

**A PRELIMINARY STUDY ON TECHNOLOGY USED IN READING AND WRITING
SKILLS INSTRUCTION FOR YEAR ONE PRIMARY SCHOOL REMEDIAL CLASS
STUDENTS**

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Published online: 30 May 2018

ABSTRACT

The investigation on the current application of technology in teaching reading and writing skills especially that involve remedial students at primary school level has not been a strong focus in previous studies. As such, this paper aims to report the findings of a preliminary study regarding the reading and writing skills current state of remedial students and also the use of technology in teaching and learning those skills among Grade One students. Interview method has been conducted to further strengthen and retain evidence regarding the problem of low performance in reading and writing skills among Year One primary school students. This is an area of concern for the lower grade level. One Malay language teacher, one remedial class teacher, and one Linus teacher involved in this interview sessions. Two Fasilinus (Linus Officer) from the district and the state department have also been interviewed. The study shows that there is a lack of technology used to help improve teaching and learning in the Malay language for remedial students.

Keywords: remedial class; reading and writing skills; Linus; Fasilinus.

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doi: <http://dx.doi.org/10.4314/jfas.v10i2s.64>



1. INTRODUCTION

1.1. Reading and Writing Skills in Early Schooling

Mastering various skills such as reading and writing is necessary for students to move forward in their learning progress. At the beginning of schooling, reading and writing skills are the most important foundation for learning. These two skills are mutually related in forming a network to absorb the knowledge that will be available to help with their learning later on. In the early years of school, students' learning will be implemented by making students phonically aware so that they can form easily understood sentences. Therefore, in order to produce a smart generation that is proficient in reading and writing skills, it is important for students to master such skills as early as possible as these skills are a necessity in the learning process [1]. Throughout the reading, students can absorb knowledge and interpret ideas conceived by writing [2]. Reading is a process for communicating globally and reading can improve existing knowledge [3] while writing is a language skill that has been emphasized in the Integrated Malay Language Primary School Curriculum (*Kurikulum Bersepadu Bahasa Melayu Sekolah Rendah*), revised in 2002 and further implemented in 2003 [4]. Ample evidence exists such as the study by [5] on the Chinese language to support the view that students' reading ability strongly depending on their writing ability. Thus, it is generally accepted that students who mastered the reading and writing skills allow them to be in a more comfortable and convincing position compared to students who have not mastered these skills yet. Therefore, effective mastery of reading and writing skills should begin at an early stage so that they will be able to read and write after they have completed their primary schooling.

Computer Assisted Language Learning (CALL) is known as one of the approaches that have been used in language learning. An example of this is the use of computers in the classroom by using learning software such as courseware or students learning the language through distance learning through internet networks. This suggests that computer technology is an interest in the national education system. In the era of 21st-century teaching and learning, primary school students are the future leaders who will lead the continuation of the present technology. As Year One is the early stage of formal schooling in a child's life in Malaysia, the Ministry of Education Malaysia (MOE) has taken the initiative in providing literacy education (ability to read, write and understand words) starting from an early stage by

promoting the Malay language as a national language and ensuring that all students in Malaysia will get an early exposure in mastering reading and writing skills in their early stages of education from Year One [6].

2. LITERATURE REVIEW

2.1. Malay Language Learning and Technology Used in Primary School

Through the Malay language teaching and learning strategy, the government is committed to emphasizing the 5P concept of consolidation, absorption, enrichment, rehabilitation and evaluation to meet the integrated concept in the National Education Philosophy [7]. The 5P concept has encouraged students to actively engage in learning and to avoid them feeling bored throughout the learning process. Hence, the government is highly committed to deal with illiteracy by implementing a special program called Linus. This program focus to address the literacy and numeracy problems in primary schools. Students who cannot master the basic reading, writing and calculating skills of Linus program are screened to be part of the remedial class at the primary school level. Table 1 explains the differences between Linus students and remedial students and also the twelve constructs (*K1* to *K12*) students required to master specifically for Malay language literacy.

Table 1. Malay language literacy [7]

| | | Mastery | Malay Language Literacy |
|----------------|-------------------|---------|--|
| | | Level | |
| Linus Students | Remedial Students | K1 | Reading ability (sound) and writing vocal and consonant letters |
| | | K2 | Reading ability (sound) and writing an open syllables (<i>suku kata terbuka</i>) |
| | | K3 | The ability to read and write (words) an open syllables (<i>suku kata terbuka</i>) |
| | | K4 | Reading ability (sound) and writing closed syllables (<i>suku kata tertutup</i>) |
| | | K5 | The ability to read and write closed syllable words (<i>suku kata tertutup</i>) |

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|-----|--|
| K6 | The ability to read and write closed syllable words (<i>suku kata tertutup</i>) 'ng' |
| K7 | The ability to read and write a word that contains a <i>diftong</i> |
| K8 | The ability to read and write vocabulary words together |
| K9 | The ability to read and write words containing a <i>digraf</i> and a consonant <i>ber-</i> |
| K10 | The ability to read and write the beginning and ending verbs |
| K11 | The ability to read and write a simple sentence |
| K12 | The ability to read, understand and write sentences based on stimuli |
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The remedial class comprising of students who doing poorly in school as they cannot achieve K1 and K2 constructs of reading and writing skills according to the level limit set by the ministry[8]. The Linus program consists of Malay language, English language and Mathematics. However, this study will only cover the Malay language which has been used as a medium of instruction for public schools in Malaysia.

Findings from [8] study suggest that there is a need for the use of technology-based teaching aids such as mobile learning that potentially will engage the remedial students with enjoyable activities to help stimulate their interest to learn more effectively. Specifically, in the context of teaching basic skills of reading in Malay language, they suggest for the design and development of technology-based teaching aids that would help improve these remedial students' learning difficulties in recognizing the letters, followed by the association of the letters with the graphic symbols, prior to the understanding of the concept of letters. Moreover, the use of technology in the classroom to enhance teaching reading and writing skills may offer a solution to help remedy the remedial class students, especially when referring to the popular use of mobile technology that is well-known close to the heart of this new generation era. Although the use of mobile technology is still at the initial stage, it may be able to trigger a new innovation in today's 21st-century education. It is said to be the main technology material that is able to guide students to think creatively and critically which educates them while using high-level thinking skills. This learning takes place in a constructivist environment which will make remedial students be able to advance and be able to compete

with mainstream students. This is supported by the study of [9] through the development of LiLIN application that utilized *tablet* as a learning platform in their study. LiLIN was designed and developed based on the ADDIE model for active and collaborative learning. The content of LiLIN application caters for children ages five to seven years old to learn syllable (*suku kata*) in Malay language, spelling and educational games. The findings have shown that students are excited and interested throughout their learning process. The LiLIN application encouraged the students to work together to complete the assignment.

Mobile technology has been proven to cultivate an active learning environment and improve the quality of learning in line with the study conducted by [10] on the use of iPad for primary school students that proven had a positive impact on the quality of students' learning in Geography subject. The findings show that an active involvement occurs, tasks are improved and students work together to complete the assignment given without full assistance from their teachers.

Through this mobile learning, the teacher's task can be reduced [11]. A study has proven that language learning with the aid of mobile application resulted with the improved formation of sentences among students as they were stimulated and enjoyed with the learning activities [12], thus further reduce teacher's work [13] to assist them closely on an individual basis. The teacher is needed, but they act as a facilitator for the students. Teachers also improve their teaching quality through the latest students' assignment from the sources that are easy to find via wireless internet resources by using mobile technology such as iPad, tabs, etc.

3. METHODOLOGY

With the aims to learn more about the present state of reading and writing skills among Year One students as well as the use of technology in the teaching and learning of these skills, this study was initiated with an interview with one Malay language teacher, one Linus teacher and one remedial class teacher at one of the primary schools located in the North region of Malaysia. Semi-structured interviews were conducted to trigger more in-depth information, enable face-to-face processes with respondents to obtain updated information from unclear facts or information. The interview inquiry about the method used in teaching and learning the Malay language, the module of Malay language subject and the technology used in the

literacy instruction. Next, an interview was also conducted with the Fasilinus (*Linus officer*) at Regional Education Office (*Pejabat Pendidikan Daerah or PPD*) to understand how the Linus program is administered in schools. On the other hand, another interview was further conducted with Fasilinus at the State Education Department (*Jabatan Pendidikan Negeri or JPN*) with the intention to get access to the descriptive statistical data regarding the performance of Linus program in the Malay language at the district and state levels. These interview data were collected with mobile phone sound recorder including with extensive note-taking. The audios were later transcribed into text and reported in a descriptive manner.

4. RESULTS AND DISCUSSION

The preliminary study resulted from responses provided by the three teachers at school level found that reading and writing skills among Year One students still remained at the lower level. According to Malay language teachers, there are students who are not familiar with the letters sounds, especially the letters of similar forms in the Malay language (e.g. (i) 'sépak' and 'sepak'; (ii) 'pérang' and 'perang'). Some of them do not know how to pronounce the reading syllables (*suku kata*). It was noticed by the language teachers that when students pronounced the last syllable, they tended to forget the first syllable. Moreover, students also cannot distinguish between uppercase and lowercase letters. Apart from that, according to the remedial class teacher, there is still little usage of technology being utilized as a teaching and learning tool in improving reading and writing skills.

The second interview that involved Fasilinus revealed that the Ministry of Education's intention to eliminate illiterate students is still unsuccessful even after the students undergoing the Linus program in three years of early primary school years. The reading and writing skills proficiency are measured from the Linus program through two screening sessions arranged by the Ministry of Education Malaysia. The implementation of the Malay language Linus program is conducted in every school in Malaysia. Table 2 shows the screening types and period for the 2016 Linus program.

Table 2. Screening types and period for 2016 Linus program

| Screening Types | Time | Test Type | Period |
|-----------------|----------------|--------------|---------|
| Screening 1 | 1-31 March | Reading/Oral | 4 weeks |
| | 5-7 April | Writing | 2 weeks |
| | 20-30 April | Data filling | 2 weeks |
| Screening 2 | 1-30 September | Reading/Oral | 4 weeks |
| | 1-16 October | Writing | 2 weeks |
| | 19-30 October | Data filling | 2 weeks |

On the other hand, the third interview that involved the Fasilinus from JPN shared descriptive statistical data regarding the performance of Linus in the Malay language at the district and state levels. Fig.1 shows the total number of Year One students from 2010 to 2015 who undertake the Malay language Linus program in Penang.

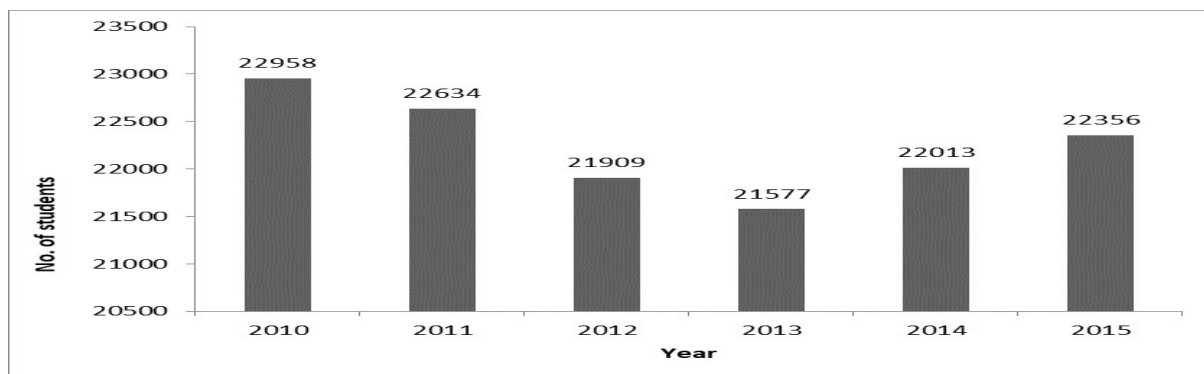


Fig.1. Total of Year One students from 2010 until 2015

Fig.2 next shows the number of students who are not capable of mastering the (K1 to K12) constructs as displayed in Table 1 and they are known as the Linus students.

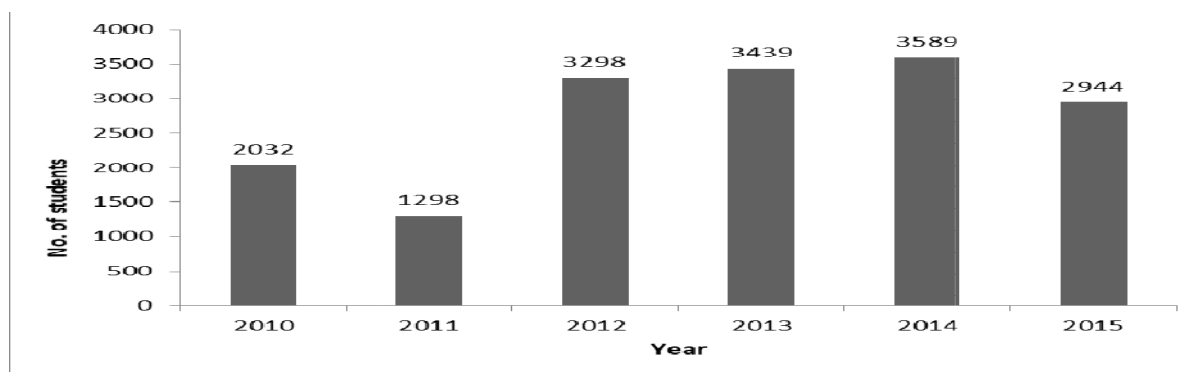


Fig.2. Number of Linus students since 2010 until 2015

Meanwhile, Fig.3 shows the number of remedial students in Pulau Pinang, referring to those who are not capable in mastering the basic (*K1* and *K2*) constructs as displayed in Table 1 and they are categorized as the remedial students. This is the weakest category.

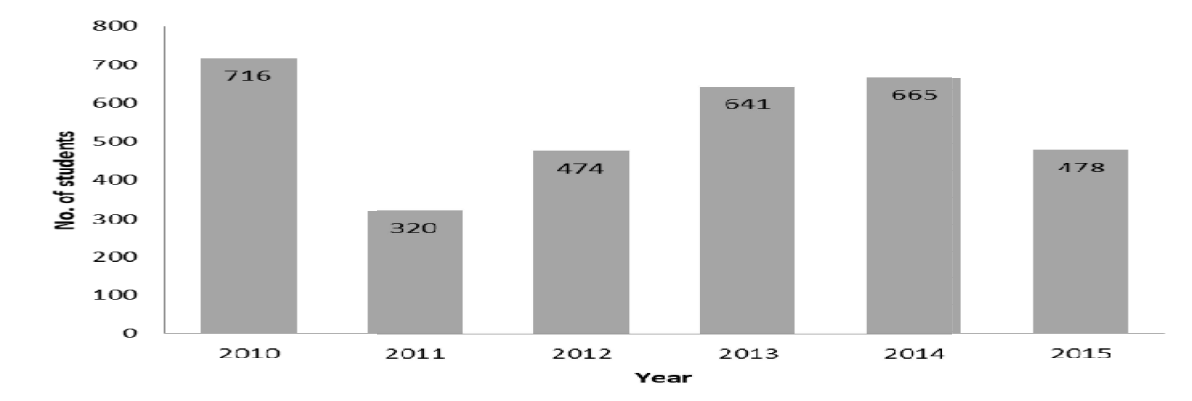


Fig.3.Number of remedial students since Linus program has been implemented in 2010

According to the responses received from the interviews, this study found that reading and writing skills are not fully mastered by students during their first year of schooling although they have gone through the Linus program even after the second screening session. The second screening session that was normally held in September showed that although students had been given the Linus program treatment in school for nine months, they were still not capable of mastering the ability to read and write the vocal and consonant characters as well as performing the reading and writing skills. Simply said, their Malay language reading and writing proficiency is still unsatisfactory. The findings in Fig.3 depicts that although the Linus program has been implemented for five years, the statistical data reveal that the number of Year One students categorized as remedial students remains high which requires further attention from the Ministry of Education.

According to Malay language and Linus teacher, the first year of schooling (Year One) is an important year informing the reading comprehension and writing as these skills will be used and built on the following year. The effective learning, especially in the reinforcement of reading and writing from the early stages of schooling, will influence students and absolutely will help to form a solid foundation of learning to help the student in learning at a higher level. This is supported by [2] study that suggests mastering one particular language will help to develop reading and writing skills being more effective and give an understanding to the students to further understand what is being conveyed. Thus, by mastering reading skills

students can interpret ideas through the intellectual thinking that is represented by the writing. Therefore, it is important for students to master the reading and writing skills before they enter the Second Level (Grade Two) of schooling in primary school level. Students should be noted on the importance of reading and writing skills that crucially required and assessed during the exam.

Furthermore, the new curriculum system of the Primary School Standard Curriculum (*Kurikulum Standard Sekolah Rendah or KSSR*) implemented by the MOE requires students to engage with higher order thinking skills (HOTs). Thus, in order for students to complete the standardized test or exam, it would be a challenge to encounter it without having a good reading and writing skills. Moreover, it will be a challenge for students to encounter UPSR standardized examination later without having a satisfactory reading and writing skills. Unfortunately, according to the remedial teacher, the use of technology in school is still at a low level. Teachers prefer to use conventional method rather than using technology, not to mention mobile technology. This problem is further supported by the previous studies of [8-9,14] that suggest the use of teaching and learning aids and also digital technology, which potentially can improve remedial students' performance.

5. CONCLUSION

Improving the strategy or method in teaching literacy skills specifically reading and writing skills especially for low achievers such as the remedial students by implementing modern ways of utilizing technology such as mobile learning is now in demand. Mobile learning will probably become an alternative solution for students to improve their skills in reading and writing. Therefore, future research should explore further on the effects of mobile learning applications in promoting students' language proficiency that specifically designed to help solve the remedial students' reading and writing skills problem to master the basic *K1* and *K2* constructs in Linus program. Perhaps, a well-targeted and effective mobile learning application developed specifically for these children could tremendously help the inability of many remedial students to read and write well, thus encourage them to compete with the mainstreams' students.

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How to cite this article:

Ro'azeah M N, Yahaya W A J W, Nazleen A R S. A preliminary study on technology used in reading and writing skills instruction for year one primary school remedial class students. *J. Fundam. Appl. Sci.*, 2018, *10(2S)*, 894-904.