DEVELOPMENT OF A RESPONSIVE LITERACY PEDAGOGY INCORPORATING TECHNOLOGY FOR THE INDIGENOUS LEARNERS IN MALAYSIA

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ABSTRACT
The aim of this study is to develop a literacy pedagogy to facilitate literacy learning among the Indigenous community in Malaysia. The Developmental Research Approach method was used and thus various groups of people participated in the study. They included subject matter experts, English language teachers from schools with indigenous students, indigenous community as well as indigenous learners in the context of the study. Insights gained from these participants were used as content for the design and development of a literacy pedagogical module. The module encompassing a digital story was implemented in two schools for indigenous students situated in Peninsular Malaysia. Findings from the study indicated that the literacy pedagogy in the module was a successful intervention which enabled the indigenous learners to respond and engage in the lessons. Evaluation of the module also revealed that literacy initiatives for the indigenous learners should be culturally responsive and relevant to the community. Central to this study is the underlying principles on designing of pedagogical efforts for the indigenous people while underlying these principles are experiences and practices recorded through interviews as well as observations.
Keywords: Responsive Pedagogy; Indigenous Learners; Literacy pedagogy; Developmental Research Approach.

INTRODUCTION
It has been noted that the literacy level and learning achievement among the Indigenous children is low in Malaysia (UNICEF Malaysia, 2008). The illiteracy rate among the Indigenous children is also alarming. Redzuan and Gill (2008 reported that the illiteracy rate among this group is 49.2% compared to 6.4% at the national level. Another serious problem of the Indigenous people is the high dropout rate. About 62% of Indigenous children drop out of school every year and 94.4% do not complete secondary school (Kamarulzaman Kamarudin & Osman Jusoh, 2008). The percentage of passes among the Indigenous children in Year 6 is between 43% to 59% compared to 78% at the national level. This calls for serious attention and the government of Malaysia has taken several initiatives in addressing the issue. The Ninth Malaysia Plan for example focuses on the effort to address gaps in access, equity and quality of education especially among vulnerable groups such as the Indigenous children. The National Education Blueprint or NEB has specified various efforts to provide equal facilities and education to both rural and urban schools. It is crucial that steps are taken to improve the standard of education among the Indigenous students. One such effort is to look at ways to increase their literacy by making reading materials effective and relevant to their context. The present study is an initiative to design a literacy pedagogy to facilitate literacy among the indigenous learners. To this end, this paper will present data collected during the design and development of a literacy pedagogical module. Implications of the study for literacy development for the indigenous community in general will also be discussed.

In a literacy pedagogy, there are two important dimensions to be given serious consideration; text and its content as well as how it is connected to the learners' context. The following sections will highlight these two dimensions and subsequent section will discuss features of pedagogical practices or better known as Responsive Pedagogy in other countries. It should also be noted that the design for the literacy pedagogy described in this study is based on the principles and practices adopted in countries with indigenous communities. The following discussion will present some of the principles and experiences in such contexts.

Text plays a significant role in reading comprehension. With the increasing impact of multimodality on literacy, it is necessary to pay serious attention to the structure and content of the text so that it matches with learners' experiences in their context. At the same time, learners' prior knowledge, reading instructions and the difficulty of the reading material are important aspects that affect comprehension (Israel & Duffy, 2009). It is therefore necessary that material production and in this sense the reading text, takes into account learners' experiences in their contexts and their cultural practices are important aspects as well.

Rushton (2007) argued that most models of reading used in syllabus and curriculum acknowledge the fact that reading is a sociocultural practice. The context and situation influence the meaning individuals make from a text.

Rushton also noted that each individual brings prior knowledge and understanding to a text. Rushton's contention is that text plays a significant factor in the teaching of reading especially in the early years. Working with several communities across Australia, Rushton focused specifically on Indigenous groups who were showing poor performance in literacy; this under-achievement in literacy was a barrier to educational success.

Rushton worked with the indigenous community using texts written in the indigenous language. She argued that engagement in reading among young readers can be achieved if the types of texts chosen are relevant to the young readers in the classroom. These texts provide opportunity for young readers to participate with some understanding. The texts reflect the subject matter, wordings and grammatical features of the oral or written text that the child encounters in the community (Rushton, 2007). Rushton concluded her multi-case study by stating that text which reflect the social and linguistic resources of the local community can provide strong support to the young reader's literacy development. In line with this view, the literacy pedagogy developed in this study attempted to include the indigenous students' life experience and context as major part of the content. Technology played a role in the literacy pedagogy by providing a multimodal approach to generate interest in the young readers.

Responsive Pedagogy
A Responsive Pedagogy (RP) has the learners' context as a central role in the classroom. Such a pedagogy has long been advocated for learners from diverse cultural groups. In countries like Canada, New Zealand and Australia, RP has resulted in many positive pedagogical implications. The following section is an account of several cases where RP had proved effective in students' engagement and achievement in learning. However, first it is important to discuss RP to understand the concepts and elements that comes with it.

RP is often related to culture and context of learners from diverse cultural and linguistic groups. The Indigenous or the Aboriginal groups belong to such groups. A culturally responsive pedagogy focuses on 'literacy teaching and learning that draws from and builds upon the student's background and experiences they bring to the classroom' (Fairbanks, Cooper, Masterson & Webb, in Israel & Duffy, 2009, p. 590). Fairbanks et al. stressed that Responsive Pedagogy (RP) is not only about integrating student's cultural, historical, social and linguistic experience in the teaching and learning process. RP also entails the belief that students from diverse background can participate in learning experience which encourages higher thinking skills in response to text. The role of the teacher therefore is of paramount importance in initiating effort to integrate students' cultures into school learning experience (Fairbanks et al., 2009). In relation to this, Gay (2000) in Israel and Duffy (2009) discussed the role of a teacher in a "culturally responsive teaching" as extending beyond cultural relevance. The teacher, Gay argued, has to respond to the daily lived experience of the students with emphasis on their prior experiences, frames of reference, and styles of performance.

Te Kotahitanga for example is a research and professional development project aimed at improving education achievement of Maori students in the mainstream in New Zealand (Bishop, 2009). Maori, the indigenous people in New Zealand have a history of low academic achievement, high rate of suspension from school, low rate of enrolment in pre-school programs and over-represented in low stream education classes (Hood, 2007, in Bishop, 2009). It was also reported that approximately 50% of Maori students leave school without any qualifications and only 18.4% achieve university entrance compared to 67.9% of the non-Maori students (Hood, 2006, in Bishop, 2009). To address this issue, Te Kotahitanga was an initiative to improve education among the Maori through uncovering their experiences and cultural aspirations (Bishop, 2009). The project focused on students' voices, their stories about their experiences in class and the meanings they made of these experiences. These stories were collected based on a series of in-depth conversations with 70 Maori students, their families, and teachers.

Three major findings emerged from this project. First, it uncovered the discursive position in the classroom which reflected deficit theorizing among the teachers. Teachers had low expectation on students' ability and this was reflected in the traditional classroom practices, remedial programs and behavior modification programs. Second, the narratives provided opportunity for critical reflection among teachers on their discursive positions in the classroom and how this affected students' learning. Thirdly, the narratives proved the relevance of a culturally responsive pedagogy for the Maori students where learning is interactive and culture is important.

In short, Te Kotahitanga is a pedagogical effort to reform the teaching and learning condition in the Maori classroom. It is a responsive pedagogy developed with the context and needs of the Maori people in mind. Bishop (2009) reported that the project was a success as there was significant improvement in Maori students' engagement and achievement in learning. Similar initiatives were reported in Canada (Epstein & Xu, 2003), New Zealand (Franken & McComish, 2003) and America (Johnson, 2011).

In Malaysia similar issues arise with the education of the minority ethnic group, the Orang Asli community. This indigenous community has diverse cultures and languages which are not addressed in the national curriculum. Their academic performance is lower compared to the national standard while their dropout rate is also very high. Efforts towards developing a responsive pedagogy known as 'Kurikulum Asas Penan (KAP)' or 'The Integrated School Curriculum for pupils of the Indigenous People' were initiated by the government. The aim of this curriculum is to increase proficiency in reading, writing and arithmetic among the Indigenous pupils. The curriculum was designed based on the needs, environment and socio-cultural aspects of the Orang Asli and Penan (an indigenous group in east Malaysia). The curriculum was piloted in 2006 in six schools throughout the country. Preliminary findings on the effectiveness of the curriculum showed that the content was still not appropriate for the Orang Asli students in term of level and needs (Mohd Aziz, Mohamad Shamsuddin, & Noor Akbari, 2008). The findings revealed that the content level was too high and the students could not follow it. At the same time teachers did not have exposure on the lives and cultures of the Orang Asli students. As a result the curriculum had to be reviewed to make it more responsive to the Orang Asli students.

A culturally responsive pedagogy has the potential to motivate students to read (Saedah Siraj, Zaharah Hussin, Melati Sumari, Habib Mat Som, & Kamaliah Siraj, 2010). In developing a module to faciliate reading, Saedah et al. incorporated elements from the culture and life experiences of the Temuan students (a sub-ethnic indigenous group in Malaysia) in the reading activities. Findings of this study revealed that the students enjoyed reading and carrying out the activities especially when the activities involved technology. The study also indicated that the reading style of the Temuan students were different and thus they needed a different pedagogical approach.

Based on the discussion on RP, it is evident that teaching can be relevant and effective when the context of the learners is given priority in the curriculum and pedagogy. The present study looked into ways of integrating indigenous learners' context and life experiences in the literacy pedagogy. Specifically the study concentrated on designing a digital reading text and the teaching instructions to utilize the text in a literacy lesson. The next section presents the methodology of the study.

The Aim of Research
The aim of this research is to develop a literacy pedagogy to facilitate literacy learning among the Indigenous community. Content for pedagogy was sought from experts and the indigenous community. Specifically the study concentrated on strategies to integrate indigenous learners' context and life experiences as integral part in their literacy learning. The design and development of the pedagogy was based on the finding in phase which involved the needs analysis. In sum, the study aimed at answering the following research question:

RQ: What is the most appropriate design for the development of a literacy pedagogy for the indigenous learners?

SIGNIFICANCE OF THE STUDY
This study has made some pertinent observations and recommendations for the further enhancement of literacy programs for young learners from the indigenous context in the ESL classrooms. For example, the study builds on knowledge of how a Responsive Pedagogy can be developed to facilitate reading among the indigenous students. Thus, for practitioners as well as policy makers, this study serves as a framework for planning and implementing reading pedagogy that is responsive to the indigenous students in term of their needs.

Secondly, the study utilized the developmental research method in producing the reading text. This methodology which involved the use of different sources and techniques of data collection has resulted in the design and development of the DS pedagogical module and the digital story as reading text specifically. This methodology can be replicated for other type of material development not only within the scope of ESL; other contexts of learning can also benefit from this methodology.

Finally, this study is significant for the enhancement of research on the indigenous community. The diverse cultures of the indigenous people should be observed through ethnographical studies which can inform the pedagogical needs of the students. There is a need to record indigenous knowledge and their cultural context to guide education planning such as effective literacy programs. Here, technology plays its role by creating an environment conducive to learning; for the young learners of today who are familiar with the online environment, literacy is not just limited to words but also visual literacy.

Scope and Limitations
There are various sub ethnic groups of indigenous people in Malaysia. However the present study concentrated on one group, the Temuans. Findings from the context of this study may not reflect the conditions and

experiences of other sub ethnics in other parts of the country. Furthermore, the study focused on the development of reading while writing was integrated.

Methodology
The research is designed based on the Developmental Research Approach (DRA). Development research is the systematic study of design, development and evaluation processes aimed at establishing an empirical basis for the creation of instructional and non- instructional products and new or enhanced models that govern their development (Richey & Klein, 2007). The three phases in this study included needs assessment (phase 1), design and development (phase 2) and evaluation (phase 3). These three phases and the procedure will be explained next. This paper will discuss findings from phase 2 where the literacy pedagogy was designed and developed.

1.   Phase 1: finding out the needs of the indigenous learners in literacy learning.
The research question for phase 1 was: What are the issues and needs of the indigenous learners in literacy learning? A total of twelve participants including teachers, parents and officers in the education field related to the Indigenous community were interviewed. The interview focused on gathering of issues and needs concerning the indigenous learners in literacy. The data were recorded, transcribed and coded according to themes. Curriculum document for Year 5 was also analyzed to ensure the pedagogy was designed in line with the skill. Findings and conclusions from the analysis phase were used to design the content in phase 2.

2.   Phase 2: designing the literacy pedagogy.
Data were collected from two sources; Interview with experts in the field and observations of daily events at the context of the study. A total of twelve experts from various fields such as in English language teaching, material development in ESL, curriculum development and expert knowledge base of the indigenous community participated in the interview. Data from the interviews were analyzed, coded and categorized. The emerging themes were collated according to content for the module and cross checked by the experts for reliability. Data from observation involved the students, parents, and village community in two particular indigenous settings. Video camera recordings of daily events in the two settings were made and later analyzed for the content. Events that captured the cultural background, distinct daily experiences and natural sites were selected to be included in the module.

Based on the insights from the interviews and observations, content for a reading unit was designed. Later the design was translated into a pedagogical module comprising a reading text and the teaching instructions. The reading text, a story about an indigenous boy was written and designed as a digital story which was presented in the form of a video. Participants in the story were taken from the context of the study which included mainly the indigenous community. The final product that emerged from the design and development phase was a digital story pedagogical module which was implemented as well as evaluated in two primary schools for the indigenous learners.

THEORETICAL FRAMEWORK
 The present study was guided by the schema theory which emphasized learners' background knowledge. Brown (2001) describes two types of schema; content schema and formal schema. Content schema includes knowledge about people, the world, culture and the universe. Formal schema is knowledge about the discourse structure. Content schema refers to understanding of the text and the cultural elements needed to interpret it. This cultural element is a major aspect that influences the understanding of a text (Carrell, 1983, in Ahmad, 2006). Carrell suggests that reading teachers should ascertain that the reading text matches the student's culture. The reading material should activate the student's schema and this leads to understanding of the text.

In view of the schema theory, Coady (1979) in Carell et al. (1996) describes reading as an interpretive process. Coady explains how readers' background knowledge interacts with their conceptual abilities and process strategies in comprehending the text. Conceptual abilities refer to the general intellectual ability while processing strategies refer to language processing skills including lexical meaning, syntactic information and contextual meaning. Background knowledge according to Coady will help the reader to comprehend better and involve the reader in the text. Readers are able to understand better because they can take the text beyond its graphic representation and assign the task to the knowledge and concepts already stored in the memory. This is further supported with the attitude and beliefs the readers bring to the text. Therefore, Coady suggests that the linguistic ability together with the knowledge of the world enables the reader to comprehend the text. This interaction can be seen in Figure 1.
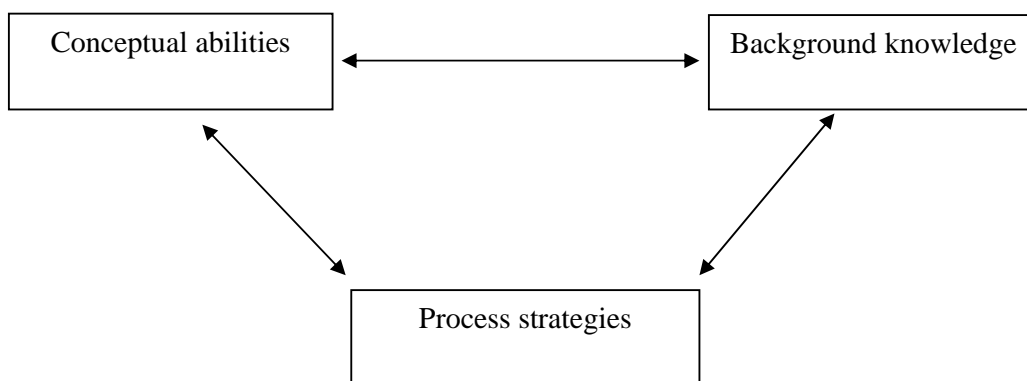
Figure 1. Coady's (1979) model of the ESL Reader.

Content knowledge of a second language learner is often culture-specific (Carrell & Eisterhold, 1983). Thus, it is important to provide text familiar to the learner and one with which they can relate. One method of maximizing learners' cultural schema is by using the students' own ideas and words in the reading text as proposed by the Language Experience Approach (Rigg, 1981, in Carrell & Eisterhold, 1983). The other method is by developing reading material with the local settings and specialized low frequency vocabulary. This method is important for learners with low proficiency who need facilitation in vocabulary. McVee, Dunsmore, and Gavalek (2005) reviewed the influence of cultural perspectives on learners' schema. In explaining the origin of schema, McVee et al. stressed that schemas or cognitive structures emerge or transform as a result of transactions with the world through material and ideational means. Thus, culture and social aspects of the learners are important elements that constitute the schema of the individual learner. The present study which was aimed at developing a literacy pedagogy was designed based on principles related to the schema theory. Context of the learners which included their experience and culture was important elements in the literacy pedagogy. The content of the text was based on insights from the context of the learners. The activities were also designed based on the context and experiences of the learners. This was to enable the students to draw on their background knowldege or schema when responding to the text.

RESULTS AND DISCUSSION
The findings presented in this section were gained as a result of data analyzed from the interviews and observations during the design stage in Phase 2.

Insights from Interviews with Experts
Table 1 gives the suggestions by experts regarding the context and instructions for the proposed digital story taking into account the environment of the Orang Asli.

Table 1: Findings on Suggestions for Context and Instruction from Interviews with Experts

1. Content of the text	Findings
Theme	Should be based on life experience of the Orang Asli people. Nature, forest, animals and fishing activities should also be built in as important part of the content.
Plot	Experts suggested that life of Orang Asli and their experience with nature specifically the importance of the forest be used as the plot for the text. It should also include aspects that the Orang Asli were familiar with such as the trees, the plants, the river and their home. Entertainment such as music and song were other elements suggested for the plot.
Setting	Setting for the text as suggested by the experts includes mainly the Orang Asli context, and familiar surroundings to the Orang Asli students (e.g., animals, trees, river, forest, village and mountain).
Character	The experts suggested that character should be the Orang Asli community itself.
Language	Where language is concerned, the experts indicated that the native language was used to explain meaning. Sentences should be simple while vocabulary should be simple and context based.
2. Instructions	
Comprehension strategy	The experts suggested the following strategies to be included in the module. 1. Repetition and oral practice of drilling.

	2. Reading aloud. 3. Translation (using the first language) 4. Providing support structures such as illustrations and narration to facilitate comprehension.		
Task/ Activities	Task/ activities suggested were: 1. Context specific task. 2. Art work. 3. Hands on activities. 4. Song based activities. 5. Online interactive activities.		
Design of classroom instructions	All the experts felt that the instruction should be simple and behavioral in nature. Therefore Gagne's nine step instruction was chosen to guide the structure of the pedagogical instruction. The nine steps are structured as can be seen in the following table.		

Step	Event	Task
1	Gaining attention	Language games, songs, retelling.
2	Informing objectives	Inform the students of the task.
3	Recalling prior knowledge	Clips of previous chapter.
4	Providing stimulus	Present the story according to chapters.
5	Providing learner guidance	Vocabulary discussion.
6	Eliciting performance	Reading comprehension task.
7	Providing feedback	Oral feedback on responses.
8	Assessing performance	Comprehension questions based on the story.
9	Enhancing retention and transfer	Reflection on the story.

Insights from observations

A close look at the buildings revealed that the school paid a lot of attention to the Orang Asli culture and the students' interest. The mural paintings in most of the school buildings were based on nature and environment. Images of animals such as elephants and tigers were painted on the classroom walls. Small fish ponds and man-made waterfalls were also built between the classrooms. Figure 2 is an example of mural painting on the school wall.

Figure 2: One of the murals in the school.

The mural paintings as can be seen in Figure 2 reflected the students' interest in animals and the forest. The school had a small canteen located opposite the computer lab. During recess, the students were seen playing some traditional games. There was a special court drawn beside the canteen and the students play after their meal. One of the games observed was called 'galah panjang' which literally meant 'long bamboo' in English. The students explained that they make their own court using long bamboo when they play the game at home. The school had taken the effort to provide space for the students to play the game in school. The court was drawn with paint on the cement floor beside the canteen. The court had two sections and there were four dividing lines. The students divided themselves into two groups and each group had to try and cross the lines without

being touched by any of the members from the opposing team. One observation made during the game was the language used by the students. The students spoke in the Temuan language and they called each other using nick names. Later, from the conversation with the teacher, it was learnt that the students have different names as they were referred to in the village. Some of the names were associated with animals, names of fishes and plants. For example, one of the students was called *Ungkak* which meant 'dog' and another student's nick name was *Tawil* which referred to the name of a fish. The game called 'galah panjang' and the nick names were reflective of the *Temuan* culture in the context of the study and as such it would be relevant to include them in the digital story.

Observations in the village
Most of the students in the school were from the village nearby. It was a small village with mostly wooden houses. The houses were very close to each other and most were similar in structure. Most obvious was the kitchen section of the houses; these were built separately and could be viewed from outside. Figure 3 is an example of the house observed in the context of the study.

Figure 3: An Orang Asli house in the village.

Stacks of wood could be seen near the kitchen and the stove was made of bricks arranged in a triangle shape. Tapioca and rice were the staple food for the people. They also depend a lot on hunting for food. During one of the trips to the village, a group of men were seen busy at work. They were preparing the blowpipe and the quivers. When enquired, the men described how the blowpipe was made and how it was important for their hunting. Figure 4 is the scene where one of the men was making the blowpipe.

Figure 4: An Orang Asli man making a blowpipe.

The blowpipe was made from bamboo. The handle was carved with a kind of blade which, according to the men, had to be done very slowly so that the shape was beautiful. This carving of the handle was done by one person while the quivers were made by a few men. Different types of bamboo shoots were used to make the quivers. Making the quivers needed a lot of time as they have to be really sharp. The men also described how a special kind of poisonous glue was spread on the quivers at the final stage. This glue can only be handled by

experienced men because it can cause immediate death on contact. A hut was built outside the house for the men to gather and make the blowpipe.

Making the blowpipe was a cultural experience for the Orang Asli community in this village. The skill was passed on to the younger generation as could be seen in the village. This experience was valuable as it reflected the lifestyle of the people in the context of the study. Thus this event of making the blowpipe was chosen for inclusion in the digital story.

The village was surrounded by bamboo and rubber trees. There was also thick jungle behind some of the houses. Apart from hunting, the people also collect bamboo and rubber to be sold. Figure 5 is the scene of the surroundings of the village.

Figure 5: The village surroundings.

Another observation from the people in the village was the special interest they had in fishing. From the conversation with some of the villagers it was noted that they loved to fish whenever they had the time. They make their own fishing rod with the bamboo and they fish at the river nearby the village. During one of the conversations with the students in the school, it was noted that most of the students mentioned fishing as their favourite pastime.

As this experience also conveyed part of the cultural practices of the Indigenous community in the context of the study, it was also selected as part of the plot for the digital story.

IMPLICATION AND CONCLUSIONS
This paper has described the process of how a literacy pedagogy for a group of Indigenous learners was designed based on the principle of a responsive pedagogy. Findings from this study showed that surrounding and life experiences of the Indigenous learners are different from the students in the mainstream. Their life is so rich with culture and there is a great importance given on family relationships. Environment and animals are of great value for this people. Their daily experiences revolve around their home and village. These aspects from the context of the indigenous people became the major content in the pedagogy. The text and the teaching module were designed and developed based on the content.

The reading text
Based on the insights from the interviews and observations, a digital text was developed. The genre was a story and the content was about an indigenous boy who undergoes a conflict between going to school and helping his parents at home; a prominent issue among the indigenous community as highlighted in the interviews. The story was edited by a novelist, an indigenous himself who had worked with the various groups of indigenous people in the country. Later the text was digitalized with videos of people acting out the scenes in the story. All the people and the scenes in the story were based on the indigenous context. The reading text was further presented to a panel of experts for validation in the areas of language and content. Figure 6, Figure 7 and Figure 8 show examples of the products prepared for the pedagogical module.

Figure 6: Screen shot of instructions for creating a bamboo fishing rod.

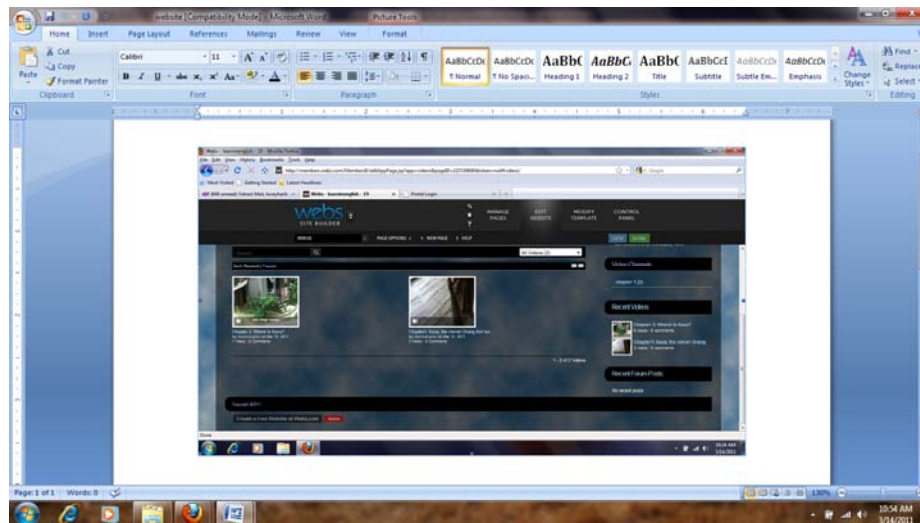*Figure 7*: Screen shot of a drag-and-drop activity in the module.

Figure 8: Screen shot of the pedagogical module.

The teaching instructions

Insights from the interviews and observations have revealed that the indigenous learners have very poor memory and thus face problem in learning. So the experts have suggested that a lot of drills and repetition are necessary. In relation to these issues, the teaching instructions for the literacy pedagogy were designed based on Gagne's nine events of instruction. The digital text was divided to six sections and each section has a set of instructions.

In conclusion, a culturally responsive pedagogy recognizes cultural knowledge, prior experiences and values of the community concerned. It has the learner's context and experience playing a central role in the learning process. Research in this area has proven that instruction through responsive pedagogical model has positive impact on students' knowledge and skill. The present study had the involvement of the indigenous learners and community as major part of the content. This participation has created excitement and motivation among the learners. As in the other parts of the world, this study has added to the knowledge base of literacy development that the indigenous population require literacy initiatives that are grounded on responsive pedagogy.

REFERENCES
Bishop, R. (2009). Te Kotahitanga: Addressing educational disparities facing Maori students in New Zealand. *Teaching and Teacher Education, 25,* 734-742.

Carrell, P.L. and Eisterhold, J.C. (1983) "Schema Theory and ESL Reading Pedagogy", in Carrell, P.L.,

Devine, J. and Eskey, D.E. (eds) (1988) *Interactive Approaches to Second Language Reading.* Cambridge: CUP.

Epstein, R. I., & Xu, X. J. (2004). Roots and wings: Teaching English as a second dialect to Aboriginal students: A review of the literature.

Franken, M., & McComish, J. (2003). Characteristics of quality teaching for students in New Zealand schools whose first language is not English. Retrieved from http://researchcommons.waikato.ac.nz/bitstream/handle/10289/3228/Franken

Hood Salleh. (2004). *Dunia peribumi dan alam sekitar: Langkah ke hadapan*. Bangi, Selangor: Universiti Kebangsaan Malaysia.

Israel, S. E., & Duff, G. G. (2009). Handbook of research on reading comprehension. New York, NY: Routledge**.**

Johnson, S. (2009). Canada: A nation by any other name. Retrieved from http://www.economist.com/blogs/johnson/2011/05/canada

Kamarulzaman, K., & Osman, J. (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.

McVee, B., Dunsmore, K., & Gavelek, J. R. (2005). Schema Theory revisited. Review of educational research*, 75*(4)*,* 531-566. Retrieved from http//ver.aera.net

Mohd Aziz, M. D., Mohammad Shamsuddin, J., & Noor Akbari, I. (2008). Evaluation of the 'Projek Rintis' for teaching and learning based on the Integrated curriculum for pupils of the indigenous people and Penan in the state of Kelantan. *Proceedings in Indigenous pedagogies in diverse cultural contexts: Issues, challenges and opportunities.* Organized by Teacher Education Division, Ministry of Education, Malaysia.

Redzuan, M., & Gill, S. (2008). *Orang Asli: Isu, transformasi dan cabaran*. Serdang, Malaysia: Universiti Putra Malaysia.

Richey, R. C., Klein, J. D., & Nelson, W. A. (2002). Developmental Research: Studies of Instructional Design and Development. Retrieved from http://www.aect.org/edtech/41.pdf

Rushton, K. (2007). The significance of text in the teaching of reading in the early years. In Alyson Simpson (Ed.), *Future Directions in Literacy: International Conversations Conference 2007* (pp. 256–268). Sydney, Australia: University of Sydney Press.

Saedah, S., Zaharah, H., Melati, S., Habib, M. S., & Kamaliah, S. (2010). *Modul kurikulum asas membaca Orang Asli*. Monograf Fakulti Pendidikan. Kuala Lumpur: Ampang Press.

UNICEF Malaysia (n.d.). Folklores to Improve children literacy. Retrieved from www.unicef.org/malaysia/media_7099.html