

**The Effect of Using Power Point Presentation in English
Classes on Students Achievement in the Dept. of
Educational and Psychological Sciences
(An Experimental Research by)**

**Lecturer
Shoaib Saeed Fahady**

**Assist. Lecturer
Saad Ganim Ali**

University of Mosul - College of Education

Received: 9/8/2007; Accepted: 6/11/2007

Abstract:

The present research aims at investigating the impact of power point presentation, as a method of teaching, on the achievement of students at the Dept. of Educational and Psychological Sciences / College of Education, in English classes. To achieve the aim of the research and test its null hypotheses, second – year students at the prescribed Dept. have been distributed on two groups; experimental group (taught by power point) and control group (taught by traditional method). The sample consisted of (24) students; (12) students for each group. At the end of the experiment, which lasted two months, an achievement test was given to the subjects. After analyzing the collected data, using t-test for two independent samples, the research concluded that there is a significant statistical difference between the mean scores of the two groups and for the benefit of the experimental one in all domains. In the light of the findings, the researchers gave some related recommendations.

أثر استخدام برنامج في الحاسوب (البوربوينت) كطريقة تدريسية على تحصيل طلبة قسم العلوم التربوية النفسية في كلية التربية في مادة الانكليزي

م. شعيب سعيد الفهادي
م.م سعد غانم علي
جامعة الموصل / كلية التربية

ملخص البحث :

يهدف البحث الحالي إلى معرفة أثر استخدام برنامج في الحاسوب (البوربوينت) كطريقة تدريسية على تحصيل طلبة قسم العلوم التربوية النفسية في كلية التربية في مادة الانكليزي ولتحقيق هدف البحث واختيار فرضياته الصفرية فقد تم تقسيم طلبة الصف الثاني في القسم المعني إلى مجموعتين : أحدهما تجريبية (درست بطريقة البوربوينت) والأخرى ضابطة (درست بالطريقة التقليدية) وتكونت عينة البحث من (٢٤) طالب وطالبة : (١٢) طالب لكل مجموعة. وفي نهاية التجربة التي استمرت شهرين تم تقديم اختبار تحصيلي في المادة لكلا المجموعتين وبعد تحليل النتائج باستخدام اختبار (T-test) لعينتين مستقلتين، خلص البحث الى وجود فروق ذات دلالة إحصائية بين متوسط درجات كلا المجموعتين ولصالح المجموعة التجريبية وفي جميع المجالات. وفي ضوء النتائج تم تقديم عدد من المقترحات ذات العلاقة بموضوع البحث.

Significance of the study:

Teaching is considered the most active means for passing scientific subject deeply into minds and souls. It presents ideas, knowledge, sciences, skills, values and trends in such a manner that makes them learnable and comprehensible.

Education systems all over the world have adhered to ensure opportunities of perfect development for the learner within the limits of his abilities and capacities as well as taking into consideration current prerequisites. In this age of Information explosion, which is characterized by the outflow of growing information and an amazing acceleration, there is no place for those who are not well acquainted with the advanced technologies.

The matter of modern technology effect on education has gained a special and ongoing care in the period following world-war II in particular. Among these modern technologies, computer has gained the largest part of focus owing to its educational traits and potentials on the one hand, and its cheap cost due to technological development of its hardware, software and courseware on the other. (Marshall,1982:42)

At the time the matter of modern technology effect on education has gained this care, the effect of computer emergence on education has taken on new horizons and a special care in view of the radical change it has generated in education techniques and strategies at all teaching levels.

Computers role appeared to be an educational means in confirming modern educational trends upon self learning and how to increase the individual's responsibility upon his learning in addition to the increasing need to individualize education to be in agreement with the individual's abilities and necessities. Moreover, computers observe the individual differences among learners owing to the huge integrated potentials of computers which combine more than a trait of various education technologies; besides the possibility of programming educational content in a logical and psychological consequence and procuring a direct interaction with the learner making its role closer to that of a tutor

(Novak and Growin,1984: 36)

A computer performs multi roles and functions in the learning process as well as assisting in passing on educational content in various modes and strategies such as Tutorial, Drill & practice, Simulation, Educational games and dialogue. (Al-kala, 1985 : 146)

Power point (@ Microsoft Corp) is a widely used presentation programme that originated in the world of business but has now become common place in the world of Educational technology. However, its use is far from being controversial in this educational context and opinions as to

its use ranges from highly supportive to significantly negative. (Lowry,2003:9)

One of the major problems is that its current use is frequently limited to an information transmission mode, often with excessive content. A usage that obscures the wider potential for diverse professional and pedagogically sound presentations.

There are some good reasons to use power point for teaching and learning activities, but the key ones include :

1. It provides encouragement and support to staff by facilitating of a presentation in a professional manner.
2. By careful mixing of media, a presentation can appeal to a number of different learning styles and be made more stimulating.
3. Extra information can be hidden within files for answering predicted questions or for providing feedback to students using the file in a distance learning –context
4. The probability of the files, especially on compact disk (CDs) with their large capacity, allows presentations to be given wherever the technology is available or be distributed where appropriate. (Mills, 2003 : p.7)

There are, of course, several risk factors associated with using the technology that make some deachers reluctant to commit to its use, The main ones are :

1. Equipment failure : refusal of any component of the system to work as expected. The solution here is to have alternative activities prepared.
2. File corruption caused by magnetic or physical damage so that the presentation will not run. Best countered by having alternative media files available.

3. Incompatible media : finding files incompatible with the system available. Best solution is to be aware of the systems you plan to use or carry your own laptop.
4. Lack of appropriate training in both programme and the technology, (Jakson, 1997)

Language is considered the base of human culture ; it represents the main medium by which generation communicates and experiences, knowledge and achievements are conveyed over generations (Robinson, 1980 : 12).

English is the most common and used language all over the world due to its known importance at all knowledge fields ; Scientific in particular. The great developments occurred in the last century in all fields have generated many accurate scientific, cultural, industrial and commercial specializations.

Since English is the most common language, it is not surprising that it includes styles distinguishing such specializations, i.e. the language style of a merchant is different than that of a doctor and so on. Therefore, the need of the specialists to the English language has become specified by what they might make use of it. We notice from previous literature that the first who wrote about the specialized scientific language were the educational teachers like Thorndike (1944) and West (1952), and not the linguists. Those teachers have only confirmed on scientific vocabularies and their meanings, then the first conference interested in English for special purpose (ESP) was held by the linguists in 1966.

Irrespective of the student who studies in the Department of English language grammar, origins, phonology and pronunciation as well as the English literature ; the most thing that student needs in other literary and scientific specialization is to consult foreign references such as books, researches and essays written in English to be acquainted with

the latest data in his general or specific field of specialization or rendering and preparing a research or a report in English. The most important thing in teaching English for special purposes (ESP) is to identify linguistic structures that distinguish various specializations from each other.

Problem :

Mosul University is one of the earliest universities in Iraq to recognize the importance of ESP to the undergraduate and postgraduate levels. It certainly deserves this credit. All the colleges had at least a one – year course, usually taught for first- year students. Department of Educational and Psychological Sciences is one of these branches that gives two - years courses in ESP to undergraduate students.

The pedagogical and academic state of the programme is not much better today than it was. The stumbling blocks have been many and sometimes very serious. In the forefront of these are, lack of a clear and stable ESP policy, absence of motivation and inadequate material.

The current research investigates the effect of using power point presentation in the English classes for students at the Dept. of Educational and Psychological Sciences, on developing their intellectual skills such as ; memorizing, comprehending applying, and also the effect on their academic achievement in general.

Aim of the study :

The present paper aimed at evaluating the effectiveness of power point presentation in English classes on enhancing the total achievement of students at the Dept.of Educational and Psychological Sciences concerning the cognitive objectives (memorizing, comprehending, application and analyzing).

Hypotheses :

In an attempt to achieve the aim of this research, the following hypotheses have been introduced

Main hypothesis

There is no significant statistical difference between the mean scores of the experimental and control groups in the achievement test.

Sub hypotheses :

1. There is no significant statistical difference between the mean scores of the experimental and control groups in the achievement test concerning the memorizing domain.
2. There is no significant statistical difference between the mean scores of the experimental and control groups in the achievement test concerning the comprehending domain.
3. There is no significant statistical difference between the mean scores of the experimental and control groups in the achievement test concerning the application domain.
4. There is no significant statistical difference between the mean scores of the experimental and control groups in the achievement test concerning the analyzing domain.

Limits of the study :

The present research is limited to second year students at the Dept. of Educational and Psychological Sciences/ College of Education/ University of Mosul for the academic year 2006- 07.

Operational definition :

Power point:

A modern method of teaching which includes a computer programme presenting the subject matter in a chine way through slides using data show.

Method of research :

This part of the research subsumes a detailed statement of the procedures followed to carry out the empirical part of the current work. Accordingly, the following points have been attended to :

The Experimental design:

This research has been built on the " After-only test research design" in which two groups of subjects are assigned to the experimental and control groups. (Christenson,1980:170)

The Population:

The population has been limited to the second – year students at the Dept.Of Educational and Psychological Sciences for the academic year 2006- 07. The total number of the population was 28 students who attended English texts classes.

The sample :

Twenty –four students have been chosen to represent the sample of the research. Four failures have been excluded since they are expected to have more experience in the prescribed subject, a point that may affect the results of the research.

The chosen students have been divided into two sections, A and B. Section A represents the experimental group while section B represents the control group. Information required for the purpose of equivalence of the two groups has been collected from the available archives in the Dept. of Psychological and Educational Sciences as shown in table 1. This information includes :

- a. Students age (measured in years).
- b. Scores in English subject for the previous year.

- c. Parents Educational achievements.
- d. Intelligence score.

The two groups were equivalent in all variables at a time when all external and internal variables that may affect the experimental design had been controlled.

Table 1
Information of the Two Groups

No.	Age	Score in English	Intelligence score	Fathers academic achievements	Mothers academic achievements
Experimental Group					
1	19	64	81	preparatory	Master
2	19	57	80	Master	preparatory
3	20	53	72	iIntermediat	Intermediat
4	21	61	96	Bachelor	Bachelor
5	20	74	85	preparatory	primary
6	19	81	92	primary	Bachelor
7	19	73	77	Bachelor	Bachelor
8	20	64	70	Master	Intermediat
9	20	66	82	Master	Master
10	20	52	66	Preparatory	Preparatory
11	19	56	60	Bachelor	Doctoral
12	19	62	71	Doctoral	Master
Control Group					
1	20	84	81	Master	Bachelor
2	19	52	74	Preparatory	Master
3	19	61	62	Bachelor	Preparatory
4	19	56	70	Bachelor	Intermediat
5	20	66	63	Preparatory	Bachelor
6	20	70	84	Master	Preparatory
7	21	74	91	Intermediat	Primary
8	19	60	94	Doctoral	Preparatory
9	20	50	86	Master	Doctoral
10	19	65	82	Primary	Intermediat
11	19	62	73	Preparatory	Bachelor
12	20	57	72	Master	Doctoral

Instrumentation :

- 1. The lecturer :** One of the researchers was nominated as the lecturer within this part of the research.
- 2. Teaching materials :** This has been limited to the units Three and Five from the text book " The Third skill book 2" (Al. kaubaisy, 1990) prescribed for teaching English texts to the definite population
- 3. Behavioural objectives :** The behavioural objectives which are set according to Blooms classification of cognitive domain, have been quoted from the prescribed units in the text book. Then, they have been given to a jury of experts in TEFL and measurement to test the validity. (Appendix A)
- 4. Instructional programme :** The instructional programme has been prepared in two methods of teaching, i. e. traditional method and experimental method by using power point presentation, and according to the behavioural objectives previously stated. Then, it has been given to the prescribed jury to test its validity.
- 5. Achievement test :** The major function of achievement test is to measure the extent of student progress in the attainment of the instructional objectives of a specific study and to evaluate the effectiveness of instruction. This is true especially in research, when experimental and control classes are given the same goals and the same materials but use different techniques to achieve them. (Harris, 1969 : 3)

The researchers conducted an achievement test to investigate the effect of teaching the experimental subjects, using power point presentation, on their achievement in English classes as compared with the achievement of the control subjects who were taught using the traditional method.

The test consisted of twenty items distributed among four questions, each question represents and measures one of the preselected cognitive objectives. The scoring scheme of this test involved assignment of one mark for each item, yielding a total mark of twenty (Appendix B).

To ensure the test validity, it was given to a number of instructors who are specialized in TEFL and linguistics.

After discussing the items with them, their directions and comments were taken into consideration.

The reliability was calculated by means of Kuder-Richardson formula 21 yielding (0.78). This coefficient gave an estimate of the internal consistency of the achievement test. (Glass and Stanley, 1970)

The Experiment :

The experiment started on the 23rd, October 2006. The lecturer started teaching English texts to both groups, following the procedure in each instructional programme prepared according to the two methods of teaching, power point presentation and traditional methods. Each group attended one lecture a week for three months. The experiment lasted twelve weeks and was stopped on 26th, December 2006. Throughout twelve weeks, the students were taught the third and fifth units from (the third skill, book 2) text book set for teaching English texts and according to two methods of teaching, i.e. power point presentation and traditional method.

Results :

To arrive at the aim of the research and test its null hypotheses, the obtained data was analyzed statistically using t-test for two independent samples.

The subjects scores on the achievement test are shown in Table 2 :

Table 2
Scores on the Achievement Test for the Two Groups

Experimental group						Control group					
No	Memo rizing	Compre hending	appl ying	analy zing	Total	No	Memo rizing	Compre hending	appl ying	analyz ing	Total
1	4	2	5	3	14	1	4	1	3	1	9
2	5	3	4	3	15	2	2	2	4	2	10
3	4	4	5	5	18	3	4	3	4	4	15
4	2	5	5	5	17	4	4	3	4	3	14
5	4	2	5	1	12	5	3	1	3	1	8
6	5	5	5	5	20	6	3	3	4	3	13
7	5	3	5	5	18	7	3	3	3	3	12
8	3	5	5	5	18	8	4	4	3	4	15
9	5	2	4	3	14	9	2	1	1	3	7
10	5	5	4	4	18	10	1	2	4	0	7
11	4	3	5	5	17	11	2	4	3	2	11
12	3	4	5	2	14	12	3	3	3	0	9

The results can be stated as follows:

- 1- In order to test the main hypothesis and know if there is any significant statistical difference between the mean scores of the experimental and control groups in the total achievement test, two independent samples t-test was used.

The result shown in Table 3 indicate that t-calculated value is (5.184). In comparison with the t-tabulated value (2.074) at 0.05 level and (22) degrees of freedom, the result shows a significant statistical difference between the mean scores of the two groups and for the benefit of the experimental group. Hence the main null hypothesis is rejected.

Table 3
Mean, Standard Diviation and T-calculated for the Two groups in the Total scores.

groups	No.of sample	mean	Standard diviation	t-calculated
experimental	12	16.25	2.277	5.184
control	12	10.833	2.823	

t-tabulated at 0.05 level and 22 degrees of freedom = 2.074

- 2- To test the sub hypotheses, the researchers used (T.Test) for two independent samples. The results are as follows:

A- there is a significant statistical difference between the mean scores of the two groups in the achievement test concerning memorizing domain and for the benefit of the experimental group. This was attributed to the fact that the t-calculated value (3.041) is higher than the t-tabulated (2.074).The first null hypothesis was rejected. The results is shown in Table 4 :

Table 4
Mean,Standard Deviation and T-calculated for the Two Groups in the Achievement Test; (Memorizing Domain)

Groups	No. of sample	Mean	Standard deviation	t-calculated
Experimental	12	4.08	0.276	3.041
Control	12	2.92	1.32	

B- Concerning the second sub hypothesis, Table 5 shows the mean scores, standard deviation and t-calculated for the two groups in the achievement test; (comprehending domain).

The result indicated a significant statistical difference between the two groups and for the benefit of the experimental one since the t-calculated (2.378)is higher than the t-tabulated (2.074).This hypothesis is also rejected.

Table 5
Mean,Standard Deviation and T-calculated for the Two Groups in the Achievement Test; (Comprehending Domain)

Groups	No. of sample	Mean	Standard deviation	t-calculated
Experimental	12	3.58	1.187	2.378
Control	12	2.5	1.04	

C- To test the third null hypothesis concerning the applying Domain, Table 6 shows that the t-calculated is (5.556) and it is higher than the tabulated one (2.074).

The mean scores of the experimental group are higher than those of the control groups. Hence, there is a statistical difference between the two groups for the benefit of the experimental one and the third sub hypothesis is rejected.

Table 6
Mean, Standard Deviation and T-calculated for the Tow Groups in the Achievement Test; (Applying Domain)

Groups	No. of sample	Mean	Standard deviation	t-calculated
Experimental	12	4.75	0.433	5.556
Control	12	3.25	0.83	

D- The fourth sub hypothesis concerning the analyzing domain is also rejected since the t-calculated (3.045) is higher than the tabulated one(2.074).The result shown in Table 7 indicates that there is a significant statistical difference between the groups in the achievement test; (analyzing domain) and for the benefit of the experimental group.

Table 7
Mean, Standard Deviation and T-calculated for the Two Groups in the Achievement Test ; (Applying Domain)

Groups	No. of sample	Mean	Standard deviation	t-calculated
Experimental	12	3.833	1.344	3.045
Control	12	2.167	1.344	

Discussion and conclusion:

The results of the current research show a significant statistical difference between students mean scores on the achievement test set for the experimental group (taught by power point presentation) and the control group(taught by traditional method), for the benefit of the former group.

The researchers attribute such a result to the effectiveness of power point presentation in teaching some linguistic skills.

The presentation of a text is in minim parts, each part represents a definit activity and behavioural objective pointing out the main ideas and norms or new vocabularies. This will facilitate memorizing and comprehending the given information, and will also lead to apply and analyze the learned norms.

On the contrary, the traditional method presents the text as a whole regardless of students knowledge of the objective of each activity in the text. The teacher may point out a main point, but the students may not know which one or where is it in the text.

Added to that, when the student watches the text through the data show, this will give him an interest and good inclination toward the subject classes. This will also release him from his colleague (the text book) and feel freedom in learning the text and focus on the main points underlined by the teacher, while in the traditional method, the student is restricted to the prescribed textbook.

Hence, power point is an excellent method of presentation. It facilitates the development and evolution of more interactive practices.

Power point is much more powerful and flexible and alternative activities can be facilitated by its use, limited only by the creativity of the user.

Recommendations :

In the light of the findings mentioned above, the researchers recommend the following :

1. Power point presentation should be used as a method of teaching English for special purposes (ESP).
2. College class-rooms should be provided with the data show as an aid for teaching the subject using power point.
3. Those who teach English for special purposes should practise to use this effective method in their classes.

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Appendix A
Jury of Experts

No.	Academic Status	Name	Specialization
1	Assist. Prof.	Anwar Nafee`	Educational Technology
2	Assist. Prof	Usama Hamed	Measurement
3	Assist. Prof	Wayes Jalood	Methods of teaching English
4	Assist. Prof	Hussien Ali Ahmed	Methods of teaching English
5	Assist. Prof	Musbah Mahmood	Applied Linguistics
6	Assist. Prof	Wa`dallah Basheer	Applied Linguistics
7	Lecturer	Basima Jameel	Educational technology

Appendix B

An Achievement Test in English Texts for Second Year Students.

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Q-1- Answer these questions :

- 1- How did Biology grow in the Eighteenth and Nineteenth centuries ?
- 2- Why do parents make a great effort ?
- 3- What does "backward " refer to ?
- 4- What was of particular importance to the development of psychology ?
- 5- How can we find out a reading age ?

Q-2- Give the Arabic / English Synonyms for these concepts :

- | | |
|-------------------------|----------------------|
| 1- experimental control | 2- social psychology |
| 3- meditation | 4- rote learning |
| 5- retardation | 6- تكيف |
| 7- التغذية الراجعة | 8- اكتساب اللغة |
| 9- الدافعية | 10- الإدراك |

Q-3- Analyze these Sentences :

- 1- The term "understanding may be used to suggest meaning or purpose.
- 2- Today, the area of social psychology is a broad field which overlaps sociology and anthropology.
- 3- We must give other factors due weight.
- 4- Some people have more limited potentials.
- 5- Most children are in contact with only one language.

Q-4- Choose the Correct Preposition from between brackets :

- 1- You can see me Five o clock. (**behind – before**).
- 2- My car is in the garage Repair. (**in –under**)
- 3- I am your opinion. (**against –at**).
- 4- We have been waiting Five o clock. (**since – for**).
- 5- The bus is going the hell. (**up – under**).