

Strength, Weakness, Opportunity, Threat (S.W.O.T.) of Multimedia Bilingual Learning under the Concept of Knowledge Management in Globalization Era: A Case Study of Taiwanese Elementary School

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ABSTRACT

Globalization has changed things worldwide, and it changes the conditions under which English learning takes place because globalization has brought more intimate contact among people from different parts of the world. The international language used by people to communicate in this era of globalization is English; organizations therefore need bilingual experts to help them build up good relationships with other firms, making English more important than ever. It has greatly contributed to people's zeal to learn English in Taiwan. Consequently, English learning with a concept of knowledge management in Taiwanese education has to become more important for both teachers and students.

The research started with a literature review of the relevant sociolinguistic studies concerning S.W.O.T. for the sake of providing a basis for analysis the result. The first section is a review of the literature, addressing both empirical and theoretical aspects of the role of multimedia English learning theories. This study employed a quantitative case study to gain an in-depth and holistic understanding of learners' performances and the efficiency of these technology teaching methods as well as by implementation of qualitative research methods to further analyze the participant students' motivations and thoughts toward the multimedia approach.

A 6-month long intensive experimental project (IEP) in a middle-size elementary school was conducted and participants consisted of the 43 elementary students enrolling in this particular intensive English program. The teaching curriculum was made up of 2 major English sections including both knowledge learning/listening comprehensive and knowledge application/oral speech.

As this research literature review of the relevant sociolinguistic studies and the quantitative /qualitative case approaches gaining an in-depth and holistic understanding of learners' motivations and perspectives, S.W.O.T. of multimedia English learning method can be arranged and summarized for the further study and students and teachers' advices.

INTRODUCTION

Globalization is what happens when the movement of people, goods or ideas among countries and regions accelerates. The ever-increasing contact between people in different countries in the era of globalization has made communication skills more important than ever before. The knowledge developing enhances relationships among countries (Palfreyman, D.,2006). The ever-increasing contact among people in different countries in the era of globalization has made communication skills more important than ever before. The knowledge development enhances relationships among countries. In the globalization era, as the value of education has become crucial to an individuals' competitiveness, the viewpoints of knowledge management have emerged. With the trend of acquiring knowledge easily, it is

a crucial issue these days of how to select and manipulate knowledge. Knowledge learning can be defined further. It is the most cherished remedy for complexity and uncertainty and the process of translating information and experience into a meaningful set of relationships which are understood and applied by an individual. As the process of identifying, achieving and disseminating the intellectual assets these valuable tools are critical to an individuals' performance (Coatsworth, J.H.,2004).

Globalization has changed things worldwide, and it changes the conditions under which English learning takes place because globalization has brought more intimate contact among people from different parts of the world. Consequently, English learning with a concept of knowledge management in Taiwan education has to become more important for both teachers and students. It has greatly contributed to people's zeal to learn English in Taiwan. Further, the concept of English teaching has evolved towards a vision more based on managing and creating instead of learning alone.

Concept Of Knowledge Management In Globalization Era

As the advent of the new era, the trend of "globalization", has engulfed the world, globalization refers to processes whereby many social relations have become relatively de-linked from territorial geography. It is a process, which has been going on since man climbed down from trees, emerged from caves and began to organize his life, by harvesting as well as hunting, exchanging goods and ideas. It is the acceleration of international integration, spurred by a number of factors, and is now largely technology-driven." (Cornu, Bernard,2003). The advances in technology and communication imply ever-increasing globalization at unprecedented levels.

With the trend of globalization driving ease of knowledge acquisition, it is a crucial issue of how to efficiently select and manipulate knowledge. Some knowledge is found to be well established fact while some knowledge may be dynamic, constantly shaped by new experience and insights (Moore, M.,2003). Knowledge is made up of principles and facts which can be explained to others. Knowledge is generated as various information sources are combined with past experience and learning. Since each person possesses an unique knowledge set and can shares with people, knowledge can be documented, categorized, transmitted as information, and illustrated to other through demonstrations, explanations and other forms of sharing. Therefore, the modern concept of knowledge learning has evolved towards a vision more based on managing and creating rather than simply learning merely. (Block D. & Cameron D.,2002) A broad range of thoughts on knowledge management discipline exist with no unanimous agreements, and usually the stages of knowledge management consisting of the main categories of knowledge storage and knowledge application can be classified and summarized. (Selinger, M.,2008).

English Learning Concept Based Upon Knowledge Managemetn

Globalization is what happens when the movement of people, goods or ideas among countries and regions accelerates. The ever-increasing contact between people in different countries in the era of globalization has made communication skills more important than ever before. The knowledge development enhances relationships among countries. The term "English" signifies an international language that is used by people of different nations to communicate with one another (McKay, S L. 2002) .

The study of knowledge management needs to be efficiently applied for the educational fields of bilingual learning. English teachers learn about knowledge management and with this viewpoint; they learn and adjust the bilingual teaching methods and make ongoing learning an integral part of their teaching strategies(Willis, D. and Willis, J.,2001). The aim of bilingual learning methodology is for teachers to learn many different language teaching methods. Bilingual methodology introduces a variety

of techniques to teachers. With knowledge management as a goal, teachers are able to adapt those teaching techniques and students' learning becomes more useful and more efficient.

Trend Of Multimedia English Approach

English has been seen as a tool of international communication and is regarded as a language of power, prestige and success". It is today in a stronger position in the world and the "hegemonic" status of English has been assured in the process of globalization as "it conveys the greater part of the world's educational, scientific, technological and commercial information." (Wu, H. Y.,2007). Clearly, English is a language being learned by more and more individuals as an additional language, it is central to a growing global economy, and it is the major language of a developing mass culture." In a research on modern English teaching,

Smith, L. concludes that "there is a movement away from the centralized and the standardized English curricula. This decentralization and deregulation in policy gradually grants more autonomy to schools at all levels." (Smith, L.,2008) The trend of multimedia teaching to assist English learning becomes unavoidable. Multimedia teaching approaches overcome time and space constraints because they offer the choices for users to study in their own preferred setting, location or facilities, which may allow this efficient approach to fit with the current of globalization. Multimedia study provides students more opportunities to study as well as a chance to choose their own curriculum patterns to complement their level of knowledge.

Weakness Of Multimedia English Learning Approach

It stated with disadvantages of multimedia material. First of all, High Expense:, the price of hardware and software makes multimedia inaccessible to many schools and families. Secondly, due to Americanization, much of the software is made in the USA, this results in vocabulary and language differences being problematic for other countries' school students(Stockley, D.,2006). Thirdly, brevity of Shelf-Life, frequent technological advances mean that hardware and software are constantly updated; it is very infuriating to discover that your PC will not run the latest multimedia releases or that the disc you bought last month has just been updated. At last, Design fault, a poorly designed interface can lead to user disorientation, making the information virtually inaccessible. Programs which continually crash are also aggravating and are probably the result of poor design or simply a lack of testing during development (Larsen-Freeman, Diane.,2008). This type of fault is only discovered on use.

Strength Of Multimedia English Learning Approach

The advance of modern convenient technique may change the traditional ways of learning; consequently the weakness of multimedia English learning methods has been generally improved. The cost of PCs and CD-ROMs continues to fall rapidly as the market grows. Also, many publishers, recognizing this problem have started to release localized versions of their products; the phenomena of globalization also promote the growth of multimedia systems. Today, when universities enjoy more autonomy in curriculum planning and development, faculty members can decide on their own what they want to teach their students. Based on students' practical needs and ability, tailor-made course plans may intellectually implement auxiliary computer systems and definitely will inspire students' motivation to learn English and make teaching more interesting(Stockley, D.,2006) . With the widespread adoption of computers and the Internet in the midst of knowledge economy of globalization, using the computer as a tool to teach and learn English has become common because the effects of learning can be seen quickly and errors can be found and corrected immediately.

The multimedia environment is created by using computers as an interactive textbook. The multimedia teaching offers many kinds of lessons for students to use. Students can choose what they desire to learn. For 'listening', students can listen hundreds or thousands times. It can be repeated until students can use the word or phrase they chose. For 'speaking', when students listen to the words, they can follow the sound to repeat and imitate the sound. After enough practice, students would be able to speak fluently. Learning English with multimedia facilities have become an inevitable trend. (Scholte. J. A.,2001).

Opportunities Of Multimedia English Approach

English is being learned by more and more individuals as an additional language, it is central to a growing global economy, and it is the major language of a developing mass culture.” In a research on modern English teaching, Hymes concludes that “there is a movement away from the centralized and the standardized English curricula. (Hymes, D.,2009) This decentralization and deregulation in policy gradually grants more autonomy to schools at all levels.” Under this circumstance and with the trend of globalization, multimedia teaching to assist English learning becomes unavoidable. Multimedia teaching is more convenient than traditional teaching, as it presents various functions that traditional teaching does not. Multimedia teaching program enables students to learn English in a very easy and convenient manner. As a matter of fact, multimedia teaching approaches overcome time and space constraints because they offer the choices for users to study in their own preferred setting, location or facilities. They provide students more opportunities to study. Students can also choose their own studying pattern to complement their level of knowledge(Heller, M. 2005).

Study Method

The research started with a literature review of the relevant sociolinguistic studies concerning S.W.O.T. in order to provide a basis for analyzing the result. The first section of this paper is a review of the literature, addressing both empirical and theoretical aspects of the role of multimedia English learning theories. Further, by implementation of quantitative research methods, further analysis of multimedia approach efficiency was conducted. This study employed a quantitative case study to gain an in-depth and holistic understanding of learners' performances and the efficiency of this technology teaching methods.

A 6-month long intensive experimental project (IEP) in a middle-size elementary school was conducted and participants consisted of the 43 elementary students enrolling in this particular intensive English program. The researcher made a detailed analysis of variables which contribute to the performs of the elementary students in learning English. Before analyzing the quantitative data, The researchers observed the participating students to elicit their motivations and interests of English. Conclusions were reached from the study and suggestions are provided for further research through the cross-analysis of quantitative analysis and qualitative observed record results,.

The content of teaching materials was designed by the researcher and the teaching assistants (TA) . The teaching curriculum was made up of 2 major English sections which consisted of listening comprehensive and speech interpretation teaching material. An excellent teacher along with 8 TA were invited to conduct this program by implementing the multimedia teaching approaches. The teacher was responsible to the teaching curriculum and 8 TA assist him to instruct 43 students which were divided into 5 study groups. Their educational and teaching backgrounds fit with this teaching pedagogies.

Based upon the concept of knowledge management in the globalization era, the test materials most fitted into the current trend would be (1) management learning: comprehensive listening, and (2) management application: oral expression. A pre-test and post-test for acquiring students' proficiency

were both carried out. For study, the independent variable was designed to be the multimedia teaching methods and the dependent variable was the students' learning performances analyzed by the a statistical implementation including (1) descriptive statistics and (2) statistic T-test.

QUANTITATIVE APPROACH

The outcomes for the various analyses are presented following each of these descriptive sections and T-test results revealed striking significant difference in English learning between pretest and posttest periods. The next table shows the means, standard deviations (S.D.), and correlations of all the variables. The following figures demonstrate the pre-test/post-test of participating students' performance

Table 1: Analysis of students' performances by the comparison between 2 periods.

English Proficiency	Teaching periods	Students	Means (I/J)	S.D	T-value	P-value	Difference (I-J)
I: Knowledge Learning: Comprehensive Listening	Pretest	43	49.95	7.85	12.10	0.000*	-28.15
	Posttest	43	78.10	6.82			
J: Knowledge Application: Oral expression	Pretest	43	51.00	8.24	4.97	0.000*	-13.20
	Posttest	43	64.20	8.54			

The analyzed pre-tests data indicated that there was no statistically significant difference in English scores, the participant students showed equal starting capabilities in English proficiency. In constant, the post-test analysis of variance T-test results show that the P-value of comprehensive listening/knowledge learning was 0.000; this figure is less than 0.05; showing that there were differences in improvement between the 2 pretest and posttest period that unlikely due to chance. Meanwhile, the post-test analysis of variance T-test results show that the P-value of oral expression/knowledge application was 0.000; this figure is less than 0.05; showing that there were differences in improvement between the 2 pretest and posttest.

The results on the posttest data, showed that the students' comprehensive listening skills (knowledge storage) and oral expression (knowledge application) had a statistically significant difference. The grade difference of listening comprehension between the two periods is (I-J) -28.15. The grade difference of oral expression between the two periods is (I-J) -13.20. The quantitative method result indicated that the participant students' posttest scores on the two learning performances are much superior to the pretest scores.

QUALITATIVE APPROACH

The study was conducted between September, 2010 November 2011. The multimedia teaching approach was chosen as a possible optimization strategy because it assisted teachers to apply study activities to curriculum and course materials improved student's study motivations and learning outcomes. The results showed that choosing multimedia teaching approach was a practical strategy for improving English learning. Beside the statistic quantitative study which assessed these participant students' learning achievements, the qualitative study was proceeded by the action of the researcher to observe and record students' motivations and attitudes toward this approach simultaneously. Collaboration, discussions, and

reflections among the action research team assisted professional development in teaching. The researchers recommend that educators choose appropriate action strategies in order to adapt to various learning situations, which may create opportunities for innovation in the learning environment. Otherwise, teachers should choose appropriate action strategies in order to adapt to various learning situations, which may create opportunities for innovation in the current rigid teaching and learning environment.

CONCLUSION

In order to teach students well and meet these new needs, teachers must integrate different English teaching methods and search for the appropriate approaches for teaching English under the framework of knowledge management in the globalization. With the enormous selection of learning technologies available, teachers should enlighten and assist students to develop their competitive abilities. Knowledge learning reflects a concern for managing and developing a well-expressed and logical long-term plan for the intellectual assets of an individual. It is based on the recognition that the knowledge held by individuals is a valuable commodity. People possess various forms of knowledge, and it is creative, dynamic and adaptable. To learn English with the concepts of knowledge management is a inevitable trend of globalization era.

Multimedia teaching is convenient as it presents a variety of functions to students. Its programs enable students to learn English in an easier way. With many kinds of diverse curricula provided, students can choose their favorite parts to read and write repeatedly . Based upon the assistance of computers facilities, this kind of cooperative learning aimed at using language for communicating effectively will become more interesting and attractive. It maintains students' learning motivation and cuts external interference. It helps to expose learning difficulties more easily and allows teachers to give guidance in studying quickly. Teachers may devise a variety of teaching programs according to students' level of familiarity with the multimedia facilities. As this research literature review of the relevant sociolinguistic studies and the quantitative /qualitative case approaches gaining an in-depth and holistic understanding of learners' motivations and perspectives, S.W.O.T. of multimedia English learning method can be arranged and summarized as the below chart:

Table2: S.W.O.T. of multimedia English learning method

Strengths of multimedia English learning approach
<p>Weakness of multimedia English learning methods have generally improved.</p> <p>Students can also choose their own curriculum patterns to complement their level of knowledge</p> <p>The cost of PCs and CD-ROMs continues to fall rapidly as the market grows</p> <p>Publishers have started to release localized versions of their product</p> <p>Schools enjoy more autonomy in curriculum planning and development</p> <p>Faculty members decide on their own what they want to teach their students.</p> <p>The curriculum can be based on students' practical needs and ability</p> <p>Diverse tailor-made course plans may intellectually implement auxiliary computer systems</p> <p>It inspires students' motivation to learn English and makes learning more interesting</p> <p>Learning environment is created by using computers as an interactive textbook</p> <p>The multimedia teaching offers many kinds of lessons for students to use.</p> <p>Students can also choose their own studying pattern to complement their level of knowledge.</p> <p>Students can choose what they desire to learn.</p>

Weaknesses of multimedia English learning approach
High Expense of hardware and software makes multimedia inaccessible American style software in English vocabulary and language differences for other countries' Hardware and software need to constantly updated Design fault of a poorly designed interface makes the information inaccessible Complicated structure leads to user disorientation
Opportunities of multimedia English learning approach
Globalization promotes the growth of multimedia systems English is a tool of international communication English is a language of power, prestige and success English conveys the greater part of the world's educational, scientific knowledge and so on.
Threats of multimedia English learning approach
Multimedia approaches enables students to learn English in a very easy and convenient manner. Multimedia approaches presents various functions that traditional teaching does not. Multimedia approaches overcome time and space constraints Multimedia approaches offer the choices for users to study Multimedia approaches allow learning in students' own preferred setting, location or facilities Multimedia approaches fit with the current trend of globalization. Multimedia approaches provides students more opportunities to study.

Multimedia teaching is more personal as computer aided instruction offers personalized communication to students and teachers. During the observation of the process of teaching, the researcher also found out the this approach can reduce pressure for bashful students. By using multimedia, the students can manipulate the variables and observe the outcome. This is a discovery learning in which students get the opportunity to experiment with quasi-real-life situations. Multimedia combines images, text, audio, animation, computer graphics and Hyperlinks. When students use multimedia, their feelings and memory are more acceptable.

Moreover, multimedia teaching uses words, sound, animation and images in class through course-software and it stimulates the students' motivations. It creates a more comfortable and joyful atmosphere because the use of a virtual environment means students are not limited to the blackboards and handouts. Students can use multimedia materials to review the lessons even after school, and teachers can identify the students' preferences and design one's teaching materials accordingly.

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