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The Effectiveness of Website Utilization in the Teaching and Learning of (Year 5) Malay Language Subject in a Tamil School: A Case Study in Malaysia

Termit Kaur Ranjit Singh
School of Educational Studies, Universiti Sains, Malaysia
Logesvari Marimuthu
School of Educational Studies, Universiti Sains, Malaysia

Abstract:
This study was performed to examine the effectiveness of using the website in the teaching and learning of Malay Language grammar in Tamil schools in Malaysia. The objective of this research is to study the performance of control and experimental groups, the level of motivation in the experimental group and the relationship between achievement and motivation of the experimental group-based learning website. This study was conducted in a Malaysian Tamil school. The study was in the area of Padang Serai. The study sample consisted of 65 students of year five. Questionnaire was used to measure the level of student motivation and pre and post tests used to measure student achievement in Malay Grammar. .The study showed that the use of the website in teaching Malay Language grammar has shown positive effects on student achievement and motivation.

1. Introduction

Teaching and learning through websites is one of the learning techniques based on hypertext and hypermedia that has been integrated as a source in producing effective learning (Zamri dan Mohamed Amin, 2008). According to the research, utilization of websites, such as multimedia, creates a fun learning environment that may improve the motivational level among students and increase the effectiveness of learning. The utilization of websites may be perceived as an innovative technique in delivering teaching to students because usage of websites served as the medium. The ability to provide an environment that allow students to interact with teachers, other students and website atmosphere is the main characteristic of website that is unavailable in other teaching methods.

It is evident that utilization of websites has become an essential part of daily teaching and learning in classrooms. In the past, teachers have always used text books or teaching modules in explaining the aspect of grammar in the subject of Malay Language. Nevertheless, significant weaknesses in mastering the understanding of grammar among students are still evident. The perception of learning grammar as a dry subject causes lack of interest among students (Awang, 2009). The utilization of websites in teaching and learning overcomes the weaknesses. It is appropriate to be used for the teaching of Year 5 grammar for students in Tamil schools.

Malay Language is the national and an official language in Malaysia. It is also used as the main medium language and required as the compulsory core subject taught at primary school level. The subject of Malay Language equips students with the skills in interacting and communicating which is consistent with its' objective of being the national language. The syllabus content of Malay Language subject encompasses usage of language which emphasizes on language skills based on standard Malay Language or "Bahasa Melayu Baku" (Kurikulum Bersepadu Sekolah Rendah, 2003).

According to the description in the Primary School Integrated Curriculum (2003), the syllabus of Malay Language subject provides emphasis on language skills such as skills in listening, speaking, reading and writing. The curriculum also suggests that the language skill enables students to use the language effectively in their daily lives as well as knowledge for lifetime learning in the aspect of social relations, knowledge acquisition and recreational purposes. The subject syllabus also provides considerations to different learning styles, interests and intelligent levels among students. However, the mastering of Malay Language is a challenge in vernacular schools such as Chinese schools and Tamil schools (Tan, 2009). In view of the challenges of learning the Malay Language in vernacular schools, the researcher has the opinion that the teaching of Malay Language in vernacular school, such as Tamil school, should adopt innovative methods such as websites to improve the students' motivation and achievement in the language. Grammar is the basic element of each nurtured language skills. It encompasses the skills in listening, speaking, reading and writing. There are a few significant subsystems in a language system. Grammar is the foundation of a language system that comprises of systems in spelling, pronunciation, vocabulary and styles. Grammar is the seam of the language system (Nor Ilyani, Ahmad Fauzi dan Fadzilah, 2012).

Students from Tamil schools face challenges in mastering Malay Language grammar due to different sentence structures between Malay Language and Tamil. The students' mother tongue have triggered the main challenging factor in learning a foreign language (Aini, 2007 and Moghimizadeh, 2008). Therefore, a student's error is perceived as the result of his/her continuous behavior from his/her mother tongue towards the targeted language (Erdogan, 2005). A Malay Language sentence starts with a 'subject', followed by a 'verb' and ends with the 'object' (Nik Safiah, Farid and Hashim, 2008). As an example, a Malay Language sentence, 'Saya makan nasi'; while, a sentence in Tamil is translated as 'Saya nasi makan'. The sentence in Tamil ends with a verb.

School	Number of Students	The distribution of grades based on headcount					Number of Students Passing The Exam	Percentage of Students Passing the Exam	Number of Students Failing The Exam	Percentage of Students Failing The Exam
		A	B	C	D	E				
A	51	3	6	17	20	5	26	51.0%	25	49.0%
B	80	10	17	22	27	5	48	60.0%	32	40.0%
C	55	6	5	20	18	6	31	56.4%	24	43.6%
D	30	4	3	9	11	3	16	53.3%	14	46.7%
E	20	1	4	6	7	2	11	55.0%	9	45.0%

Table 1:Results Analysis - Year 5 Malay Language Grammar, Year End Examination (2012) of a Tamil School In Padang Serai
Source: Department of Education in Kedah, 2012

Table 1above shows the analysis of results for Year 5 Malay Language Grammar or Paper 1, Year End Examination, from five (5) Tamil schools in the district of Padang Serai in 2012. Based on the results, the percentage of students failed the Malay Language grammar was high due to their failure in understanding the concept of grammar (Laporan Peperiksaan Akhir Tahun Sekolah Tamil, 2012).

2. Method
The researcher employed pre and post tests as well as questionnaires to acquire the answer to Question 1,that is students' achievement in Malay Language. Descriptive statistical analysis and inferential statistics were used in this study. Data from Pre and Post Tests were examined with paired sample t-test for research questions 3.

2.1. Population of Study
The population considered for the experiment was Year 5 students from 5 Tamil schools in the district of Padang Serai. The population from SJK (T) Ladang Henrietta has been selected where 65 of Year 5 students participated in the experiment. The sampling of 65 students were segregated into 2 groups with 33 as the experimental group; while, another 32 as the controlled group.

2.2. Purposive Sampling
Purposive Sampling was chosen for this study. Purposive Sampling involves individual consideration in choosing sampling where it is based on the researcher's knowledge and the specific purpose of the research (Noraini Idris, 2010).The study samples were 65 students of Year 5. According to Noraini Idris (2010), samples of a research are the group that functioned as the required information source. While, sampling is the process of selecting individuals to represent a specific research from a group of individuals that represents a big assigned group. The objective of sampling is to obtain information about the population. According to Gay, Airasian and Mills (2009), good samples of a quantitative research are of those representing the selected population. Table 2 illustrates the distribution of study samples used.

Controlled Group Learning Method Without Websites ('Kaedah Pembelajaran Berasaskan Tanpa Laman Web')	Experimental Group Learning Method Based on Websites ('Kaedah Pembelajaran Berasaskan Laman Web')
32	33

Table 2: Distribution of Study Samples

2.3. Pre-Test
Pre and post test were used to answer the first question of the study. The same pre and post test were given to both experimental group and controlled group. The pre and post test questions were the same; they only differ in the sequential of questions as to prevent students from answering the questions based on memory from pre test. The pre test determined the students' ability and background on the subject to be taught in classrooms. The pre tests were given out before the study commenced.

2.4. Post Test
The post tests were conducted 4 weeks after the students participated in the Learning Method Based on Websites ('Kaedah Pembelajaran Berasaskan Laman Web') and Learning Method Without Websites ('Kaedah Pembelajaran Berasaskan Tanpa Laman

Web'). The questions were the same as those in Pre Test. However, the sequential of numbering were revised. The questions were to test the students' understanding of Malay Language.

2.5. Data Analysis
The data collected from the study were analyzed using statistical software SPSS (Statistical Packages for Social Science), version 20. Descriptive statistics such as mean, mode, median and standard deviation were used to discuss the findings. Paired sample-t test and correlation test were used to study all formed hypothesis.

3. Achievements Between Experimental Group And Controlled Group

3.1. Research Question 1
Is there significant difference of students' achievements in Year 5 Malay Language grammar at the Tamil school that utilized Learning Method Based on Websites ('Kaedah Pembelajaran Berasaskan Laman Web') and Learning Method Without Websites ('Kaedah Pembelajaran Berasaskan Tanpa Laman Web')?

3.2. Null hypothesis 1
- **H_{o1}:** There is no significant difference of students' achievements in Year 5 Malay Language grammar at the Tamil school that utilized Learning Method Based on Websites ('Kaedah Pembelajaran Berasaskan Laman Web') and Learning Method Without Websites ('Kaedah Pembelajaran Berasaskan Tanpa Laman Web').

Group	n	Pre Test		Post Test	
		Mean	SD	Mean	SD
Controlled	32	53.44	2.58	53.62	2.54
Experimental	33	53.91	3.81	56.67	4.35

Table 3: Mean Score of Pre and Post Test Achievement from Experimental and Controlled Group

Table 3 indicates the mean score of pre test achievement for controlled group (n=32) are (M=53.44, SD=2.58); while, the mean score of post test achievement are (M=53.62, SD=2.54). The increase of mean score for controlled group is 0.12. The mean score of pre test achievement for experimental group (n=33) are (M=53.91, SD=3.81); while, the mean score of post test achievement are (M=56.67, SD=4.35). The increase of mean score for experimental group is 2.75. The data show that the differences of mean score of achievement from the experimental group is higher compared to controlled group.

Group	n	Mean Difference	SD	Value-*t*	df	*p*
Controlled	32	0.19	1.40	0.76	31	0.46
Experimental	33	2.76	5.29	2.99	32	0.01

Table 4: Paired sample-t test: The Effect of Teaching and Learning for Controlled Group and Experimental Group
Significant level p<0.05

Table 4 shows the mean difference between controlled group (M=0.19, SD=1.40) and experimental group (M =2.76, SD = 5.29). The paired sample t-test indicated that there was no significant difference of mean scores between controlled group (t = 0.76, df = 31, p = 0.46) and experimental group (t = 2.99, df = 32, p = 0.01). Therefore, null hypothesis (H_{o1}) was rejected for experimental group. The results have proven that Learning Method Based on Websites (' Kaedah Pembelajaran Berasaskan Laman Web / KPBLW') provided to experimental group has helped the students in accomplishing higher and more significant achievement scores as compared to results from the controlled group that adopted Learning Method Without Websites ('Kaedah Pembelajaran Tanpa Laman Web / KPTLW').

4. Motivational Level Towards Malay Language From Experimental Group

4.1. Research Question 2
Is there significant difference in motivational level towards learning Year 5 Malay Language grammar within the experimental group students from the Tamil school as compared to before and after the duration of study?
4.2. Null hypothesis 2
- **H_{O2}:** There is no significant difference in motivational level towards learning Year 5 Malay Language within the experimental group students from the Tamil school as compared to before and after the duration of study.

Group Teaching	n	Mean	SD	*T*	df	p
Eksperimen Sebelum	33	36.18	1.98			
Experimental Before				18.77	32	0.00
Selepas	33	44.64	1.67			
After						

Table 5: Paired sample t-test: The Effect of Utilization of Learning Method
Based on Websites Towards Motivational Level In The Experimental Group
Significant Level p<0.05

Table 5 shows the mean scores of motivational level from the experimental group (n=33) before the teaching and learning using Learning Method Based on Websites (M = 36.18,SD= 1.98) and the mean scores from the same group after the duration of study (M = 44.64, SD = 1.67). The results have proven that there was significant difference in motivational level towards learning Year 5 Malay Language grammar within the experimental group before and after using the Learning Method Based on Websites ($t = -18.77$, $df = 32$, $p = 0.00$). The motivational level towards learning Year 5 Malay Language grammar within the experimental group showed positive effect after using the Learning Method Based on Websites. Therefore, null hypothesis (H_{o2}) was rejected for experimental group. Evidently, Learning Method Based on Websites ('Kaedah Pembelajaran Berasaskan Laman Web / KPBLW') provided to the experimental group has enabled the students to increase their motivational level.

5. The Relationship Between Achievement And Motivational Level of The Experimental Group After Duration of Study

5.1. Research Question 3
Is there significant relationship between the achievement of grammar and motivational level of the experimental group after the duration of study?

5.2. Null Hypothesis 3
- **H_{O3}**: There is no significant relationship between the achievement of grammar and motivational level of the experimental group after the duration of study.

Motivational Level of The Experimental Group			
Achievement of Grammar	Pearson	1	0.77**
	Correlation		
	Sig. (2-tailed)		0.00
	N	33	

Table 6: Relationship Between Achievement of Grammar And
Motivational Level of The Experimental Group After The Duration Of Study
***Correlation is significant at the 0.05 level (2-tailed)*

Table 6 shows the results of relationship between achievement of grammar and motivational level of the experimental group after the duration of study. The analysis of correlation shows that the coefficient correlation value r=0.77 and p=0.00 lower than 0.05. The results indicated positive relationship between achievement and motivational level of students participating in the Learning Method Based on Websites. Therefore, null hypothesis (H_{o3}) was rejected for experimental group.
Based on Table 6 analysis, correlation test is equivalent to 0.77 showing high correlation level. Clearly, achievement and motivation have a positive relationship.

6. Discussion, Implications and Recomendations
The findings indicated positive effect of learning Malay Language grammar through Learning Method Based on Websites. The students who learned Malay Language grammar through Learning Method Based on Websites attained significantly higher achievement level as compared to those who learned in the absence of websites. The utilization of websites in the subject of Year 5 Malay Language grammar has improved the students' achievement in the subject.
The results of the study are consistent with findings by Nor Ilyani, Ahmad and Fadzilah (2012) that proves the utilization of computers such as teaching and learning grammar through multimedia and websites creates positive effects on school children. In addition, the study conducted by Yahya Othman and Dayang Raini, shows that the utilization of computers delivers positive effects on achievement of Malay Language. Moreover, a study conducted by Al-Haq dan Al-Sobh (2001), related to the effectiveness of achievement and writing based on websites, confirms that learning through websites contributes an excellent effect on learning languages and improves the Year 5 students' achievement in Malay Language.
According to Khan (1997), learning through web is a form of learning based on hypermedia executed as a source in medium WWW in order to produce effective learning. Furthermore, Chang (2001) study reviews the ability of website learning process in facilitating students' understanding and improving their learning development process. Website learning is suitable in creating

enjoyable learning process. It is consistent with the websites used by the researcher for Year 5 teaching and learning of Malay Language. It helps in the understanding of grammar concept.

The learning method based on websites contributes to positive effects. The results of this study show that method based on websites have enabled the students to master grammar more effectively specifically in Year 5 Malay Language.

The results of the study has shown that there was significant difference in motivational level of the experimental group after using Learning Method Based on Websites. Therefore, the experimental group using Learning Method Based on Websites has shown high motivational level compared to before using the method. The utilization of websites in teaching and learning has improved students' motivational level in the subject of Malay Language specifically in its' grammar. The results of this study are consistent with a study by Robiah (1998) that states motivation is able to contribute effects on both primary and secondary students. Clearly, motivation is the main factor leading students to learn Malay Language. The utilization of websites increases students' motivation.

7. Recommendation and Conclusion
The findings of the study show that the utilization of websites is able to help students in increasing, customizing and structuring their knowledge in the learning process of Year 5 Malay Language. Malay Language teachers are recommended to implement the utilization of websites in the teaching and learning in view of its' ability to provide positive effect to teachers and students. The utilization of Learning Method Based on Websites contributes positive effect on students' achievement and improvement of motivational level in the subject of Malay Language. The administration group should provide support to teachers in order to revise the the teaching and learning method with respect to students' interests and needs.

The study finds that the utilization of websites in the teaching and learning is actually a new alternative. An effective teaching method increases students' achievement and their motivational level. The utilization of websites motivates students and at the same time creates a continuous active learning. A good teaching method is the one that enables the teachers to fulfill the needs and behavior of the students. In addition, an effective and enjoyable teaching method is significantly important in providing understanding to students. The utilization of websites is able to increase students' achievement and motivation in Malay Language. Similarly, the use of websites further motivates students to learn certain knowledge. Interest also increases skills, helps students to give complete attention and leads them to be more creative and innovative. Teachers are responsible to create active learning atmosphere to students. The utilization of Learning Method Based on Websites ('KPBLW') is the evidence of an active learning atmosphere. As a conclusion, teachers should play the role in changing the pattern of development of education in schools.

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