MAKING BEHAVIOUR CHANGE AMONG ORANG ASLI STUDENTS THROUGH ICT LITERACY PROGRAM

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Abstract

In 2013, the dropout rate of Orang Asli students in Malaysia was at a high level of 25 per cent. To reduce the dropout rate, many authorities played an important role to solve the problem. The nation may be losing great potential human capital if proper and systematic actions are not taken to solve the problem. Therefore, this research aims to explore how ICT literacy program may be able to change the attitude of Orang Asli dropout students. Qualitative case study method was used to explore the impact of the program on Orang Asli. Interview and observation were carried out in order to gain in depth information of the phenomenon being studied. The findings of the study show that, designing student-centered learning contributed in motivating Orang Asli students to continue with their formal education. They gain and appreciate new knowledge. All of them expressed their satisfaction with the ICT literacy program which they went through. A good community relationship among facilitators, parents and students were developed during and last even after the ICT literacy program. As a conclusion, designing student-centered learning based the preference of the students and meaningful learning experience played a major role in forming behaviour change among Orang Asli dropout students.

Keywords: Dropout, Orang Asli, ICT literacy program, behaviour change, learning styles

1.0   Introduction

Teaching and learning process has gone through a lot of changes since the last few decades. The development of new technology intensifies and thus it plays a role in fulfilling the needs of current teaching and learning process (Marion & Lez 2010). Technology-based learning environment can provide support for lifelong learning among students and instructors (Rosseni et al. 2011). Lifelong learning is the third pillar of Malaysian human resource development, in line with school and higher education systems. Besides that, lifelong learning also provides added value to the community and it is the biggest contributor to national productivity and development (Alicia 2011; Muhyiddin 2012)

Technology plays an important role in teaching and learning (T&L) process in ensuring successful implementation of lifelong learning and has brought transformation in education sector, especially among Orang Asli students (Megan et al. 2013). However, the social problems that exist among Orang Asli students can disrupt the sustainability of lifelong learning. According to Charlotte and Fred (2009), 50 percent of Orang Asli students were recorded to be left out from education because of no sufficient sources and opportunities given to them. Therefore, it is crucial to identify the solution to this problem in order to ensure that the nation will not lose a part of human resources that may contribute towards national development.

2.0   Problem Statement

Orang Asli community is often considered as isolated and not integrated with the development and main development stream of the nation. Most of the Orang Asli youth are left out from education which makes them more isolated. Therefore, to improve their quality of life, Orang Asli youth have to be exposed to the education and skill aspects. Various educational programs and personal development courses (Abdul Rahman Ahlan & Yusri Arshad 2011; Andrew 2011; Andrew 2012; Megan Bag et al. 2013) for Orang Asli have been conducted by various parties.

However, there were some problems in the implementation of the said programs that caused the objectives not fully achievable. Among the problems faced are different competency skill levels of the Orang Asli students (Michelle & Stuart 2010), limited information for T&L content development (Sun, Tsai, Finger, Chen & Yeh 2008), low literacy and achievement levels and lack of suitable training (Kral & Schwab 2003; Eady 2004; Greenall 2005), lack of pedagogical model that can create meaningful learning (Campbell & Christie 2009), incomplete basic facilities for Information Communication Technology (ICT) in terms of speed or functions (Hassan Mat Nor 1998; Amir Zal 2009), and technology-based learning developed has not show any impact (Warschauer & Matuchniak 2010). Based on the problems existed, this study has taken the initiative to develop an ICT literacy program which is designed by considering the differences among Orang Asli students and based on five attributes of meaningful learning. This is to ensure that the program developed fulfills various learning styles of Orang Asli students and to ease the comprehension process of the teaching and learning process conducted. An ICT literacy program that is able to create meaningful learning and consider different learning styles is needed in order to instill the interest of Orang Asli students to learn and later to increase the awareness on the importance of education and ICT for their social, family and local community development.

Continuous studies have to be conducted in identifying the needs and problems of Orang Asli in education to ensure that they are not left behind (Muhyiddin 2012). Therefore, to produce excellent, knowledgeable, skillful and good personality human capital among Orang Asli, the government through Ministry of Education (MOE) has developed Orang Asli Education Transformation Plan. This is one of the continuous efforts to improve the quality and productivity of Orang Asli (Muhyiddin 2012). This plan is developed to ensure that no one is left behind including children from Orang Asli community from the main education stream.

Under the 10th Malaysia Plan, the effort to strengthen the education system starting from childhood to higher education has taken account the interest of community of the nation (Muhyiddin 2012). In fact, this effort is expected to improve educational excellence of Orang Asli community, especially in rural areas. However, the dropout rate among Orang Asli students is increasing. The dropout rate from 1994 to 2008 increased at 18 percent for primary six school leavers but unregistered for form one, meanwhile 17.1 percent registered for form one but did not complete their studies until form five. In 2013, the dropout rate among Orang Asli student was a high level which was 25 percent. Besides that, low and inconsistent attendance percentage for students is one of the main factors that lead towards dropout and illiteracy among them. Based on the statistic from UNICEF (2007), there was about 80 percent of Orang Asli students did not complete their studies to secondary level, meanwhile Charlotte and Fred (2009) stated that 50 percent of Orang Asli students were reported to be left out from education.

Thus, YAB Tan Sri Dato' Haji Muhyiddin Haji Mohd Yassin, Deputy Prime Minister cum Minister of Education (2012) has introduced seven initiatives in Orang Asli Education Transformation Plan. The third initiative which is to decrease dropout rate of Orang Asli students six percent per year starting from 2013 is the main focus of this study. To ensure that this problem can be curbed, behaviour changes among Orang Asli students has to be implemented to shift the paradigm of the community and to improve their quality of life as well as to prepare them to compete with other

communities (Mohamad Johdi et al. 2009). Therefore, this study aims to explore the behaviour changes among Orang Asli students listed for dropout through ICT literacy program. This effort is to ensure that Orang Asli students will continue to be left out from the development of lifelong learning (Charlotte & Fred 2009).

3.0   Methodology

In this study, the researchers have developed ICT e-Practice modules to be used in a literacy program. The program is a specific short course that was conducted for six months. The modules are developed by considering different learning styles of the students aiming to create meaningful learning among Orang Asli students. This is because e-Practice can be used as a medium for teaching and learning that helps in creating meaningful learning to the students (Rosseni et al. 2011, 2010; Jonassen et al. 2007; Jonassen, Peck & Wilson 1999). This study involved 11 Orang Asli students from primary school.

This study is using qualitative research design based on case study. In the context of this study, the boundary used is referring to dropout Orang Asli students who were involved directly in the ICT literacy program conducted. Data collection was done in two ways which are through interview and observation. Individual interview was conducted in this study to obtain detailed information as well as to build good rapport between the researchers and the students. General open-ended questions were used in this study. The interviews were conducted after each session of the ICT literacy program. Data collection through observation was conducted without specific structure to obtain deeper and detailed data from the participant and to avoid rehearsed actions in the observation made. The observations were made in each two-hour session of the ICT literacy program. To ensure the smoothness of the observations made, electrical gadgets such as video recorder and iPad were used to record the situations that took place throughout the implementation of the program. The data collection process is based on the protocols prepared prior to the study. This is to make sure that the data collected coincides with the research questions.

Once the data was collected, it went through transcription process. Transcription is an early stage of data analysis process, which serves as a guide for audio documentation. The production of transcription is important in the validation process of a study (Seale 2002). Then, open coding was conducted as an early process in data analysis after the data has been transcribed. Open coding is a process of identifying the codes in the transcribed data (Seaman 2013). The codes will be classified into several parts of information. Each part will be analyzed based on the needs and questions of the research. The implementation of open coding helps to produce various temporary codes that are useful in axial coding process, and will be expanded in the next analyses. Next, data will go through the following analysis phase which is axial coding. After open coding process, a researcher will refine data through axial coding. Axial coding is a set of procedures that include data combination into a new form after open coding by relating the categories produced (Straus & Corbin 1990; Seaman 2013). Axial coding methods is conducted by taking the codes produced in open coding and later combine them based on suitable relation. Therefore, the axial coding was used in the analysis process of this study to relate two separated concepts and the relation will be organized based on the phenomenon being studied on the relation existed.

4.0   Findings

This section is explaining on the findings obtained based on the observations and interviews conducted. This section is divided into three parts which are the learning styles, meaningful learning and behaviour changes. Observations were made while the activities were conducted in computer lab meanwhile the interviews were conducted after each session of the program and on the final day of the program. Interviews were conducted to obtain deeper information on the acceptance of the respondents towards meaningful learning as well as to identify whether different learning styles and meaningful learning can influence behaviour changes among the respondents or otherwise.

4.1 Findings on Learning Styles

Learning styles are divided into two parts which are sensory and sociology. The focus of dominant learning styles among Orang Asli students are kinesthetic, tactile, visual and auditory meanwhile sociological learning style is group to individual. Thus, the modules developed considered the dominant learning styles of the students to ensure that they would be able to understand the information conveyed easily. Following are the findings obtained through interviews conducted by using semi-structured questions:

Question 1: What is your perception on the content of the modules used?

It is easy to understand as there are a lot of pictures. The pictures are beautiful and I like to look at them. It is fun to learn. In school, the teacher would give us notes to be read, which have a lot of words. I don't even get it. If it has pictures like these, it would be more fun to learn.

Question 2: What do you like the learning style in this program?

I like it when I get to use the computer to do the work. It is difficult to get the chance to use computer at school because they do not have enough. Sometimes the teacher would just talk about computer without example and therefore I could not imagine what the teacher means. This program is using a lot of pictures in the modules. I want to learn and it is easier to understand because each explanation is followed by pictures. The explanations are short and not wordy. It makes it easier to understand as it uses interesting videos and software.

Question 3: How about the tasks given?

It is fun to do it because we can discuss about it with our friends. We can also do what we want based on the questions given by the teacher. The teacher helped us if we were not able to understand. At times the teacher asked us to work individually; it is great as no one can disturb our work. We can do what we want based on the questions given by the teacher. I can use my favorite colors to color the tasks given.

4.2 Findings on Meaningful Learning

Meaningful learning is consisting of five constructs which are constructive, objective, cooperative, authentic and active. The following are the findings based on observations made on the five constructs of meaningful learning.

4.2.1 Constructive

Facilitator gave two weeks to the respondents to complete a poster. The facilitator observed the progress of the task every week. In the second week, the facilitator noted the progress of the poster in terms of color selection, font size and appropriate image used for the poster. The respondents showed increasing performance as compared the poster preparation in week one.

4.2.2 Objective

The respondents were to complete a task by using Microsoft PowerPoint based on the objective stated by the facilitator at the beginning of the practice session. The objective of the task is to create a poster related to 'My Dream'. The facilitator explained to the participants that the poster should contain information, explanation and pictures related to their ambition.

4.2.3 Cooperative

The facilitator stated that the task given should be done individually, however, the participants were encouraged and allowed to discuss with other participants in order to help them to get more information and new ideas. Most of the participants showed preference to complete the task given individually. However, there were some participants completed the task given, then helped other participants who had difficulties in completing the task. They volunteered to help without being asked. They helped others by providing suitable explanation based on the acceptance level of the other participants. Thus, the completion process of the task given went smoothly based on the briefing provided.

4.2.4 Authentic

The task given by the facilitator on 'My Dream' aims to increase the motivation of the respondents in being aware of the importance of education for the future. The topic was chosen based on the real problems faced by the respondents which are illiteracy and discontinuation of schooling.

4.2.5 Active

The respondents showed their interest and active participation in the completion process of 'My Dream' poster. The respondents wrote the description related to their ambition and explored and indentified suitable pictures related to the ambition that they have stated. Besides that, the respondents also shared the reasons for the ambition that they have stated with high determination.

4.3 Findings on Behaviour Changes

Four semi-structured questions were used in the interview sessions to obtain the required information.

Question 1: What do you get from the short course conducted?

It was fun. I've got to learn a lot of things that I have never learned before. It is easy to understand what the teacher is teaching. The teacher will explain first on what we have to do, if I do not understand, I can directly ask the teacher. If there are some of the things that I could not understand was because of me, because I did not give enough focus on the lesson. It was fun because I can do the activities together with my friends. My friends taught me a lot too if I could not understand certain things. Now, I understand the importance of education after the learning process.

Question 2: Why do you like to attend to this class?

I like it because I can learn easily, I got the chance to use computer and to do something new. It is easier for me to understand what the teacher taught. I have never attended your class before this, teacher, but now I want to come to this class all the time and I do not want to skip the lesson.

Question 3: If you were given an opportunity to continue schooling, would you like it?

Yes, teacher. I like to learn. I want to achieve my dream in becoming a teacher. Because, when I am a teacher, I can teach other people, just like you do. When I know I have the knowledge in this class, I can teach other people. If I want to seek for knowledge, I have to go to school. Once I am successful, I want to help my mother. I don't have a father anymore, teacher. My mom falls sick often. I want to help less privileged people too. I like to see these people to live a better life. The

practices in this class encourage me to continue trying, so that I can be independent.

Question 4: If I helped you to continue schooling or to take private examination, would you like it?

Yes, I do. I really like that. When, teacher? Let me know later, teacher? (While smiling)

5.0 Conclusion

The findings of the study show that the variety learning styles used as the basis to the development of ICT e-Practice contribute toward behaviour changes among Orang Asli students. Besides that, various learning styles inculcated help to create meaningful learning for the students. Meaningful learning also contributes to the behaviour changes of the students. This is because they are more determined to comprehend the information given as the approach used matches their needs. They also show high commitment in every learning session as well as showing promising attendance rate. This situation will indirectly encourage them to be determined in seeking for knowledge for their future.

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