that the Mappadendang topic received approval in the song/narrative material with a Threshold value of 0.038 and an Average fuzzy number of 0.787. The topic of Mappadinding received approval on the Explanation Text/ Description Text material with a Threshold value of 0.038 and an Average of Fuzzy Number 0.787. Nene Malomo's topic is on Traditional Story/Narrative Text/Reading Comprehension material with a Threshold value of 0.038 and an average fuzzy number of 0.787. Development of an English learning module based on Bugis Local Wisdom consisting of the beginning, content and the end. Experts have validated the EMBOS module. The results of expert validation indicate that this module is generally suitable for use in learning English at senior high school.

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