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The Development and Testing of Preschool Bahasa Malaysia Reading Intervention Module Using Multimedia

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Abstract

Presently many preschool children are still unable to identify letters or words hence leading to difficulties in normal writing and reading. As a result they need guidance and intervention in reading to overcome such difficulties. The main objective of the research was to test the reading intervention module (MIM) among preschoolers in Malaysia. The MIM was developed based upon module development approaches by Fitzgerald, Bauder and Werner (1992) and Scheafermeyer (1990). Additionally the research seek to examine the differences between the experimental and control group in the level of reading skills after using MIM. The test retest reliability of MIM was obtained with Alpha Cronbach 0.9357. The data were analyzed using by SPSS 12.0 version. A hundred preschool children from Bandar Tenggara, Johor were randomly selected as a sample. The pre-test data showed that most of the children experienced difficulties in letter-name, sound letter and reading words and they have different levels of reading abilities. The finding showed that the experimental group (mean=82.48) performed better than the control group (mean=59.36) after the post test. Preschool teachers who had conducted the experiments agreed that the MIM can be integrated in preschool teaching and learning.

Keyword:Effect of Preschool, Reading Intervention Module, Multimedia

1. Introduction

Students enrolled in preschool centres have different levels of readiness to learn which is influenced by various factors such as family backgrounds, environment and socio-economic status (Jas Laile Suzana 2002). Reading readiness is generally understood as a stage of development driven by various factors either environmental factors or existing factors that stimulate a student to read (Juriah, Raminah and Sofiah 1992). Understanding the diversity of students can assist teachers in selecting appropriate techniques and the types of learning materials to enhance the quality of learning (Abdul Ghani, Abdul Rahman and Abdul Rashid, 2007). Economic difference is a factor that influences differences in language development of students (Jas Laile Suzana 2002). Lacking of learning materials, such as books and charts at home reduces the process of retention (Sahabuddin 2003). Meanwhile, differences in parents' goals also affect the achievement of students' reading skills (Rohaty 2003).

Multimedia program is a medium of educational instruction that delivers teaching through computers and the students learn by interacting with the computer that can respond as a teacher (Cotton 1997). The use of computers in

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teaching help many teachers to make their teaching more attractive, effective, enjoyable and challenging (Zurida, Sharifah Norhaidah and Maznah 2003). Compact discs is capable of preparing and providing information that can not be supplied by the print media (Azizi et al. 2005). In addition, the computer is considered the most effective learning medium for preschoolers (Zurida, Sharifah Norhaidah and Maznah 2003). Computer simulation has its own strengths to help improve the effectiveness of the teaching and learning process by stimulating students to improve their verbal skills and comprehension.

The Student Performance Ranking Report (KIA2M) 2006, stated there are many first grade students who have not mastered reading skills. The first report showed that 10.05% of students of national schools in the district of Kulai, still have not mastered reading skills. The second report showed that 4.28% of the students have not mastered reading skills. At this stage, they should have begun to master basic reading skills such as identifying the vowel, combining consonant and vowel sounds, forming words and continued to read sentences and paragraph (Haliza, Joy and Rafidah 2008). Torgesen et al. (1999) stressed that any effective intervention programs for students who have poor phonological skill must contain explicit instructions and are implemented seriously based on student's difficulties. Based on the above issues, this study was carried out to test the effectiveness of Reading Intervention Module (MIM).

2. The Objectives of the Study

The objectives of the study was to examine the effects of the Reading Intervention Module (MIM) among preschoolers by answering the research questions as followa:
 a. Is there a mean difference in Pre and Post test reading achievement of control group A and control group B?
 b. Is there a mean difference in Pre and Post test reading achievement of experimental group A and group B?

3. Research Design

This study was a quantitative study the Quasi-Experimental Group Random Pre-test - Post Test to measure students' reading achievement. The tests were carried out on two experimental groups and two control groups. The sample of this research was 100 children from four preschool classes in Bandar Tenggara, Kulai, Johor. Pre Test and Post Tests in the control group and experimental group used the same test instrument which was adapted from the Diagnostic KIA2M instruments. The control group was taught using traditional teaching and learning method which was chosen by the teachers and without the use of MIM while the experimental group was taught using MIM. T-test was used to identify the difference in reading achievement between Pre Test and Post Test.

4. Findings of the Study

Table 1 showed the pre and post test score of two control groups, control group A and control group B. For control group A there was no significant difference in mean scores of 62.24 (Pre) and post scores of 64.68. For group B the mean scores of pre (55.12) and post scores (59.36) showed an increase in scores.

Table 2 showed the Pre and Post Test Reading scores of experimental group A and B. Experimental group A mean scores increase from 30.08 to 82.48. This showed a significant difference in mean scores, while for experimental group B the mean scores also increase from the test scores of 30.88 to 95.76. Therefore the pre and post test for both the control group A and B showed significant increase. It must be stated that the original pre test scores for the experimental group were lower than the control group. The findings showed the effectiveness of using the MIM in experimental groups.

Table 1. Pre and Post Test Reading scores of Control Group A & B

Groups		N	Mean	t	Df	sig
CONTROL A	Pre	25	62.24	-1.53	24	0.140
	Post	25	64.48			
CONTROL B	Pre	25	55.12	-2.92	24	0.008
	Post	25	59.36			

Table 2. Pre and Post Test Reading scores of Experimental Group A & B

Groups		N	Mean	t	Df	sig
EXPERIMENT A	Pre	25	30..08	-13.48	24	0.000
	Post	25	82.48			
EXPERIMENT B	Pre	25	30.88	-14.88	24	0.000
	Post	25	95.48			

5. Discussion and Implication

The results of statistical analysis showed that there was no significant difference in mean scores of pre and post-tests in the control group A. This means there was no significant increase in reading skills within those three months. This contradicted MacDonald' findings (1998) who found that students can read fluently in six or seven months of the first school session.

In this study, the control group teachers did not use special materials for teaching reading. Teachers did not make reading as a consistent daily routine. This will not impact the effective development of reading skills. Teachers applied a lot of reciting activity but lacked emphasis on different forms and sounds of letters. According to Jane (2005) students require a lot of materials because students always learn new words, increase vocabulary, learn new vocabulary and learn syntax.

Levine (1994) stated that there are two major factors that contribute reading readiness: the internal factors and external factors. External factor is the teaching procedures and materials used. While internal factor is within the students themselves, such as their ability to learn new things. Teachers also play an important role in ensuring the continued interest in these students by providing a source of stimulation of interesting learning.

Statistical analysis also showed that there was a higher mean score in experimental group B, which was 95.76, compared with the experimental group A. All students of the group achieved scores of more than 44.0% which is the minimum standard based on KIA2M PPK (2006). Teacher's awareness of the importance of using modules or special materials to develop basic skills in 3M makes the use of MIM meaningful. Teachers take full advantage of the use of MIM by adding few minutes during the closing session as a routine activity to review the lesson. During the teaching and learning, a lot teachers were observing students' responses to the CD on a computer screen or LCD projector screen. Here, teachers can track student weaknesses by looking at their mouth, the position of lips and tongue that tend to produce sound.

In this study, teachers had the opportunity to use various strategies to teach new skills in addition to strengthen the development of existing skills. Teacher teaching strategy had made learning to read, which was only 15 to 20 minutes a day, anticipated by students. The sound volume of CD that can be adjusted is an important element to attract students as well as distinguishing the sounds of letters and words. This strategy makes learning reading more systematic, controlled and attractive. The use of modules and CD also attract students to explore the MIM parts.

Based on these findings, the use of MIM teaching and learning help improve student progress. By exploring the CD of MIM, students learn through activities to get an interesting learning experience. In the context of teaching and learning, using MIM CD enable students to learn recognizing letters, read and explore the software program.   At

this stage, students can use keyboard and mouse efficiently, open and exit the program. In short, teaching and learning using MIM provided a meaningful experience for students and teachers. This study showed useful and effective innovation to teaching and learning of preschool. This study has main implications: policy changes, methods of implementation, and teacher readiness and parental involvement.

6. Conclusion and recommendation

Based on the findings, researchers concluded that the use of MIM can develop better reading skills than learning to read without the specific reading module. After learning to read using MIM for three months and after the tests were conducted, the two experimental groups A and B showed higher levels of reading achievement. MIM also contains several units of instruction to assist teachers in implementing some important elements of education for preschool children. However, teachers still need to diversify the teaching styles such as student interaction patterns.

This study recommends that teacher's competence in conducting action research and experimental studies should be improved through In-Service Training. A study on the development of specific modules to enhance students' writing skills is required to ensure that the writing skill of Malay language is mastered well in Primary School. Learning to read using the module should be conducted at least 20 minutes every day.

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