



An Experimental Study on the Effectiveness of Multimedia in College English Teaching

Jing Liu

School of Foreign Language, Qingdao University of Science and Technology

69 Songling Road, Qingdao 266061, China

Tel: 86-532-8761-5850 E-mail: rogerliu099@yahoo.com.cn

Abstract

Based on empirical research and qualitative analysis, this paper aims to explore the effectiveness of multimedia assisted methods in college English teaching. It seems and has been proved by some studies that multimedia assisted methods can effectively promote students' English learning. But the results of this study do not positively contribute to the previous hypothesis. Is multimedia a definite facilitator in college English teaching? The paper is trying to draw attention and offer insights into this problem.

Keywords: Multimedia assisted methods, College English teaching, Effectiveness

1. Introduction

It is obvious to everyone that traditional mode or singular form of classroom teaching can no longer effectively fulfill the needs of students. As a response to the call of higher quality language delivery and then in turn cultivating global competitor for the soaring economic development in china, a considerable number of teachers of College English are trying every means to find some suitable approaches to enhance their teaching quality. Thanks to the overall development of hardware, more and

more computers and multi-media equipment installed classrooms have been set up and put to use, whereby students now have access to modern equipment. Hence, a lot of direct and exciting improvements can be found here and there in English language classrooms. Needless to say, the big change is of vital importance viewed from historical perspective of English teaching. A reliable investigation (Table 1) shows as follows:

The comparisons of figures as above have strongly supported the effectiveness of teaching method reform. So we have the following hypothesis:

Multi-media assisted methods may effectively facilitate English Teaching.

As a pre-study financed by Qingdao University of Science and Technology, this study were carried out to further test the hypothesis.

2. Method

2.1 Subjects

The subjects for the study were selected, according to their English results of National College Entrance Examination and Pre-test, from first-year undergraduates of non-English majors in Qingdao University of Science and Technology where the researcher worked. Chinese was their L1, and English their L2 or foreign language. And there is no obvious difference among the two selected groups (Experimental group and Control group), we may take it for granted that the subjects roughly the same English proficiency.

2.2 Instruments and Procedures

In this study, the instrument used to elicit and collect information was in the form of test,. The use of language tests as tools to measure the EFL learners' literacy has been well justified in the literature. In the current study, the subjects under different teaching approaches (experimental group, multimedia methods; while control group, traditional mode) took part in the same test. Their test results were collected and analyzed to see whether the multimedia methods have positive effect on their English learning.

During the four-month experimental process, 112 subjects from two classes were taught English by the same teacher with the same textbook *New Horizon College English*. In the experimental group, the researcher made full use of well-made multimedia courseware which involves a combination of a large range of communication elements – text, sound, graphics, pictures, photographs, animation and video clips. Each media element has its own particular advantage in conveying particular kinds of messages and evoking particular kinds of learner responses. While in the control group,

the lessons were given in the traditional classroom, mainly includes teaching materials (textbooks, text-related cards, pictures etc.), chalk plus talk, and sometimes taping-recorder.

Both groups were required to take turns to give a three-minute oral presentation before class and the subjects in the experimental group had to use the PowerPoint format. To prepare for the presentation, the subjects of both groups tried every means possible to accumulate, select and analyze the best information on their own. The PowerPoint files made by subjects in the experimental group were not only filled with many beautiful photos, paintings, but also with music and sometimes even videos, which made the presentation impressive, expressive and more enjoyable.

At the end of the experimental term, with a purpose of comprehensive test of the language proficiency of the subjects, both groups were asked to take part in the same test – the final examination which included writing, speed reading, listening comprehension, reading comprehension, cloze and translation. After the test, the test papers were carefully collected by the researcher.

2.3 Data Analysis

2.3.1 Data Preparation

In the quantitative study, a few steps were followed to prepare the data for statistical analysis. The raw data in the study was first inspected and as expected, some missing scores were found for the tests. However, to determine whether these scores should be treated as “missing” or “wrong”, the researcher established the following procedures. First, if a subject made a reasonable attempt to answer the questions in the test, the questions left unanswered were treated as wrong and scored zero. However, if a subject left an entire test paper blank or if more than half of the questions were unanswered, the data were regarded as missing, and the subject was dropped from the statistics. In accordance with these conditions, the final number, which was of statistical value, of subjects in experimental group was 55, and the control group was 57.

2.3.2 Scoring of the Tests

In the data analysis, all the object answers sheets were marked by the computer, and in order to get more convincing and persuasive results, the subject answers (writing and translation) were objectively marked by three different teachers rather than the researcher himself and the mean of the three scores were the final scores for the subject parts.

And the raw scores were carefully typed into the SPSS data table in order to gain the desired data.

3. Results and Discussion

The results have been fed into SPSS (12.0) and analyzed using independent sample T-test analysis.

Table 2 shows that in Test 1, Group 1 and Group 2 are quite similar in the means (Group 1 is 69.33, while Group 2 is 70.92), this means both groups have nearly the same English proficiency, and though experimental group is a little lower, it ($P > 0.05$) has no significance at all. Therefore, the results of the test proves that, though under different teaching approach, the two groups does not show much difference, and the two different methods does not affect the scores of the subjects. Or in another way, the multimedia approach did not show its advantages over the traditional method, which is contradicted to the hypothesis and the established belief.

Is it a failed experimental study? What is the problem? Though there are a number of other factors such as preparation for the examination, health state while taking examination, gender difference and so on, that play important roles in the examination, the test results really means something, and it aroused a question that whether the multimedia assisted method a definite facilitator in English teaching, which deserves more consideration and further reflection.

4. Further Discussion

According to the theory of Constructivism, knowledge is not taught but is learned by the learner himself through constructing new knowledge on the bases of old knowledge, under a certain setting, with the help of others, such as teachers or study partners, utilizing certain study resources. So the student should be the center of teaching and “student-centered methodology” should be used. That is to say, the student is the center of teaching and the teacher works as organizer, facilitator and motivator, utilizing setting, cooperation and dialogue to motivate the student's interests, activity and creativity. Teachers should meet the needs of students. From this point of view, multi-media assisted approach can help students learn in this way.

It cannot be denied that multimedia assisted approach can make English learning more interesting, and to some extent, change the situation of *having to learn* into *willing to learn*. Multimedia courseware combines sound, pictures, texts together and it offers a vivid, direct study environment. It has different kinds of forms, exercises, and activities. It can arouse students' interest.

It can facilitate English teaching and learning and make it more efficient. Well-designed courseware can provide students with a lot of useful information, such as word study, useful expressions, language structures, sentence explanations, cultural background, organization of the text, Chinese translation of the text and exercises. Just click the mouse and students can present the visual information the students needed easily and efficiently, saving a lot of time

otherwise used in lecturing and blackboard writing. Teachers can do more important things in class: to design some activities to see whether students have really grasped the knowledge they should learn, to explain difficult parts, to practice spoken English by giving them some topics to discuss or by doing other things, such as, debate and role-playing. In this way, students can really grasp and use the language, because the final goal of language teaching is to use it freely.

But the test results prompt us to reflect the disadvantages of multimedia assisted approach in college English teaching. Long hours of watching courseware screen which is filled with text, sound, graphics, pictures, photographs, animation and moving video is harmful to the eyes, and it is easy for students to become tired after long periods of watching and sitting. What's more, in the face of so much information, some students will feel lost and not know what to choose.

Meanwhile, the new method cannot meet all the expectations. With the help of various resources that internet offers, teachers find things greatly attract them and in turn unavoidably organize teaching materials according to their own interest, while think a little less of making study an evolutionary and systematic process for students. Students are still relatively passive in the seemingly new learning environment. Teachers are the lords of all the sources. Students do what they are told to. They take down notes from the screen, try hard to memorize them and follow through to do simulated practice. Frustrations thus appear in the classroom. Students become stenographers. Teachers can hardly make students listen to their explanations or appreciate insights into matters, not to mention discussions between them. When lights are turned off the dark classroom might become the best napping place. It seems that the so-called exciting advanced technology — multi-media assisted teaching method is to some extent only a practical electronic blackboard.

The alleged four elements of education are teachers, students, teaching materials and multi-media facilities. They are interconnected and interacted efficiently during the course of teaching. Teachers mechanically provide input, cue up and switch on videos and tapes, sometimes forgetting whom they are teaching and their real aims to teach. Just as easy to tune-out modern method so teachers can fail to do their best they see themselves as technicians. Students become lonely learners on the planet of high-tech.

5. Conclusion

Aware of all these problems mentioned above, we might as well conclude that current multi-media assisted teaching method is not facilitating a two-way communication atmosphere, student-oriented classroom, or cultivating students' independent learning ability.

So, to solve these problems, Teachers' role should be dramatically altered and encourage the teachers to update their concept of multi-media, base their teaching planning on theory of constructivism, tailor to different students' need for language learning. What they should do is to offer visual audio input, that is, they organize materials that are used to help in their lesson preparation, providing texts, sound, digital video, grammar or vocabulary exercises that can be used in class; students should do individual exploring and presentation, the World Wide Web for example can be used by learners as research materials for classroom presentations or as sources for materials and information for project work, as well as students' group work. In addition, It's time for ESL teachers and software experts to work out practical and advanced English teaching courseware, which is an integration of virtual real situation, collaboration, conversation and meaning construction, etc.

References

- Brett, P. (2000). Integrating multimedia into the Business English curriculum: A case study. *English for Specific Purposes* 19:269-290.
- Dong, Zhe. (2002). Comparison of effects of CALL and traditional classroom teaching approach of College English. *Foreign Language World* 2:65-70.
- Harmer, J. (2000). *How to Teach English*. Beijing: Foreign Language Teaching and Research Press
- Liu, Jiwan. (1999). Current situations in foreign language teaching and multimedia technology. *Foreign Language and Foreign Language Teaching* 3:44-46.
- Liu, Mingdong. (1998). Computer assisted instruction and its application in English learning. *Teaching English in China* 31; 44-46
- Sandra Fotos (Ed.) (1996). *Multimedia Language Teaching*. Tokyo and San Francisco: Logos International.
- Wu, Xiaozhen. (2001). Teacher's Role in CALL. In Cai Jigang (eds.). *Papers On 21st Century College English Teaching*. Fudan University Press.

Table 1. The Comparison of Memory through Different Ways

	Verbally transmitted information	Silently memorized information	Audio-visually transmitted information
Memory after 3 hours	60%	70%	90%
Memory after 3 days	15%	40%	75%

Table 2. Means Comparison for Test 1

	N	Mean	Std. Deviation	t	Sig.(2-tailed)
Experimental Group (1)	55	69.33	8.6	.024	.981
Control Group (2)	57	70.92	9.4		