# Empowering Orang Asli Educators with Mobile Learning for Basic Literacy

Empoderando a los educadores de Orang Asli con el aprendizaje móvil para la alfabetización básica

Fairus Hamdan<sup>1</sup> Universiti Kebangsaan Malaysia – MALAYSIA mhmmdfairus@gmail.com Helmi Norman<sup>2</sup> Universiti Kebangsaan Malaysia – MALAYSIA helmi.norman@ukm.edu.my Hafiz Zaini<sup>3</sup> Universiti Kebangsaan Malaysia – MALAYSIA hafiz87.zaini@gmail.com Norazah Nordin<sup>3</sup> Universiti Kebangsaan Malaysia – MALAYSIA drnmn@ukm.edu.my Ruslina Ibrahim<sup>3</sup> Universiti Kebangsaan Malaysia – MALAYSIA ruslinasbpit@gmail.com Mohamed Yusoff Mohd Nor<sup>3</sup> Universiti Kebangsaan Malaysia – MALAYSIA yusoff1963@ukm.edu.my Rokiah Omar<sup>4</sup> Universiti Kebangsaan Malaysia – MALAYSIA pghuctc@ukm.edu.my

## ABSTRACT

This study aims to evaluate the perceptions of tutors on their readiness of implementing the basic literacy program and the module of M-Litora (basic literacy and digital transformation module for Orang Asli via mobile learning). This is important to ensure for the appropriateness of the literacy program developed by researchers from Faculty of Education and Faculty of Health Sciences, UKM in meeting the problems of reading difficulties among the children of the Orang Asli. The finding revealed that mastery on Bahasa Melayu among tutors, the capability of Orang Asli tutors to receive online training and motivation among tutors and the children were part of elements influencing the tutor's readiness towards this program. Perhaps the initiatives through this program accelerating the government inspiration in strengthening the marginalized community with education. However, there are more effort and initiative that are deemed essential to the implementation of the Bahasa Melayu program for the marginalized community.

Keywords: Orang Asli, basic literacy, Bahasa Melayu competency, tutor readiness.

### RESUMEN

Este estudio tiene como objetivo evaluar las percepciones de los tutores sobre su preparación para implementar el programa de alfabetización básica y el módulo de M-Litora (módulo de alfabetización básica y transformación digital para Orang Asli a través del aprendizaje móvil). Esto es importante para garantizar la idoneidad del programa de alfabetización desarrollado por investigadores de la Facultad de Educación y la Facultad de Ciencias de la Salud, UKM, para resolver los problemas de dificultades de lectura entre los niños de Orang Asli. El hallazgo reveló que el dominio de Bahasa Melayu entre los tutores, la capacidad de los tutores de Orang Asli para recibir capacitación en línea y la motivación entre los tutores y los niños fueron parte de los elementos que influyeron en la preparación del tutor para este programa. Quizás las iniciativas a través de este programa aceleran la inspiración del gobierno en el fortalecimiento de la comunidad marginada con educación. Sin embargo, hay más esfuerzo e iniciativa que se consideran esenciales para la implementación del programa Bahasa Melayu para la comunidad marginada.

Palabras clave: Orang Asli, alfabetización básica, competencia Bahasa Melayu, preparación del tutor.

1, 3 Faculty of Education, Universiti Kebangsaan Malaysia

2 Corresponding author. Faculty of Education, Universiti Kebangsaan Malaysia

4 Faculty of Health Sciences, Universiti Kebangsaan Malaysia

Recibido: 21/07/2019 Aceptado: 16/09/2019

RELIGACIÓN. REVISTA DE CIENCIAS SOCIALES Y HUMANIDADES

Vol 4 • N° 19 • Quito • Septiembre 2019 pp. 135-143 • ISSN 2477-9083

# 1. INTRODUCTION

Knowledge is the essential aim in the education of all over the world. Therefore, the main objective for any Basic literacy at an early age is crucial in ensuring children have access to education and knowledge. UNESCO (2015) in its Education for All Report 2015 emphasizes on the universalization of primary education. Here, in goal number two, UNESCO (2015) aims to ensure children in Malaysia under difficult circumstances and belonging to ethnic minorities have access to complete, free, and compulsory primary education of good quality. This is aligned with the Malaysia Education Blueprint 2013-2025 shift number two, in which each child is to be proficient in Bahasa Melayu and English language and is encouraged to learn an additional language (Ministry of Education, 2013). This includes the Orang Asli children, who were categorized under the ethnic minorities who live in difficult circumstances.

The education level of Orang Asli in Malaysia is currently at upsetting state. In the Annual Report 2015 of Jabatan Kemajuan Orang Asli (JAKOA), they indicated that the enrolment of Orang Asli pupils in standard one in 2009 were 3,548 while the number of completed standard 6 in 2014 were higher that i.e., 4,295 with a difference of 747 with dropout rate 21.05% (Jabatan Statistik Negara 2015). Having lower registration rates compared to completion rates has a huge interpretation of the increasing trend of enrolments that impacts the educational process of each Orang Asli pupils. Chen (2017) in discussing the issue of late enrolment highlighted that the negative impact such as low cognitive development and achievement among the rural community in future due to the trend of late enrolment would cause early drop-out. This issue is in line with research conducted by Mohamad Johdi & Abdul Razak, (2009) and Sinappan et al., (2014) which stated that Orang Asli pupils are facing an educational gap particularly in basic literacy – skills of reading and mathematics. Gordon and Qiang (2000) had mentioned on the reports stated that the minimum requirement in China - 'neo-literate should be able to read the easier popular papers and magazines and essays, to keep simple accounts, and to write simple and application-oriented essays. While Muhammad Isa et al. (2012) stated that the minimum requirement to functionally literate in Malaysia is the ability to read and to understand the papers and articles and can write a letter for personal use.

While in discussing the development of Japan indigenous people, Nonoyama-Tarumi & Ota (2011) highlighted the preprimary education is one of the crucial factors for early childhood development. In ensuring the proper quality educational implementation on children including from rural area must be arranged and set in proper for them to participate in early learning program in ensuring the reduction of drop out rate. This issues of late enrolment, school attendance and the dropout rate among indigenous pupils were in line with Angrist & Keueger, (1991); Connelly & Zheng, (2003); and Mamaril, Cox, & Vaughan, (2018). The other factors that contribute on the low educational achievement of Orang Asli are factors such as incomplete of educational facilities (Kral & Renganathan, 2018; Shaari et al., 2016), poverty levels (Fadzil et al., 2017), holding value towards education (Rabahi, Yusof & Awang, 2015; Mohamad Johdi & Abdul Razak, 2009), low motivations (Kamaruddin & Jusoh, 2008, Abdullah et al., 2013, Rahman et al., 2018), minimal working prospects in future (Teo, 2016; Mohamad Johdi & Abdul Razak, 2009), geographical factors (Fadzil et al. 2017), low parenting skills (Rabahi, Yusof, & Awang 2015), strong family relationships and ignorance to attend to school in a while (Savage et al. 2010), family income/economy (Teo 2016), unsuitable learning environment (Shaari et al. 2016), inappropriate learning materials (Sinnappan et al. 2014; Shaari et al. 2016; Norman et al., 2015b) and life styles – hunting, foresting, drunk (Porath 2010).

As such, based on the problems and gaps identified, the study evaluates on the readiness of Orang Asli on volunteering to facilitate basic literacy programs for Orang Asli children. The context of this research implementation is to assess the level of readiness with factors such as level of quality in terms of being knowledge, attitude, and skills (Mahmud et al., 2012) in having online training (Mahamod & Noor, 2011) that to implement the module of M-Litora (acronym of Mobile-Literasi dan Transformasi Digital Orang Asli) that focus on teaching the children of Orang Asli on reading skills. With the initiative from the established module of Asas Membaca Orang Asli (Siraj et al., 2014a; Siraj et al., 2014b; Siraj et al., 2014c) this module integrates mobile learning in improving basic literacy as well as technological literacy of the Orang Asli.

## 2. BACKGROUND

The interpretation of literacy brings the understanding as to the proficiency in reading, writing, and arithmetic (UNESCO 2006; UNESCO 2015). A person who lived in remote is but unable to read and write having this disability on literacy seem to need to have literacy program based on local contextual model and module (Milton 2017; Mamaril, Cox, & Vaughan 2018). Eady, Herrington & Jones (2010) stressed that in blinding adopting a western educational model or approach by directly copying the model or method could disrupt current educational aims. Education-based on western ideals and standards, or even to the extent of our national standard and policies are often inappropriate for aboriginal communities. This in turn would affect the literacy proficiencies of aborigines as they are denied access to literacy education at an early stage, as the educational approach is not suitable for them, which calls for suitable measures with regards to accessible and equitable educational approaches and practices (Norman et al., 2015a; Nordin et al., 2018; Adnan & Rizhaupt, 2018; Andersen et al., 2018; Bakar et al., 2019).

Promotion on literacy for indigenous people is one of the main initiatives of the international community. The teaching and learning activities of aboriginal in the North Territory of Australia by Brasche & Harrington (2012) highlighted the importance to improve teacher quality and continuity teaching process in a remote area. The issues such as the newbie and recently graduate teacher were located in isolated and remote area were the higher issues of retention in remote area (Olatunji, & Ajayi, 2017); having little interaction with the remote communities (Kelly et. al., 2014); no life experience lived in isolated remote area and setting (Kline, White & Lock, 2013) resulting the low performance and high teacher turnover in remote educational institution. In meeting the issue of teacher's quality and turnover the initiative to revised the recruitment strategies need to implement by exercising the reorientation expectation to ensure the level of quality and

continuity of teacher to contribute to gain the positive educational impact and outcome (Asim et al., 2017; Mason & Matas, 2015; Kline & Walker-Gibbs, 2015), offering the rural scholarship to meet the issue of the ideal candidate to suitable candidate among young students in Australia with at least three years service in a remote area by New South Wales Department of Education (NSW 2018). Table 1 summarized the strategies and approaches taken by several countries in the study of Haque et al., (2013) that make the comparison analysis from secondary sources about pre-primary education including websites, newspapers, various published and unpublished article.

Country	Strategies
Bangladesh	Strategy to develop an educational center with forming the committee to supervising and monitoring and provide the teachers in pre-primary sectors. The committee consists of personnel from schools nearby, NGOs, a representative from the parents, and teachers of the center. The committee is to ensure the smooth running educational program in a rural area.
India	Strategy by forming a scheme that fulfilling the health care facilities, supplementary nutrition support, and focus on children community on communication and cognitive skills in preparing them for primary school. This scheme/program started in several states and focused on many remote and tribal areas.
Argentina	The strategy is to achieve two goals; that is to enhance educational achievement started from home and develop new competencies; and ii. Acquisition in early-stage and accessible knowledge and skills that improve the first year of primary education. A new curriculum that explicitly designed to develop on communication skills, personal autonomy, and behavioral skills, social skills, logical and mathematical skills, and emotional management skills.
Nigeria	Strategy to implement the pre-primary educational program that;- encourage the private initiative to supports pre-primary education; prepare the provision of training the teacher that specialized in early childhood education; to ensure the instruction in pre-primary school using mother-tongue language-based education; to develop the orthography of many Nigeria languages; producing national textbook-based Nigeria languages; promotes fun-education and setting up-regulation for pre-primary schools.
EU	Strategies to promote the approach to pre-primary and improve its universal access to their pre-primary school.

The program of teaching in a rural area by preparing the presentable aboriginal educator and staff had been discussed by Kitson and Bowes (2010). They highlighted the benefits of having community consultation able to help and reduce the undesirable comfort of the non-indigenous staff towards children of a remote community. The initiative may promote the cultural-based education (Sinappan et al. 2014), with personal communicate effectively with aboriginal families/communities (Ball, 2007), teach the children of community about cultural norm practices and deliver culturally anticipated comfort and educated role models (Kline, White & Lock, 2013; Asim et al., 2017).

### **3. THE INITIATIVE**

Statistic by UNESCO Institute of Statistic had rated low on the country's youth (15 and above) were below that national statistic, i.e. 94.46 percent in 2015. In their report in Adult and Youth Literacy: National Regional and Global Trends 1985-2015, 40 percent which lowers that national statistic (UNESCO Institute for Statistics, 2013). As reflected on this the Director-General of National Library of Malaysia had produced the statement stated that the high standard of measurement set by the UIS made the rate were empirically low and reclaim that the national level of literacy still in the unsatisfactory level that needs to put several improvising programs (Bernama, 2015). The statistical figure has included with the marginal minorities live in a remote area. The initiative by a local university in supporting the government of the cause-and-impact of late enrolment Orang Asli should be properly set up. The ideas of meeting the need for inclusive education for remote area children in meeting late enrolment issue due to the house-school distance that needs to deal with poor transportation and infrastructure facilities and such other contributing factors. Thus the initiative was to prepare the selected adult Orang Asli with minimum education level through distance learning for trainers program.

In this study, before the implementation of online training to the Orang Asli tutor through Web 2.0; we are going to get the adult Orang Asli views on their readiness to implement the literacy activity, the part of the whole program conducted in center-based-education conducted in Pusat Pendidikan Komuniti UKM-CIMB Islamic. The part of the program is suggesting the informal pre-primary program in helping rural children to gain skills of reading/ literacy. The literacy program was to embark in Pos Gob. Figure 1 shows the journey seven to eight hour off-road from the city of Gua Musang Kelantan with four wheels drive.

Even though the Internet communication has provided with the capability to have communication device is high, the level of knowledge to wisely use the technology device for educational purposes are quite low among adult Orang Asli (Zal, 2011) and this is aligned with the adult Orang Asli in Pos Gob. For instance, this village has received several facilities such as Internet, computers, and fund compared to other villages due to their effort to enhance the quality of life among the community; they still at a low level in utilized the facilities for educational purposes. In spite, several universities have put the initiative to implement the research at the village.

In result, the students missed out the broader aspect of teaching and learning taught in the class. Thus, the optimum pedagogical practices such as this literacy program for such children with reading disability need in a remote area requires personal face-to-face or pull out well-trained facilitator in improving their literacy instruction. Figure 3 shows the minority ethnic with small group initiative was having initial training for adults Orang Asli who have at least minimum certification of SPM and above. They were trained to be the facilitator on this literacy program for children of their community with reading/literacy disability.

### 4. RESEARCH PROBLEM

Mahmod & Noor (2011) pointed out the educational tools based online technology should be benefited in meeting the educational program in the distance. Kelly et al., (2014) discussed the need to support in term of knowledge and online technology skills for them, especially the newbie teachers in a remote area to support their teaching and learning activities. Educator and tutor need time, skills and learning resources to prepare them to use the Internet and technology for teaching purposes (Mamaril, Cox & Vaughan, 2018). The issue of lack of skill using online technology may drag educator ineffectively used the technology in supporting the teaching and learning activities (Kral & Renganathan, 2018). Thus, the educator and tutor must be ready and be prepared to use the technology to ensure ICT skills. In discussing the level of readiness in ICT for teaching and learning, the measurement of knowledge, attitude, confidence, and skills toward utilizing the web-based educational resources were highlighted (Mahmud et al., 2012; Suliman et al., 2016). While Milton (2017) discussed the issue associated with improving the literacy class by using more targeted supports, in this context, online-based technology is in need for inclusive education for remote community to access quality education; it is critical to ensure the educator to understand the role of the learner in an online learning environment. For instance, the need to understand the educator and tutor level of readiness towards the online training via Web 2.0 needs to be conducted in meeting to the lack of study on Orang Asli online training in the distance by remote geographical area.

### **5. METHODOLOGY**

The selection of Pos Gob is due to its located in a remote area with six to eight-hour off-road journey from the city of Gua Musang. Surprisingly, it has equipped with Internet facilities. The researcher from several public universities has supported the place with Internet and several facilities. Instrument adapted from the past study that focuses on the level of readiness. The study focuses on estimating the tutor readiness of adult Orang Asli and their view during the activities in the program. In addressing the issue of under-representation among educator program to implement M-Litora module, the researcher thought it is important to consult them by knowing their readiness to have the online training. Survey and items factors adapted from past study and suited with the context of the study (Mahmud et al., 2012; Suliman et al., 2016; Milton, 2017). In meeting these objectives, this study has addressed several research questions:

1. What is the knowledge readiness among the tutors of adult Orang Asli to participate in the literacy program?

2. What is the attitude readiness among the tutors adult Orang Asli to participate in online training for the literacy program?

3. What is the perception among the tutors adult Orang Asli on children behavior in a literacy program?

4. What is the perception among the tutors adult Orang Asli on an inclusive educational program in solving disability-reading program?

Data collection and analysis methods – the development of the survey were based on previous literature. This study constructs the online linguistic scale questionnaire through the Google survey form. The online survey had distributed through Whatsapp and Email and requested them with an immediate response. The data were analyzed using SPSS 20.0 with producing the percentage of agreement and presenting the value of the mean.

### 6. FINDING

Table 2 describes the demographics of the tutor in facilitating the program of literacy Bahasa Malaysia. It is consist of data on gender, types of Orang Asli ethnic participated, age, level of education of respondent.

Gender	Male (4)	36.4%
	Female (7)	63.6%
Sub-Ethnic	Temiar (9)	81.8%
Age Level of Education	Semai (2) 20 - 30 years (11) UPSR (1) PMR (3) SPM (5) STPM (1)	18.2% 100% 9.1% 27.3% 45.4% 9.1%
	Diploma (1)	9.1%
Willingness to be an educator	Yes (7) Unsure (4)	63.4% 36.4%
	No	-
Know how to administer the blog	High Moderate	-
	Low (11)	100%

### **TABLE 2. Tutors Demographic Profile**

	High (2)	18.2%
Know-how to use a blog to access information	Moderate (5)	45.5%
-	Low (4)	36.3%

As illustrated in Table 1 that the majority of Orang Asli facilitators were female (71.4%), with the sub-ethnic majority are Orang Asli Temiar (71.4%) with the respondent range of age is 20 to 30 years old. The table also shows that respondents are rating them on the willingness to participate as an educator (100%) towards the implementation of the literacy program in their community. As it was mention early, the minimum requirement to be the educator on the teaching program is SPM holder and above and the majority of the respondent (63.6%) fulfilled the requirement. In term of their knowledge wise to administer a blog, it has shown that all of them were rated low. Unfortunately, to use the blog in accessing for information, the majority of respondent were rated them know how to use the web/blog for information. With-in this small community members and limited skilled workforce sources of adult Orang Asli, only eleven from the sub-ethnic of Temiar and Semai were voluntarily joint with this literacy program, but seven are ready to be the educator.

Table 4 describes the items about the tutor level of readiness in facilitating the program of literacy of Bahasa Malaysia among Orang Asli children. The linguistic scale was rate 1. Strongly Disagree; 2. Disagree; 3. Neutral; 4. Agree & 5. Strongly Agree. Result of Table 2 is the finding for research question 1. What is the knowledge readiness among the tutors of adult Orang Asli to participate in the literacy program?

TABLE 4. The knowledge	e readiness among the tuto	rs adult Orang Asli to pa	articipate in the literacy program

		1	2	3	4	5	
No	Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
1	I can master the teaching and learning of basic reading skills provided through online	-	-	18.2%	27.3%	54.5%	4.36
2	It is easy for me to read Bahasa Melayu	-	-	9.1%	18.2%	72.7%	4.64
3	It is easy for me to write Bahasa Melayu	-	-	9.1%	18.2%	72.7%	4.64
4	It is easy for me to understand instruction in Bahasa Melayu	-	-	9.1%	-	90.9%	4.82
5	It is easy for me to communicate in Bahasa Melayu	-	-	9.1%	9.1%	81.8%	4.73
6	I have experience in using a textbook to master the educational topic in Bahasa Melayu	-	-	-	9.1%	90.9%	4.82
7	It is easy for me to understand the notes, textbook, reference in Bahasa	-	-	-	27.3%	72.7%	4.73
8	Activities given to improve my basic facilitating skills are sufficient	-	36.4%	54.5%	9.1%	-	2.73
9	I use reference books, reading materials and exercise books in Bahasa	-	-	45.5%	45.5%	9.1%	3.27
10	I can understand the content in the news in Bahasa Melayu	-	-	9.1%	-	90.9%	4.82
11	Various learning facilities in Bahasa Melayu is sufficient.	-	72.7%	27.3%	-	-	3.18

As per illustrated in Table 4, the mean value near to 5.00 is the highest value agreement among the facilitator that was shared within the items number 4 (mean=4.82) and 10 (mean=4.82). The evidenced shows that all of the Orang Asli facilitators were understood and make practice the national language in their educational learning purposes. In measuring the standard of literacy skills among the respondents in reading and writing activities, the majority of the agreements were high as item 4 - easy to understand the instruction in Bahasa Melayu. As such, these were evidence that all the respondents had a high level of knowledge readiness towards participating in facilitating the literacy program. But as shown in items 8 (mean=2.73) and 11 (mean=3.18) these elements need researchers to put some additional effort to improve the online facilitation for under-presentable tutors conducting M-Litora module in meeting the main objective of the program, i.e. to reduce the number of illiteracy among the children in a remote area. Result illustrated in Table 5 is the finding for research question 2. What is the confidence readiness among the tutor adult Orang Asli to participate in the literacy program?

		1	2	3	4	5	
No	Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
1	Adapting surrounding natural resources in the module is a good idea and easy for me to teach	ı	ı	ı	ı	100%	5.00
2	The ABC M-Litora song was good and improve learning engagement	١	ı	54.5%	36.4%	9.1%	3.18
3	Sharing online video in Bahasa will ease me to understand facilitation process	١	١	١	١	100%	5.00
4	I am motivated to improve reading skills to my community	ı	ı	,	ı	100%	5.00
5	I encourage children to work hard in the program	١	١	ï	١	100%	5.00
6	I come as per agreed scheduled time on teaching session	ı	١	81.8%	9.1%	9.1%	3.91
7	The module guided me to teach our community children	١	١	9.1%	81.8%	9.1%	4.64
8	I give early respond through social media instrument when requested	١	١	9.1%	81.8%	9.1%	4.64

TABLE 5. The attitude readiness among	the tutors adult Orang	g Asli to partici	pate in the literacy program

As per illustrated in Table 5, the mean value near to 5.00 is the highest value agreement among the facilitator that was shared within the mean 5.00 items number 1, 3, 4 and 5. All the items explain the level of instructor confidence in implementing the program. The item 1 explained that adapting the module with the surrounding natural elements were a good idea and this was the main criteria to make education meaningful to the children, where the content is based to community culture and life. Result illustrated in Table 6 is the finding for research question 3. What is the perception among the tutor adult Orang Asli on children behavior in a literacy program?

TABLE 6. The perception among	the tutors adult Oran	g Asli on children be	ehavior in the literacy program
-------------------------------	-----------------------	-----------------------	---------------------------------

No	Item	1 Strongly	2 Disagree	3 Neutral	4 Agree	5 Strongly	Mean
		Disagree	Disaglee		Agree	Agree	Ivicali
1	Children easily understand content based	-	-	18.2%	18.2%	63.6%	4.91
2	natural surrounding resource Children easily can sing the <i>ABC M-Litora</i>	-	-	27.3%	45.5%	27.3%	4.00
3	song Children can benefit online video session	-	-	63.6%	27.3%	9.1%	3.09
4	Children enjoy the food provided	-	-	-	-	100%	5.00
5	Children enjoy with the uniform provided	-	-	-	-	100%	5.00
6	Children enjoy new facilities classroom provided	-	-	-	-	100%	5.00
7	Children memory towards the ABC	-	-	-	9.1%	90.9%	4.91
8	<i>M-Litora</i> song is high Children easy to come to the educational center	-	-	27.3%	-	72.7%	4.45

As per illustrated in Table 6, the mean value near to 5.00 is the highest value agreement among the facilitator that was shared within the items number 4, 5 and 6 (mean = 5.00 respectively). All the items explain the level of perception among the tutors adult Orang Asli on the children behavior in the literacy program. It can be explained from the table that the facilitator not using the technology devised wisely. Also, from the perspective of the facilitator, the purpose of the song is to bring the participant to enjoy and improve its memory. Using song such as a great teaching tool as it is a universal attraction, connecting to the culture and language (British Council, 2015). The ABC M-Litora song is purposely designed to be part of the lesson that focuses on the easily understandable word, vocabulary, and pronunciation by woven with the surrounding natural elements and easy percussion rhythm. Result illustrated in Table 5 is the finding for research question 4. What is the perception among the tutors adult Orang Asli on an inclusive educational program in solving disability-reading program?

TABLE 7. The perception among t	he tutors adult	t Orang Asli	i on inclu	1sive ed	ucational	informal	program

		1	2	3	4	5	
No	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
1	It is good to have such a basic reading program in a	-	-	-	9.1%	90.9%	4.91
2	remote area The children having literacy disability	-	-	-	-	100%	5.00

3	The program needs to be open wider by teaching the community elders	-	-	-	18.2%	81.8%	4.82
4	Acquiring the basic reading skills is a step to the other knowledge	-	-	-	18.2%	81.82%	4.82
5	This program needs a longer time and fund	-	-	9.1%	9.1%	81.8%	4.73
6	Teaching children of my community need a long time	-	-	18.2%	18.2%	63.6%	4.45
7	The knowing/memorizing the alphabets is appropriate for the introduction	-	-	18.2%	-	81.8%	4.09
8	Knowing how to say syllable is suitable for the next topic in the program	-	-	18.2%	-	81.8%	4.09
9	The last approach is to ensure children can easily read short/simple reading story	-	-	18.2%	-	81.8%	4.09
10	To color, the alphabet may improve children memory	-	-	18.2%	72.7%	9.1	4.32
11	It is good to give us appropriate training for facilitation program	-	-	18.2%	-	81.8%	4.09

As per illustrated in Table 7, the mean value near to 5.00 is the highest value agreement among the facilitators confirm that all the participants had a disability in reading skills. In meeting the inclusive education need among the children in the remote area were important (mean = 4.91) to the facilitators. They also had an agreement that the format of the module to be implemented, i.e. in items number 7, 8, and 9. Table 7 also shows that the majority of the tutors still needs an additional training program.

#### 5. DISCUSSION AND CONCLUSION

Pusat Pendidikan Komuniti UKM-CIMB situated in Kampung Orang Asli Pos Gob. This initiative is to promote inclusive education for the Orang Asli community in the remote area. This study conducted to propose the best practice in improving the literacy-disability program in the remote area. This program conducted successfully by training qualified adult community becoming presentable trained facilitators. All the children willingly attend to participate with the program on basic literacy-based M-Litora module shows that the children and their parents positively accept the initiative. This program intends to educate Orang Asli children with basic reading skill before they join with the standard educational system.

In many circumstances of the successfulness to implement new approaches in conducting training in based online technology will heavily rely on the readiness of its participants, especially in geographical distance. This is aligned with the study of Mahmud et al., (2012) in determining the participants' readiness in term of his or her knowledge, skills and attitude need to be assessed together in gaining the understanding and information. In this context of the study, the educator readiness of utilizing the Web 2.0 to facilitate the program of basic literacy of Bahasa Melayu on Orang Asli community children was explored. This study shows that the majority of the participant who took parts in this study had little knowledge in administrating the Web 2.0 but having the required knowledge to use the web to access the information using their mobile devices. This positive indicator put the researcher understanding that the respondents are having minimum technology-wise to get training as the facilitator to teach reading and writing skills to the children and had a positive attitude towards using the ICT. Indeed, having high administration web skills will be added value to the educator roed to learn and familiarize with the web and online educational content in ensuring more beneficial will gains in this 21st Century educational approaches (Rahman et. al., 2018; Ball, 2007; Eady et al., 2010; Kelly et al., 2014; Muslimin et al. 2018).

From the study also the finding gave the reflection effect towards the underlying Social Learning Theory (Bandura, 1979) where the concept of participation of the community, the development of learning center in remote area than focusing on development of literacy-ability with the element of surrounding natural resources, gave the positive impact to in changing the behavior of Orang Asli children towards learning the basic literacy. This was in line with the past study that is improving participation of aboriginal community need to woven the education with their culture and surrounding element (Dee & Penner, 2017; Savage et al., 2011; Mellom et al., 2018). This study also shows the implication towards the requisition and acceptance of online training among the facilitators situated in remote area strengthen the underlying theory of Distance Learning Theory (Moore, 1997) that promote adults learning in the distance pedagogical concept that supports the train-of-trainer program. This is crucial to ensure remote community having quality educational support (Meyer, 2002) and Jones et al., (2015) whereby sharing the quality education in the distance with conducted through online need a proper instructional learning strategy.

Since the majority of the tutor among the Orang Asli youth had little experience in attending online training, this program was proposing the video-based resources and materials that encompass in Web 2.0 to be used for the teaching and learning activities. The implementation of this program resulted in a positive impact on the tutor and community children of Orang Asli. A relevant stakeholder is proposed to promote the use of Web 2.0 in improving the education activities in the remote area, and it should implement this initiative. The initiative should be done with collaboration with the universities researcher or NGOs in design and develop online training. As discussed by Haque et al., (2013) this is one of the strategies in implementing the pre educational before the children go for national standard schools by educating the children with the basic literacy acquisition. As discussed by Haque et al., (2013) this is one of the strategies in implementing the children go for national standard schools by educating the children with the basic literacy acquisition.

the basic literacy skills. The reason for the establishment of the pre-primary in remote areas is to reduce the problem of tumbled behind due to late enrolment, which will cause the failure of reading and writing skills acquisition. Perhaps, the initiative to ensure the quality of education will be meet the objectives and will be shared with the remote community in Melayu. This initiative with the support of computers and Internet facilities will successful the generic facilitation skills acquisition in anywhere and anytime in distance educational approaches.

### ACKNOWLEDGEMENT

This research is funded by the Arus Perdana Project, Grant No: AP-2017-004/1, the Malaysian Research Universities Network (MRUN) Translational Program Grant, Grant No: MRUN-RAKAN RU-2019-003/1, MRUN-RAKAN RU-2019-003/2 and GRANT AKU 211, APU 2017-004/3, CIMB Islamic, Pos Gob Community.

#### **BIBLIOGRAPHIC REFERENCES**

- Abdullah, R., Mamat, W. H. W., Zal, W. A., & bin Ibrahim, A. M. (2013). Teaching and learning problems of the Orang Asli education: students' perspective. Asian Social Science, 9(12), 118.
- Adnan, N. H., & Ritzhaupt, A. D. (2018). Software Engineering Design Principles Applied to Instructional Design: What Can We Learn From Our Sister Discipline? TechTrends, 62(1), 77-94.
- Andersen, B. L., Na-songkhla, J., Hasse, C., Nordin, N., & Norman, H. (2018). Perceptions of authority in a massive open online course: An intercultural study. International Review of Education, 64(2), 221-239.
- Angrist, J. D., & Keueger, A. B. (1991). Does compulsory school attendance affect schooling and earnings?. The Quarterly Journal of Economics, 106(4), 979-1014.
- Asim, S., Chimombo, J. P., Chugunov, D., & Gera, R. M. C. (2017). Moving teachers to Malawi's remote communities: a datadriven approach to teacher deployment.
- Bakar, NSA, Maat, SM, & Rosli, R. (2019). Evaluation on Mathematics Teachers' Technological Pedagogical Content Knowledge (TPACK) Scale using Rasch Model Analysis. Religation Journal of Social Sciences and Humanities, 4 (18), 30-36.
- Ball, J. (2007). Aboriginal young children's language and literacy development: Research evaluating progress, promising practices, and needs. Manuscript prepared for the Canadian Language and Literacy Networked Centre of Excellence, National Literacy Strategy. Retrieved from http://www. ecdip. org.
- British Council (2015). How to use song in English language classroom. Retrieved 4 February 2018. https://www.britishcouncil.org/voices-magazine/how-use-songs-english-language-classroom
- Chen, Q. (2017). Impacts of Late School Entry on Children's Cognitive Development in Rural Northwestern China—Does Preprimary Education Matter?. Asia & the Pacific Policy Studies, 4(3), 586-601.
- Connelly, R., & Zheng, Z. (2003). Determinants of school enrollment and completion of 10 to 18 year olds in China. Economics of education review, 22(4), 379-388.
- Dee, T. S., & Penner, E. K. (2017). The causal effects of cultural relevance: Evidence from an ethnic studies curriculum. American Educational Research Journal, 54(1), 127-166.
- Eady, M., Herrington, A., & Jones, C. (2010). Literacy practitioners' perspectives on adult learning needs and technology approaches in Indigenous communities. Australian Journal of Adult Learning, 50(2), 260.
- Fadzil, K. S., Ibrahim, W. S. W., Awang, S. N., Zainol, R., & Edo, J. (2017). Masyarakat pribumi, infrastruktur sosial dan pembangunan terancang di Malaysia: Kajian penglibatan masyarakat Orang Asli di RPS Air Banun, Belum-Temengor, Perak. Geografia-Malaysian Journal of Society and Space, 12(10).
- Gordon, A., & Wang, Q. (2000). Education in rural areas of China and South Africa: Comparative perspectives on policy and educational management. Comparative Perspectives: Education in China & South Africa, 1-45.
- Henderson, R. (2008). A boy behaving badly: Investigating teachers' assumptions about gender, behaviour, mobility and literacy learning. Australian Journal of Language and Literacy, The, 31(1), 74.
- Jabatan Statistik Negara (2015). Rumusan data pelajar Orang Asli bagi sekolah 100% Orang Asli, 2014. Retrieved on 31 Jan 2018. http://www.rurallink.gov.my/wp-content/uploads/2015/05/7-JAKOA.pdf
- Jones, S., Walker, C., Miles, A. C., De Silva, E., & Zimitat, C. (2015). A rural, community-based suicide awareness and intervention program. Rural Remote Health, 15(1), 29-72.
- Kamaruddin, K., & Jusoh, O. (2008). Educational policy and opportunities of Orang Asli: A study on indigenous people in Malaysia. The Journal of Human Resource and Adult Learning, 4(1), 86-97.
- Kelly, N., Reushle, S., Chakrabarty, S., & Kinnane, A. (2014). Beginning teacher support in Australia: Towards an online community to augment current support. Australian Journal of Teacher Education, 39(4), 68-82.
- Kline, J., & Walker-Gibbs, B. (2015). Graduate teacher preparation for rural schools in Victoria and Queensland. Australian Journal of Teacher Education (Online), 40(3), 68.
- Kline, J., White, S., & Lock, G. (2013). The rural practicum: Preparing a quality teacher workforce for rural and regional Australia. Journal of Research in Rural Education (Online), 28(3), 1.
- Kral, I., & Renganathan, S. (2018). Beyond school: Digital cultural practice as a catalyst for language and literacy. In Language Practices of Indigenous Children and Youth (pp. 365-386). Palgrave Macmillan, London.
- LaFromboise, T., Coleman, H. L., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. Psychological bulletin, 114(3), 395.
- Mahamod, Z., & Noor, N. A. M. (2011). Persepsi guru tentang penggunaan aplikasi multimedia dalam pengajaran komponen sastera bahasa Melayu. GEMA Online<sup>®</sup> Journal of Language Studies, 11(3).
- Mahmud, R., Ismail, M. A. H., Rahman, F. A., Kamarudin, N., & Ruslan, A. R. (2012). Teachers' readiness in utilizing educational portal resources in teaching and learning. Procedia-Social and Behavioral Sciences, 64, 484-491.

- Mamaril, M. N., Cox, L. J., & Vaughan, M. (2018). Weaving evaluation into the Waipā ecosystem: Placing evaluation in an indigenous place-based educational program. Studies in Educational Evaluation, 56, 42-51.
- Mason, S., & Matas, C. P. (2015). Teacher attrition and retention research in Australia: Towards a new theoretical framework. Australian Journal of Teacher Education (Online), 40(11), 45.
- Mellom, P. J., Straubhaar, R., Balderas, C., Ariail, M., & Portes, P. R. (2018). "They come with nothing:" How professional development in a culturally responsive pedagogy shapes teacher attitudes towards Latino/a English language learners. Teaching and Teacher Education, 71, 98-107.
- Meyer, K. A. (2002). Quality in Distance Education: Focus on On-Line Learning. ASHE-ERIC Higher Education Report. Jossey-Bass Higher and Adult Education Series. Jossey-Bass, 989 Market Street, San Francisco, CA 94103-1741.
- Milton, M. (Ed.). (2017). Inclusive Principles and Practices in Literacy Education (Vol. 11). Emerald Group Publishing.
- Mohamad Johdi, S., & Abdul Razak, A. (2009). Kesedaran pendidikan dalam kalangan masyarakat Orang Asli [Education awareness amongst indigenous communities]. Jurnal Persepktif Pendidikan dan Sosiobudaya (Education and Social-Culture Perspectives Journal). Bangi, Universiti Kebangsaan Malaysia, 47-58.
- Mohamed Isa, Z., Hamid, A., & Asiah, N. (2012). Peranan Ibu Bapa Dalam Memastikan Pencapaian Literasi Kanak-Kanak Prasekolah Semasa Berada Di Rumah. Jurnal Pendidikan Bitara UPSI, 5.
- Muslimin, M. S., Nordin, N. M., Mansor, A. Z., Ismail, I. M., & Hamdan, F. (2018). Application of Learning Theories in Design and Development of the Mobile Application for Microeconomics Course. Advanced Science Letters, 24(4), 2475-2479.
- Nonoyama-Tarumi, Y., & Ota, Y. (2011). Early childhood development in developing countries: Pre-primary education, parenting, and health care. Background Paper Education for all. Global Monitoring Report.
- Nordin, N., Norman, H., & Hamdan, F. (2018). Quality education with instructional design via massive open online courses. Advanced Science Letters, 24(4), 2541-2545.
- Norman, H., Nordin, N., Din, R., Ally, M., & Dogan, H. (2015a). Exploring the roles of social participation in mobile social media learning: A social network analysis. The International Review of Research in Open and Distributed Learning, 16(4).
- Norman, H., Siraj, S., Hussin, Z., Sinnappan, G. S., Hamdan, M. F., Nordin, N., & Dogan, H. 2015b. Empowering Aborginal Women in Literacy using Mobile Learning Technology. Poster. AMOS4M.
- Olatunji, O. A., & Ajayi, S. O. (2017). Rurality, Nigeria's massification policy on access to basic education and turnover causations amongst teachers. Australian and International Journal of Rural Education, 26(3), 3-17.
- Porath, N. (2010). 'They have not progressed enough': Development's negated identities among two indigenous peoples (Orang Asli) in Indonesia and Thailand. Journal of Southeast Asian Studies, 41(2), 267-289.
- Rabahi, M., Yusof, H., & Awang, M. (2015). Leading learning: A grounded theory perspective of orang asli parental involvement and engagement. Procedia-Social and Behavioral Sciences, 211, 94-103.
- Rahman, N. A., Halim, L., Ahmad, A. R., & Soh, T. M. T. (2018). Challenges of Environmental Education: Inculcating Behavioural Changes among Indigenous Students. Creative Education, 9(01), 43.
- Rogoff, B., Paradise, R., Arauz, R. M., Correa-Chávez, M., & Angelillo, C. (2003). Firsthand learning through intent participation. Annual review of psychology, 54(1), 175-203.
- Savage, C., Hindle, R., Meyer, L. H., Hynds, A., Penetito, W., & Sleeter, C. E. (2011). Culturally responsive pedagogies in the classroom: Indigenous student experiences across the curriculum. Asia-Pacific Journal of Teacher Education, 39(3), 183-198.
- Shaari, A. S., Yusoff, N., Ghazali, M. I., & Dali, M. H. (2016). Kanak-kanak minoriti Orang Asli di Malaysia: Menggapai literasi bahasa Melayu. Jurnal Pendidikan Bahasa Melayu, 1(2), 59-70.
- Sinnappan, G. S., Siraj, S., Alias, N., Hussin, Z., & Hamdan, M. F. (2014). Development of Basic Reading Module for Primary Indigenous at Urban Areas in Malaysia. Life Science Journal, 11(11).
- Siraj, S., Sinnappan, G. S., Norman, M. H., Hamdan, M. F., Asra, M. (2014a). Buku Latihan AMOS<sup>4M</sup> Asas Bacaan 1. Kenal Huruf. Ilovemykids.
- Siraj, S., Sinnappan, G. S., Norman, M. H., Hamdan, M. F., Asra, M. (2014b). Buku Latihan AMOS<sup>4M</sup>Asas Bacaan 2. Suku Kata. Ilovemykids.
- Siraj, S., Sinnappan, G. S., Norman, M. H., Hamdan, M. F., Asra, M. (2014c). Buku Latihan AMOS<sup>4M</sup> Asas Bacaan 3. Bacaan Mudah. Ilovemykids.
- Suliman, A., Nor, M. Y. M., & Yunus, M. M. (2017). Dual-Language Program in Malaysian Secondary Schools: Glancing Through the Students' Readiness and Unravelling the Unheard Voices. GEMA Online<sup>®</sup> Journal of Language Studies, 17(4).
- Teo, K. S. (2016). Penggunaan bahasa Orang Asli Che Wong di Kuala Gandah (Language use of Orang Asli Che Wong in Kuala Gandah). Geografia-Malaysian Journal of Society and Space, 12(11).
- UNESCO (2006). Understandings of literacy. Chapter 6. Education for All Global Monitoring Report 2006. Retrieved on 7 Feb 2018. http://www.unesco.org/education/GMR2006/full/chapt6\_eng.pdf
- UNESCO Institute for Statistics (UIS) (2013). "Adult And Youth Literacy National, regional and global trends, 1985-2015)". Montreal: UIS. http://unesdoc.unesco.org/images/0021/002174/217409e.pdf
- UNESCO Publishing (2015). Education for All 2015 National Review. World Economic Forum 2015. Retrieved on 31 Jan 2018. http://unesdoc.unesco.org/images/0022/002297/229719E.pdf
- Zal, W. A. (2011). Information and Communication Technology Adoption by the Aboriginal Youths in Selangor. Asia-Pacific Journal of Information Technology and Multimedia, 11(1).