

ENHANCING CREATIVITY THROUGH MULTIMEDIA : A STUDY IN MALAYSIAN TAMIL SCHOOLS.

Paramasivam Muthusamy PhD,
param@fbmk.upm.edu.my
University Putra Malaysia

&

Kanthimathi Letchumanan MA,
kanthi65@hotmail.com

Abstract

Communication and Information Technology (ICT) have made deep inroads to teaching and learning among the students. In Malaysia there are 524 Tamil schools and 90% of these schools have been equipped with computer laboratories. School Curricula have been modified to include ICT in order to upgrade teaching and learning. The computer with its internet and hypermedia capabilities is a powerful tool to enhance learning. With its unlimited collection of text, sound, pictures, video, animation and hypermedia provides meaningful context to facilitate comprehension (Bruner, 1986). The implementation of ICT in the classroom are both an innovation in technology and teaching (Scrimshaw, 2004). The study for this paper is being conducted in 10 Tamil schools in Klang Valley, Peninsula Malaysia to examine how far incorporation of ICT could promote students' creativity in their performance and suggest how teachers could use multimedia effectively. Questionnaire and interview methods will be used to collect data for the study. 100 students are selected by the respective schools. 50 students are grouped as experimental group and another 50 as the control group. The experimental group will be exposed to the multimedia during the process of language learning where students will be encouraged to play computer games in Tamil in the classroom. Meanwhile, the control group will be exposed to traditional approach while learning Tamil language. Both the group's performance will be analyzed based on their skill to write essays, richness in their vocabulary and appropriateness in pronunciation

Introduction

One of the most significant changes in education in recent years has been the availability of a range of Information Communication Technologies (ICT). Thus, ICT is no longer a new terminology nowadays. Almost everyone is familiar with ICT not only at work but also in schools as it encompasses the Internet and multimedia. The power of ICT can be used effectively in language teaching and leaning as there is a paradigm shift from traditional teaching to using ICT in classrooms. Besides that, the generation born after 1980 are named as digital mind and also known as N-Gen - Net Generation (Tapscott, 1998). These groups of students are highly influenced with Internet and have changed their learning attitudes and abilities (Adone at el., 2007). Computer is not an unfamiliar gadget to this group of students.

Students feel that computers with the help of internet have helped to produce a good work. Furthermore, the computer with its multimedia effects, in the form of its unlimited collection of text, sound of pictures, video, animation and hypermedia provide meaningful context to facilitate comprehension (Bruner, 1986). Furthermore, multimedia tool is believed to provide the possibilities of multiple perspectives and a realistic learning environment. The real power of multimedia to improve education may only be realized when students actively use them as cognitive tool. Furthermore computer based learning is more motivating for students and this is generally accepted by educators and by administrators.

ICT in Malaysian Schools

Under the Smart School Project, about 8000 schools in Malaysia have been equipped with computer facilities in 2005. By the year 2010, it is projected that about 10,000 primary and secondary schools will have computer facilities and more schools will obtain computer with Internet connection and teachers will be encouraged to use it in their classroom teaching (Malaysian Ministry of Education, 1997). ICT is aimed at producing students with knowledge, thinking skills and innovations, which eventually contribute to the knowledge-based economy (Economic Planning Unit, 2001). It can be said that the Malaysian government is spending a huge amount of money for the advancement of ICT use in schools. Thus, it is important to see that the ICT has been adopted in the schools.

ICT in Malaysian Tamil Schools

In Malaysia there are 524 Tamil schools and 90% of these schools have been equipped with computer laboratories. With this facility, Tamil school administrators have made it compulsory for teachers to inculcate ICT into their teaching especially in Science and Mathematics. Some teachers also included ICT in teaching Tamil. The advancement and usage of ICT through computer in schools are also due to the support from Non-Governmental Organizations (NGO) other bodies such as, Parents-Teachers Association (PTA) various community movements etc.

Although, the implementation of ICT in schools have been highly encouraged and publicized according to Mullai Ramaiya & Sudandra (2001), the impact of using computer in teaching and learning in Tamil schools in Malaysia is comparatively lower as against Chinese schools (p12). In the mean time, according to Paramasivam (2002), even in those Tamil schools where the computer laboratories are available there was no systematic teaching by using computer as an instructional tool. This was mainly because of the fact that the teachers/instructors did not have enough computer literacy in imparting computer skills to students.

This scenario slowly changed and a positive shape took place since 2003, when the Malaysian government has a change in curriculum policy. It was made compulsory for

Science and Mathematics to be taught in English. Due to this concept, a lot of money was invested in the training of teachers to impart ICT knowledge in them. This gave teachers more opportunities to use the computer more effectively. Tamil teachers also took this golden opportunity to bring in changes into the teaching and learning of Tamil language using computers. Students are now exposed to use multimedia in learning. Multimedia language games have prompted students' interest in learning.

Multimedia and Student's Creativity

In a traditional classroom, teachers play a dominant role as they provide all the information to students. Students on the other hand, are passive learners and follow teacher's instruction. But today's world has changed so much when ICT is incorporated into teaching and learning. Students are now more active and they play an important role in learning with the help of the computers. Teachers are no longer dominant but mere facilitators in providing education. According to Papert (1996), young people's access to information is more interactive and non-sequential and they learn for the pleasure and benefits of discovery. Due to the endless access to Internet they obtain a wide range of information and facts. Therefore, the penetration of ICT cannot be ignored and given the cost, should be used to support learning and teaching (Livingston and Londie, 2007). Besides that, Scrimshaw (2004) also points out that the implementation of ICT in the classroom is "both an innovation in technology and teaching" (p.9). On the other hand, multimedia is a combination features of text, graphic, art, sound, animation and video elements with facilities for interaction. Thus, multimedia is a powerful presentation tool, which can be effectively used for teaching. Studies showed that if students are stimulated with audio, they will have about 20 % retention rate, audio-visual is up to 30 % and in interactive multimedia presentation, the retention rate is up to 60% (Vaughan, 1997; p10). Hence, multimedia tools can enhance many skills such as, functional communication as a result of enriched vocabulary, critical and creative thinking. This article looks at how multimedia based language games obtained through several websites or in the form of Compact Discs (CD) had contributed significantly in the remarkable enhancement of language development among the Tamil students. Further, this article shows empirical evidence the differential achievement rate when compared to the students who have not used multimedia games in the learning process.

Multimedia Language Games

Online computer games are not only potential for engaging and entertaining the users, but also in promoting learning. Simon (1996) has noted how our outlook of learning has been changed from being able to recall information to being able to find and use information. Thus, computer can be an effective tool for enhancing learning even though the present generation students pass much time by playing online games (Turgut, 2009; p761).

Role play and games are used in language classrooms to let students practice language before they use it in the “real world”. Video games are another avenue for “experimentation in a safe ‘virtual environment’” (Kirriemuir, 2002) Learners may be hesitant to participate in language classes because of not wanting to make mistakes in front of their peers, but may be more willing to interact with video game in order to gain valuable linguistic feedback and practice with language before applying their knowledge in the “real world”. As online games and CDs are highly interactive, they are able to give valuable linguistic feedback. For example, (moZhiviLaiyaaTTukaL-**Senthamizh**), Wordsmith and Oarsman (2003).

In some games, the players must vocally interact with the characters of the games via a microphone and use correct vocabulary, pronunciation or grammar as well as speak appropriately which can suit in the game’s context. If the player’s utterance is incorrect, these games will prompt the player to alter his/her pronunciation. This gives the player many opportunities to improve his/her speaking ability and pronunciation through implicit feedback.

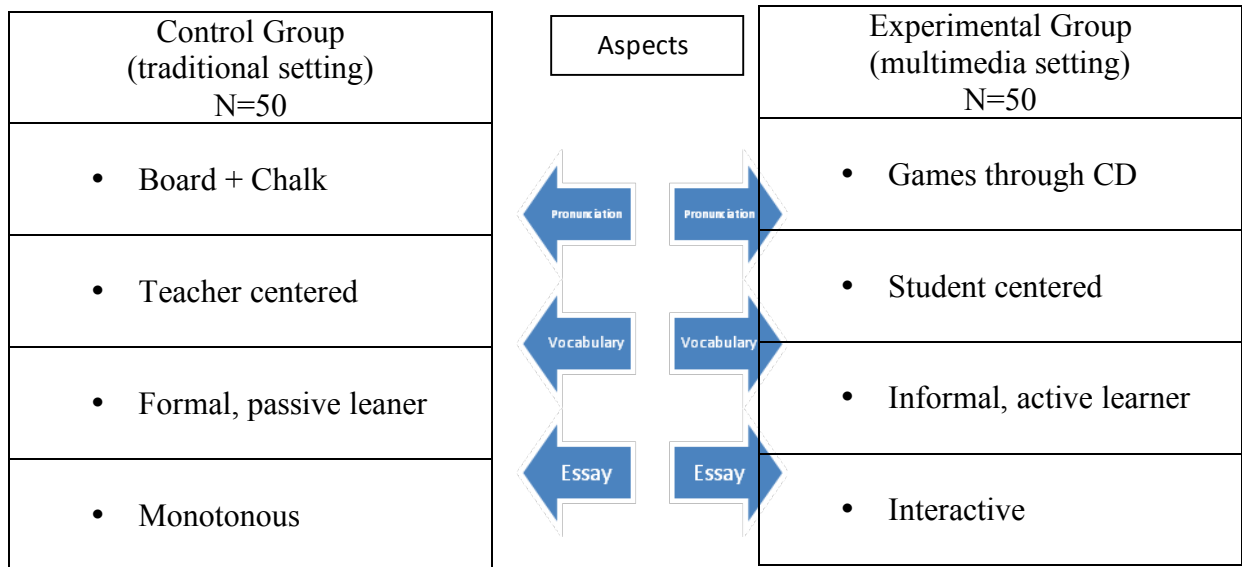
Methodology

The study is being conducted in 10 Tamil schools in Klang Valley, Peninsular Malaysia. Ten students from Year Five, from each Tamil school will be taken as the subjects of the study (n= 100). Five students from each Tamil school will be exposed to traditional teaching while another five students will be exposed to multimedia based teaching strategies. Both the groups will be exposed to the identified teaching methodology for three months. The teachers will be trained in such a way that they can appropriately teach the experimental classes according to the objectives of the present research.

Framework

The study will look at how multimedia in the form of games is incorporated in teaching and learning of Tamil. The games can be accessed through the internet or played through CD.

The differences in the students' performance between the two groups will be observed in the use of vocabulary, ability to write essay and confidence in pronunciation. The result will be given by way of comparing the performance of both groups.



Conclusion

Since multimedia is basically a medium of entertainment, it is a misnomer to think that this media is doing more harm to the students rather than contributing in their studies. In fact, this research has given a clear indication that the students who are exposed to teaching through multimedia based methodology could excel in many ways while engaged in language discourse. Apart from this, the research has also shown that the exposure to multimedia based games could make the students excel in all the basic language skills.

Reference

Adone, D., Dron, J., Pemberton, L. & Bagne, C. (2007) E-Learning environments for digitally-minded students. *Interactive learning Research*, V 18(1) pg 41-53

Condle, R., & Livingstone, K.(2007). Blending online learning with traditional approaches : changing practices. *British Journal of Educational Technology* V38 (2) pg. 337-348

Mullai & Sudandra. (2001). Factors that impaction the use of computers in teaching/leaning in Tamil Schools. *TI 2001 Conference Proceeding*. p12

Paramasivam. (2002). Malaysia Tamil School and ICT Usage. TI 2002 Conference Proceeding p192-197

Mohanlal,Sam (2003) Wordsmith and Oarsman- Language games in Vocabulary Development in Tamil., Central Institute of Indian Languages,Mysore,India.

Senthamizh II, A Multimedia title for teaching/learning Tamil as first language.(Based on the Curriculum of Schools in Singapore),Apple Soft, Bangalore and Singapore Education Society,Singapore,2000

Simon, H.A.(1996). Observation on the sciences of science learning. An Interdisciplinary Discussion, Carnegie Mellon University, Department of Psychology, Washington. DC.

Tapscott,D.(1998). Growing up digital: How the web changes work, education, and the ways people learn. Change Magazine, pg 11-20

Turgut, Y., & Irgin, Pelin (2009). Young learners' language games learning via computer games. Procedia Social and Behavioral Sciences 1 (2009) pg. 760-764

Vaughan, Taay.(1997). Multimedia making it work. (3rd edition) New Delhi: Tata McGraw Hill.