

Teaching English Words of First Grade Textbook by means of Software and Traditional Method: A Comparative Approach to the Effects of Both Methods on High School Students' Achievement in the Second Educational Region of Zanjan, Iran

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Abstract: *The objective of the present research was to compare the effect of teaching English words of first grade textbook by means of teaching software and traditional method on scholastic achievement of grade one high school students. The research was applied-oriented in terms of its objective and semi-experimental by its methodology. The statistical universe included 90 first grade high school students among which 60 students were selected randomly as sample. Researcher-made questionnaire with proper reliability (Cronbach's Alpha of 0.86) were used to gather data. Gathered information was examined using t tests for one independent group and one dependent group. The results showed that not only using educational software in teaching English words is effective on students' scholastic achievement but also this effect is higher than that of traditional methods of teaching. Furthermore, teaching English words through educational software was significantly effective on students' motivation to learn meaning of the words.*

Keywords: CALL, Teaching, Educational Software, Traditional Teaching Style, Scholastic Achievement, High School Students

1. Introduction

The third wave has really brought about a new way of life which is based on an institute can be called electronic cottage. Continuous developments resulting from applying technology such as IT, cause significant changes in industrial, economic, political and civil structures of the societies and finally brought about serious challenges to traditional approaches of teaching and learning in terms of goals, methods and quality. It can be predicted that old dreams and unsolvable difficulties such as making education to be applicable, focusing on capabilities and needs of students, stabilizing learner-based education, changing teacher's function into guide and authenticating life-long learning may be achieved through development of ICT. Students' academic achievement is an important index to evaluate education system. In other words, education system expects students to become able to improve their cognitive, emotional and personal capacities and skills. Therefore, to achieve this goal the whole effective factors should be considered. In this respect, one important factor concerning development of education system is utilizing new education technologies.

2. Statement of Topic

The reflection of the ICT-supported process of instruction requires to be researched continuously and systematically in the whole context as modern information and communication technologies have penetrated the society, including the field of education and brought crucial changes (Ivana Simonova, 2014). Educational software can provide reach sources as an opportunity to create participation environments. The basic feature of electronic learning is its

communicative and interactional function. Skinner is well-known advocate of teaching technology and believed that educational technology is the process of finding and setting learning conditions by using physics and electronic and mechanical tools so that these conditions can result in more effectiveness of teaching. Teaching Technology Committee of the US Department of education described teaching technology as follows: 1) media that emerged as a result of communication revolution and can be used along with teacher, textbooks and board and 2) a systematic method to design, present and evaluate all steps of teaching according to specific objectives and on the basis of research results on learning and human relation by using human and non-human resources to have effective teaching. Therefore, educational software supports teaching and learning process and is one of important factors of learners' development and creativity and changing their behavior in learning environment. Learners can be able to understand how to generate new production. This means a meaningful learning and educating citizens to informational society.

Accordingly, many education systems in recent decades have been trying to enter and use new technologies in order to improve learning as soon as possible. Many research in this field proved the advantages of the tool in terms of better learning and saving teacher and students' time saving. Referring to the explanations made above, we are going to discover how teaching English words of first grade textbook by means of teaching software, in comparison with traditional method, may effect on scholastic achievement of the students.

3. Literature Review

Over the past few decades, computer-assisted language learning (CALL) has become an important element of language learning which supports the idea that computers should be used as a medium to facilitate language learning (Elham Mahmoudi et al, 2012). Almekhlafi (2006) studied the effect of computer-assisted language learning on the EFL elementary students' achievement and motivation. 83 students were studied in two experiment and control groups with and without using computer, respectively. The results showed significant difference of the benefit to experiment group. Furthermore, the experiment group had much more motivation to learn English than the control group.

Chuan Kungand Chuo, T. W. (2002) examined the effect of internet on learning different parts of English including conversation, comprehension, writing, and grammar structures and found that internet generally can improve learning different parts of English. Al-Kahtani (2001) studied the effect of using computer and learning software on teaching English and observed that these tools save teaching time and improve students' learning. Dela Cal Fasoni (2001) studied the effect of computer and internet on learning English and found that these tools improve students' learning, increase cooperation and participation between them and improve their language skills especially correct pronunciation. Kendrasue (2001) studying the effect of computer programs on English learning observed that diverse software and computer resources can improve English learning. Moreover, the ability of word processing in computer allows the student to concentrate on what he/she wants to say without being disappointed by slow pace of writing, cleaning and correcting the materials or looking up words in dictionaries.

Zarei and Khazaie (2011) studied how Iranian learners of the English language learn L2 vocabulary through laptop based delivery of multimodal items. They observed that the subjects treated with vocabulary items with pictorial or written annotations performed significantly better on the tests.

Elham Mahmoudi et al (2012) investigated the relationship between attitudes toward Computer Assisted English Language Learning (CAELL) and their performance on the English language vocabulary and found that participants possessed positive attitudes towards CAELL and their attitudes and performance were found to be positively related.

Suggesting Hybrid Learning (HL) Idée Edalati Shams (2013) studied how Iranian advanced EFL learners improved in their autonomy level and vocabulary knowledge by attending a HL vocabulary course. Findings showed that the learners' autonomy level and vocabulary knowledge increased after attending this HL course.

Reviewing literature on the field encouraged us to ask whether these tools can be effective, especially, in learning English Words and improve the students learning in our country. Therefore, this paper deals with comparing the effect of teaching English words of first grade textbook by

means of teaching software and traditional style on scholastic achievement of grade one high school students and examining the following hypotheses:

- H1. Teaching by means of educational software is effective in students' learning of English words.
- H2. Teaching by means of educational software is more effective on students' motivation to learn English words than any other traditional teaching methods.

4. Methodology

Given the subject, hypotheses and objectives of the research semi experimental method was used and the statistical universe consisted of 90 first grade high school students among which 60 students were selected randomly from high school students in the Second Educational Region of Zanjan, Iran in 92-93 school year. Attributes of sample size were shown in table 1.

Table 1: Frequency distribution of sample size in two studied groups

| Teaching method | Number of students |
|-----------------|--------------------|
| Traditional | 30 |
| Using software | 30 |
| Sum | 60 |

The method was that two classes were chosen randomly in two groups, one were taught by traditional teaching method (control group) and the other by educational software (experimental group). Before entering independent variable (teaching by means of educational software) a pretest was conducted among two groups and then only the experimental group was taught using educational software for three months and at the end the same test was given again to two groups and the subjects' achievement was calculated using the scores gained from teacher made tests on the basis of presented words from the textbook. Moreover, a questionnaire made by researcher was used to examine learning motivation for learning English words with the help of software. It is worth to note that related experts' view contributed to improve formal and content validity of the questionnaire and after applying required modifications the final version was confirmed. In order to indicate the reliability of the questionnaire dealing with learning motivation Alpha Cronbach Coefficient was calculated and its reliability was 86%.

Descriptive statistics was also used to calculate central and distribution indexes and generalize the results to statistical universe t test used concerning two independent groups – individual group t and dependent t. SPSS software was used to analyze data.

5. Findings

Dependent t test was used to study H1 to indicate the effect of teaching by means of educational software on the students' learning of English words. Table2 shows the mean of grades of learning English words dealing with pre and posttests of the group taught with the help of software.

Table 2: The mean of grades of learning English words dealing with pre and posttests of the group taught with the help of software

| Teaching method | Number of students/ tests | Mean | Standard deviation |
|-----------------|---------------------------|--------|--------------------|
| Pre test | 30 | 16.668 | 2.87 |
| Post test | 30 | 18.35 | 2.22 |

As seen in table 2, the mean of grades of learning English words dealing with post tests is higher than the mean of pretests. Dependent t test was also used to indicate significance difference between two means, as shown in table 3.

Table 3: Results of Dependent t Test

| | Calculated t | Crisis t | Number of students/ tests | Freedom degree | Significance level |
|------------------------|--------------|----------|---------------------------|----------------|--------------------|
| Learning English words | 15.143 | 3.291 | 30 | 29 | 0.000 |

Table 3 with Significance level of 0.000 indicates that there is a significant difference between the means of pre and posttests of English words. Given two means of pre (16.668) and posttests (18.35) it can be concluded that teaching by means of educational software may bring about achievement in learning English words.

Single group t test was used to study H2 to indicate the effect of teaching by means of educational software on the students' motivation for learning English words. Table 4 shows the frequency and means of grades of learning English words of the group taught with the help of software.

Table 4: The frequency and means of grades of learning English words of the group taught with the help of software

| Name of variable | Number of students/ tests | Mean | Standard deviation |
|------------------|---------------------------|--------|--------------------|
| Motivation | 30 | 33.117 | 6.15 |

As seen in table 4, the mean of motivation scores is higher than the cut number. Single group t test was used to indicate the significant difference, as shown in table 5.

Table 5: Results of Single Group t Test

| | Calculated t | Crisis t | Number of students/ tests | Freedom degree | Significance level |
|------------|--------------|----------|---------------------------|----------------|--------------------|
| Motivation | 21.7 | 3.291 | 30 | 29 | 0.000 |

Table 5 with Significance level of 0.000 indicates that there is a significant difference between the means of motivation scores and the cut number. Statistically, it means that teaching by means of educational software may develop students' motivation for learning English words.

6. Discussion and Conclusion

In this research the effect of teaching by means of software and traditional method on the students' achievement of learning English words was studied from the comparative

point of view. On the whole, the results showed that teaching with the help of software is effective on students' achievement dealing with learning English words and improving their motivation. The findings of this research are in the same line with those of Chuan Kungand Chuo, T. W. (2002), Al-Kahtani (2001), Dela Cal Fasoni (2001) and Kendrasue (2001). In fact, educational software can help teachers with explaining materials and analyzing them as well as creating a setting to make materials coordinated. Furthermore, it can help students with learning more and better and make materials richer, more effective and interesting.

On the other hand, results showed that using educational software may increase learning motivation in the students which are in line with those of Almekhlafi (2006). It was also found that there is a significant difference between learning with the help of software and traditional method that this finding is in line with that of Almekhlafi (2006), Al-Kahtani (2001), Dela Cal Fasoni (2001), Kendrasue (2001) and Chuan Kungand Chuo, T. W. (2002). Therefore, educational software as new tools has great potentialities to change teaching and learning methods and by further research on how well applying these tools in future it could be possible to improve quality of teaching and learning in all education systems.

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