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Application of Fuzzy Delphi Techniques in Designing the Main Construct of the Extensive Reading Module

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ABSTRACT

Language learning can improve vocabulary acquisition using extensive reading methods. Many studies conducted experimentally have shown that reading extensively provides great benefits to students. However, primary school students in Malaysia prefer to read fiction physical books and are less interested in non-book materials as well as digital materials. To overcome this problem, extensive reading modules need to be developed based on constructs and elements that obtain expert consensus. The Design and Development (DDR) approach was used in this study. The design process will use the Fuzzy Delphi Method (FDM) which is to develop the main construct based on the literature review and interviews conducted in the Needs Analysis Phase. A total of 30 experts have been involved as experts to validate FDM instruments. The results showed that all items met the requirements of FDM which has a threshold value of less than 0.2 ($d \leq 0.2$) which is 0.106 and 94% expert agreed as well as placing the Reading Community construct as a priority. The findings of this study based on the agreement of experts can be used as a reference by relevant parties to design a reading program to fill the gaps that still exist in the implementation of the NILAM program in schools. The cooperation of community members is also necessary for implementing the reading program through the National Reading Decade which is a program designed based on the Reading Encouragement Policy.

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INTRODUCTION

The definition of reading is constantly changing (Mirza et. Al, 2021). The act of reading is a multifactorial process influenced by numerous factors such as psychology, physiology, and environment (Christian et. Al, 2018). The definition of reading is an activity that can add a variety of knowledge (Khir et. Al, 2019) and is the main path to success in education (Fatiloro et.al, 2017). This is because reading skills need to be mastered by everyone in the 21st century who targets the reading of several types of reading such as e-mail, text, text messages as well as the use of various applications in daily affairs (Sulaiman et al., 2020).

Reading is particularly important in the field of educational skills for use in one's life as an individual can develop and enhance their knowledge through reading activities (Fatiloro et.al 2017). This goal is in line with the main direction of education which is to acquire reading skills as many things or activities that need to be undertaken by students require knowledge based on reading. These skills enable students to make critical, confident, realistic assessments as well as obtain accurate information (Pearson et.al, 2020). Reading skills need to be practised as appropriate and the purpose of reading is conducted either intensively or extensively. Through learning reading skills, a person will be able to change their life because the acquisition of knowledge helps them get a good career. Even low literacy achievement poses a problem that will continue around the world (Castle et. Al, 2018). Thus, by reading, one will be able to communicate with others to convey desires, perceptions, opinions, thoughts, ideas, knowledge as well as information (Kee et.al, 2017).

Among the approaches to teach reading skills that are often used to cultivate interest in reading and develop literacy skills is the extensive reading approach. This approach is one of the methods used to develop reading skills (McLean & Rouault, 2017). Grabe and Stoller (2013) define extensive reading as an approach in teaching and learning which students read reading material to the maximum based on their reading proficiency. Extensive reading is also termed as a reading activity to gain pleasure with self-selected material as well as done voluntarily (Ng et al., 2019). If the material being read is not enjoyable, then students can stop reading as well as choose reading material that can instil confidence in their abilities (Bamford & Day, 2004). Redandya (2007) said that extensive reading activities should involve the whole book longer to form a better understanding and emphasize the acquisition of meaning from the reading material. Bamford and Day (2004) also say that students read intending to acquire general knowledge, obtain information as well as the purpose of pleasure. Extensive reading activities will be successful if done in maximum quantity (Beiri, 2018)

In addition, extensive reading is also an approach to read simple material in a new language with a large quantity and students choose their reading material without the involvement of teachers (Bamford & Day, 2004). Reading in enormous quantities using self-selected reading material indirectly helps promote reading in a foreign language (Hardy, 2016; Renandya, 2007). Reading material in a new language can improve the proficiency and reading skills of that language (Milliner, 2017). However, the effectiveness of extensive reading in foreign languages has not yet reached a proficient level of effectiveness (Hardy, 2016). This may be due to the lack of exposure to such reading activities (Nishizawa et al., 2017).

The benefits of reading extensively help students read many unfamiliar words that are not found in textbooks in Japanese schools (Stephens, 2019). Vocabulary can also be enhanced (Milliner, 2017), increase motivation (Beiri, 2018), increase comprehension of words (Renandya, 2007), improve reading comprehension (Hardy, 2016), and increase student interest (Nishizawa et al., 2017). Most of the implementation of this extensive reading program follows the ten principles of extensive reading introduced by Day and Bamford (1998) that reading material must-have characteristics such as easy, fast, quiet, enjoyable, on their own, self-selected material, fast reading and guided by teachers (Li et al., 2021).

The reading program conducted in Malaysia is through the Reading Encouragement Policy through the National Library of Malaysia. This Reading Encouragement Policy was officially approved on 14 March 2013 to plan various reading programs in Malaysia. The main purpose of the Reading Encouragement Policy introduced is to cultivate reading habits in the community as well as shape lifelong learning. This policy is also developed in line with the goal of the National Reading Decade (2021-2030) to realize the goal of Malaysia Reading 2030. The reading method conducted through this program is extensive reading. This continuous effort is made to curb low reading habits among Malaysians as well as low literacy rates (Harji et al., 2017).

The implementation of the Reading Encouragement Policy, which is an extensive reading program in schools, is through the Pulse of Knowledge of Reading Practice Program (NILAM). The NILAM program was fully implemented in 1999 through the Ministry of Education Malaysia Professional Circular No. 13/1998: Reading Habits Building Program dated 22 May 1998 (Reading Encouragement Policy, 1987). The NILAM program was formed through the Reading Habits Movement Steering Committee Meeting at the Ministry of Education level. The target participants of the program are all primary and secondary school students starting from pre-school students to form 6 students. The purpose of this program is to cultivate the practice of continuous reading in the community. The NILAM program exists as a government effort to uphold the culture of reading as well as show serious commitment and support for the culture of reading to strengthen lifelong learning methods (Ministry of Education Malaysia, 2013).

The implementation of reading programs faces many constraints that disrupt the teaching and learning process of reading extensively. This is because the extensive use of reading methods is a process that involves students 'attitudes, interests, abilities, and goals whereas students say that they do not have enough time to read (Martina et.al, 2020). Martina and colleagues (2020) also said that students do not know the benefits, principles, and methods of performing reading activities extensively due to a lack of information.

Among the problems in the implementation of the NILAM program is closely related to reading habits. Most students do not tend to read as well as be positive towards the reading culture because they prefer to do other social activities such as sports, entertainment and completing assignments given by teachers (Fatiloro et. Al, 2017). To avoid the problem of the adoption of a continuous reading culture, measures of adopting a cheerful outlook must be done since childhood through the role of parents and community (Sulaiman et al., 2020). They also found that also says that all reading programs designed to gain pleasure will fail if students read-only to complete the academic assignments given by the teacher. In addition, there are other problem that affect the effectiveness of the implementation of the NILAM program. Among them are family income, reading material facilities in schools, the role of the community, the role of parents and the reading programs conducted (Sulaiman et al., 2020).

Therefore, many efforts can be made to solve reading problems among primary school students. Among them are the introduction of mobile learning, organizing workshops, reading competitions and workshops for parents and the community (Suher Sulaiman et al., 2020). Active involvement, as well as optimal use of the School Resource Center, can increase student motivation as well as improve their performance (Majid et al., 2020).

In addition, the introduction of learning according to the latest trends through the Industrial Revolution 4.0 (IR 4.0) also saw the rapid development of information technology and media so that students are more active in the use of social media. This condition leads to a decline in active reading among students (Fatiloro et al., 2017). This suggests that technological developments are changing the lifestyles of societies globally (Mirza et al, 2021). As students today grow up with the use of computers, and smartphones (Loh et al., 2019), then efforts need to be made to help them use technology in the right way to reap maximum benefits. Students also need to be exposed to various reading materials according to the NILAM Program template through the Improved NILAM Implementation Guidebook. Therefore, all parties must make efforts to reduce the gap of problems faced in the success of extensive reading

programs. The development of extensive reading modules is also able to improve reading skills as well as expand students' knowledge in various fields.

LITERATURE REVIEW

The NILAM program is a program born from extensive reading. This program has been conducted in Malaysia since before independence. Grabe and Stoller (2011) say that extensive reading requires students to read a large amount of reading material according to their ability as well as acquire general knowledge by focusing on meaning (Renandya, 2007).

There are ten principles of extensive reading introduced by Richard Day and William Bamford (1986) namely simple reading material, reading material from various topics, readers choose reading according to their preferences, readers reading as much as possible, readers reading to gain pleasure, general information and comprehension, reading has its rewards, the reading process is accelerating, reading is silent and solitary, the teacher as a mentor and as a role model. The principle of extensive reading put forward by Richard Day and William Bamford (1986) is often used as a study to evaluate the effectiveness of its implementation.

According to Richard Day and Bamford's (1998) ten principles of extensive reading, extensive reading does not involve an evaluation process. Yet many studies have been conducted using evaluation methods to measure the effectiveness of extensive reading. among them, a study conducted by Klassen (2019) used formative assessment to assess the extent of student achievement after practising reading extensively and the results showed an increase in reading speed and positive evaluation of the course conducted. In addition to Klassen (2019), Hardey (2016) also used pre-test and post-test to assess Spanish language skills using questionnaires and notes related to reading material. The findings of this study also showed an increase in intrinsic motivation among the study participants. A study conducted by Park (2017) also used a vocabulary test to look at the advantages and benefits of extensive reading on meaning and use of vocabulary in second language learning.

Bieri (2018) also provides some questions to see how students choose reading materials they like and respond to the reading material. The findings show that the selection of reading materials of several types and according to the desires of students supports the ten principles of extensive reading. This study is like Donald's (2018) study involving the role of teachers in reading material selection and the results show that material selection by teachers is related to aesthetic factors influencing text selection rather than ideas that evoke reading pleasure and speed. This indicates that teachers and students do not agree on the selection of reading materials but the role of teachers as mentors is still recognized as important when learning to read.

Klassen (2019) uses the method of collecting scores through Nation's (2007) namely Word Count Vocabulary Levels, The Timed Reading, Scores Participants and Course Evaluation. The number of words is calculated to see the performance of students in terms of reading speed, vocabulary level and student feedback on the extensive reading program conducted. The findings of this study showed an increase in positive reading speed and positive response of students. Hardy (2016) conducted a short-term study to look at the attitudes and levels of motivation as well as the achievement of students' vocabulary in Spanish. The findings of the study showed that students achieved an improvement in vocabulary acquisition as well as increased intrinsic motivation during reading. Evaluation is important are important to see the extent of the effectiveness of extensive reading among students when compared to intensive reading (Park et al., 2017).

Many studies show the role of extensive reading in developing students ’vocabulary compared to intensive reading (Park et.al, 2017). Martina (2020) says that many studies prove that extensive reading can improve skills in English but is rarely used in the teaching and learning process. However, Chen’s

(2018) study shows that there is a contradiction with the principle of extensive reading that emphasizes silent reading because reading learning along with assignments can develop reading skills and encourage critical thinking through interaction. Completion of tasks given through extensive reading activities will create motivation for reading in turn able to develop reading habits. Chen's (2018) study shows that interesting reading material is also a key factor in creating a positive experience in language learning, especially when combined with specific assignments given by teachers.

Some studies look at the extent to which reading material is selected according to the views of teachers and students. Donald's (2018) study is also at odds with the ten principles of extensive reading that place the selection of reading material on students. Yet Donald (2018) places the role of teachers in the selection of reading material as the first step to guide students in choosing reading materials that suit them to choose reading material that suits them. Library and Media Teachers (LMT) and subject teachers are the most effective resources in helping students obtain information with proper methods (Majid et al., 2020). If the reading selection is relevant and appropriate to the students' interest then the students will be helped to play an active role in making the right decision and selection (Chen, 2018).

In the extensive reading module design process, the Delphi Fuzzy Technique will be used in the second phase of the DDR study. The use of Fuzzy Delphi has advantages in terms of reaching expert consensus on the results that occur in uncertain situations as well as the lack of empirical evidence (Mustapha & Darulsalam, 2018). Therefore, this study was conducted to obtain answers to the following questions:

1. Is there expert agreement on key constructs for developing an extensive reading module?
2. What is the order of priority of the main constructs in the extensive reading module based on expert agreement?

METHODOLOGY

The development of an extensive reading module in this study uses a Design and Development approach. There are four phases in DDR namely the needs analysis phase, the design and development phase as well as evaluation phase (Richey & Klein, 2010). The main construct validation process of the extensive reading module is in the design and development phase. The Delphi Fuzzy technique was used in the design phase of the developed reading module.

The Delphi technique has long been introduced and used in previous studies. Respondents involved in this technique are experts in the field studied and appropriate to the context of the study (Eshak & Zain, 2020). The Fuzzy Delphi technique developed by Murray, Pipino and Gigch (1985) has been modified with the aim of improvement (Murray et al., 1985) by Kaufmann and Gupta (1988) (Ghani et al., 2021). This technique combines the traditional (classical) Delphi method and a fuzzy numbering set based on a binary set (yes or no) (Zadeh et al., 1975; Radzi, 2021). The selection of the Fuzzy Delphi technique has been widely used for data collection because it can obtain the agreement of a group of experts related to a problem being studied (Noh et al., 2020; Eshak & Zain, 2020).

The extensive reading module design process uses the Fuzzy Delphi technique because this approach can obtain expert consensus in solving a problem (Jamil et al., 2017; Noh et al., 2020). This technique is quantitative to obtain expert agreement on the validation of key constructs in an extensive reading module. In addition, the use of the Delphi Fuzzy Technique also helps experts identify the elements that will be used in the extensive reading module. The use of FDM is the most effective and efficient method because it involves the use of statistics to assess the level of expert consensus (Yaakub et al., 2020).

Thus, the researcher used the FDM approach to obtain the consensus of a group of experts who agreed to lend their expertise in expressing ideas, critiquing, and improving the content of items that had been constructed by the researcher (Yaakub et al., 2020; Beram et al., 2021)

Participants

Researchers justify the selection of the Fuzzy Delphi technique as the most effective measure to validate the main construct of an extensive reading module because Fuzzy Delphi is the best technique for developing a module framework (Rusdin, 2021). Thus, researchers will be able to obtain relevant information as well as make improvements to the instruments developed (Yaakub, et al., 2020). To ensure that the agreement obtained is accurate and beneficial to this study, the selection of experts in the design of extensive reading modules must meet the following criteria:

1. Library and Media Teachers, officers under the Education Technology Resource Division either Educational Technology Resource Sector officers or Educational Technology Officers who are or have been involved in the implementation of the NILAM program.
2. Experience in the implementation of an extensive reading program (NILAM Program) for at least 5 years. (Berliner, 2004).
3. Able to provide the commitment to the study of extensive reading modules.
4. Has good achievements in reading program management.

Based on the criteria, the researchers selected 30 experts consisting of Library and Media Teacher and officers under Educational Technology Resources Division who have served more than five years in the implementation of the NILAM program. The experts were selected throughout Malaysia considering their contributions and achievements in the NILAM program. The selection of experts also considers the type of school, namely national schools, national secondary schools, Chinese and Tamil national type schools as well as national schools for Indigenous students. The selection of all types of schools across the state is expected to strengthen the findings for the main constructs of the extensive reading module

RESEARCH FINDINGS

The instrument used was a questionnaire consisting of nine main constructs formed based on literature highlights, as well as interviews in the needs analysis phase (Jamil et.al, 2014). Scales 1-7 will be used as the Fuzzy linguistic scale. This scale is then translated into a Fuzzy set which means that each element contained in it is a unit interval between 0 to 1. The term Triangular Fuzzy Number refers to the values of m1, m2 and m3 which represent the terms minimum value, reasonable value, and maximum value (Beram et al., 2020). The following are the experts involved in the validation of the main constructs of the extensive reading module.

Table 3: Number of Specialists by Type of School

No.	Type of School	Number of Experts
1	National School (SK)	19
2	National School (Orang Asli)	1
3	Tamil National Type School (SJKC)	1
4	Tamil National Type School (SJKT)	2
5	Secondary school	5
6	Educational Technology Officer	2

All selected experts have served for more than five years and have experience in operating the NILAM program. The analysis of the period of service of the specialist is shown in the following table:

Table 4: Expert Panel Experience Period Analysis

Experience Period	Number of Experts
5-10 years	17
11-20 years	8
21-29 years	4
>30 years	1

Subsequently, the experts involved were also selected based on special awards they had received during their service as LMT. The award is a recognition of the excellence of experts in implementing reading programs in schools. A total of 11 experts received the District LMT Icon award. Seven experts received the State LMT Icon award while 4 received other awards and one was an Outstanding LMT. Table 5 shows the distribution of awards that have been received by the experts involved.

Table 5: Special Awards of Excellence Received by Extensive Reading Module Design Specialists

Special Award Type	n
Regional LMT icon	11
State LMT Icon	7
Other Awards	4
Excellent LMT	1
Total Special Awards	23

Subsequent findings refer to the analysis that has been conducted on FDM constructs. The constructs were constructed based on the findings of the needs analysis phase and literature through library research. There are nine constructs obtained and arranged from the first to the ninth, namely objectives, content, teaching and learning strategies, selection of techniques, methods, teaching and learning activities, selection of materials and tools, motivation, teacher's role, material resources and location also reading community. Analysis of data from 30 experts on nine extensive reading module constructs showed threshold values (d) as follows:

Table 6: Threshold Values (d) for the Extensive Reading Module Construct

EXPERT	ITEM								
	1	2	3	4	5	6	7	8	9
1	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
2	0.097	0.309	0.296	0.300	0.311	0.314	0.081	0.296	0.061
3	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
4	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
5	0.060	0.084	0.060	0.061	0.075	0.314	0.078	0.097	0.061
6	0.097	0.084	0.060	0.094	0.082	0.079	0.078	0.097	0.061
7	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
8	0.060	0.071	0.060	0.061	0.075	0.079	0.078	0.097	0.061
9	0.296	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
10	0.060	0.071	0.060	0.061	0.075	0.076	0.078	0.060	0.093
11	0.060	0.071	0.060	0.061	0.082	0.076	0.081	0.060	0.093
12	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
13	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
14	0.296	0.309	0.296	0.300	0.311	0.314	0.314	0.296	0.332
15	0.060	0.071	0.060	0.094	0.082	0.079	0.902	0.097	0.061

16	0.097	0.071	0.097	0.061	0.082	0.076	0.078	0.060	0.061
17	0.060	0.084	0.097	0.061	0.082	0.079	0.078	0.097	0.061
18	0.060	0.071	0.097	0.094	0.075	0.076	0.081	0.060	0.061
19	0.060	0.071	0.060	0.061	0.075	0.076	0.081	0.060	0.093
20	0.296	0.071	0.296	0.300	0.311	0.076	0.081	0.296	0.332
21	0.097	0.084	0.097	0.061	0.082	0.079	0.078	0.060	0.061
22	0.097	0.084	0.097	0.061	0.082	0.079	0.078	0.097	0.061
23	0.296	0.309	0.296	0.061	0.311	0.076	0.078	0.060	0.093
24	0.097	0.084	0.060	0.094	0.075	0.079	0.078	0.060	0.093
25	0.097	0.084	0.060	0.094	0.082	0.079	0.078	0.097	0.061
26	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
27	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
28	0.097	0.084	0.097	0.094	0.082	0.079	0.078	0.097	0.061
29	0.097	0.084	0.097	0.094	0.082	0.079	0.081	0.296	0.093
30	0.060	0.071	0.097	0.061	0.082	0.076	0.081	0.060	0.093
Average value of *d* per item	**0.112**	**0.103**	**0.112**	**0.102**	**0.111**	**0.102**	**0.114**	**0.112**	**0.086**

Table 6 shows that all items have a threshold value of less than 0.2 (d≤0.2). This finding implies that all items in the extensive reading module construct are accepted by experts and meet the first requirements of FDM. Next, the analysis of the study was performed to obtain the percentage condition of expert agreement (Jamil et.al, 2017) on the construct of an extensive reading module. The results of the analysis to obtain the percentage value of expert agreement are shown in Table 7.

Table 7: Findings of Percentage of Expert Consensus on the Construct of Extensive Reading Module

Construct	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Number of Items d ≤ 0.2	26	27	26	27	26	27	28	26	28
Percent Per Item d ≤ 0.2	87%	90%	87%	90%	87%	90%	93%	87%	93%
Total Item d ≤ 0.2					678				
Total Item Percentage d ≤ 0.2					94%				

Based on the table, nine constructs that have been listed by the researchers have obtained expert agreement. Item values less than d≤0.2 are over 75%. Constructs 1, 3 and 5 showed a total of 87% expert agreement while constructs 2, 4 and 6 obtained 90% expert agreement. For constructs 7 and 9, the expert agreement figure exceeds 90% which is 93%. The findings of the study indicate that the second FDM condition has been met and the researcher will analyze the defuzzification to determine the construct priority of the extensive reading module. The determination of the priority of the main construct was analyzed to obtain the result from the condition of Triangular Fuzzy Numbers. The findings of the study on the determination of the Delphi Fuzzy Triangular Condition are shown in the following table:

Table 8: Findings of Triangular Fuzzy Numbers Conditions and Construct Rankings

Construct	Ranking
Reading Community	1
Motivation	2
Teacher's role	3
Material Selection	4
Contents	5
Selection of Techniques/Methods/Teaching and Learning Activities	6
Teaching and Learning Strategies (Information Literacy)	7
Material Sources	8
Objective	9

Table 8 shows the final findings of the constructs of the extensive reading modules that have been sorted in order of priority based on expert consensus. The results of the questionnaire conducted showed that the construct of Reading Community became the priority of experts and was in the first position with an α-cut value less than 0.2 ($d \leq 0.2$) which is 0.106. The next constructs in order of priority are Motivation, Teacher Role, Material Selection, Content, Technical Selection, Methods, Teaching and Learning Activities, Teaching and Learning Strategies (Information Literacy), Material Resources and finally, the Objective construct.

DISCUSSIONS

This study was conducted to obtain consensus from 30 experts to develop an extensive reading module. The findings of the study showed the expert panel reached an agreement to accept the nine constructs listed by the researcher to develop an extensive reading module. The agreement value obtained based on the analysis is between 0.097 to 0.0296 which is a value that is smaller than the threshold value ($d \leq 0.2$). The value of this threshold indicates that the construct of an extensive reading module is incredibly significant in reading programs conducted in schools throughout Malaysia because it contains an element of creativity which is one of the educational skills of the 21st century (Bakla, 2020).

Based on the FDM findings after the defuzzification process, all constructs were accepted and passed the alpha cut condition greater than 0.5. The construct that obtained the Fuzzy (A) score was placed in the first position i.e., the Reading Community construct. The community is a target in the Malaysia Education Development Plan 2013-2025 through the involvement of parents and the community to create an effective learning ecosystem (Ministry of Education Malaysia, 2013). Although the formation of a reading community requires time and perseverance and requires an interactive and collaborative process from various parties through social activities (Cremin, 2019), parental awareness of the importance of education and responsibilities is necessary to enable children to access education from the beginning (Ministry of Education Malaysia, 2018). Its implementation process also requires collaboration between researchers and teachers to acquire new methods or techniques as well as take specific actions to develop innovative practices (Chatenoud et al., 2019).

The results of this study also indicate that FDM branded through Delphi Technique (Yaakob, 2017) can be used in the process of obtaining results (Beram et al., 2020) to develop extensive reading modules. The findings of the study also show that the development of extensive reading modules is very necessary to implement reading programs in the era of Industrial Revolution 4.0. The challenges of the technology era through the construction of reading materials help to shape the quality of students to be competitive and have awareness of the importance of applying knowledge and information (Irzawati et al., 2021).

Knowledge and information based on reading materials, whether printed or digital materials have a positive relationship with motivational constructs, namely intrinsic motivation, extrinsic motivation, and the reading environment at home (Khir et al., 2019).

This study has huge implications for the implementation of reading programs that are constantly being improved by the government. This is because the main constructs developed in this study can help teachers design appropriate reading programs and materials for implementing reading programs. Organized and systematic planning and development of appropriate programs will attract students to participate in reading activities as well as cultivate a culture of reading among students. This is because the extensive reading process requires students to perform follow-up activities such as making notes to gain more benefits (Bakla, 2020).

CONCLUSION AND RECOMMENDATION

Overall, the use of the DDR approach is appropriate for this study for module development. The design phase using FDM which was used to obtain expert agreement on the construct of the extensive reading module obtained a high agreement value of 94%. The results of the analysis also proved that all constructs proposed by the researcher were accepted by the experts. All constructs also passed the three conditions of FDM have proven their suitability to be applied in reading programs conducted through the NILAM program in all primary and secondary schools in Malaysia. Based on the constructs that have been received by experts, the construct elements will be developed according to the suitability of the implementation of reading programs that are appropriate to the context of education in Malaysia. Once the constructs that have been developed, then the elements will be developed based on the main constructs. It is then will be tested in the fourth phase, which is the usability evaluation phase.

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