Research Paper Education

Students' Attitude Towards the Use of Microsoft Powerpoint Presentation by Lecturers in Class and The Relationship with their Academic Achievement

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ABSTRACT

The present quantitative study aims to find out the relationship between students' attitude toward the use of Microsoft PowerPoint presentation (PPP) by lecturers in class and their academic achievement, by investigating 800 students (450 Art and 350 Science disciplines) through an adapted questionnaire at Koya University, Kurdistan regional government/Iraq. The results revealed a positive students attitude toward the use of PowerPoint. No statistically significant difference between Arts and Science students in terms of their attitude towards PowerPoint presentation was found, and also proved that there was no statistically significant correlation between students' academic achievement and their attitude towards PowerPoint. The results of this study provide information for the policy makers, Koya University, and the researchers who are interested in understanding the factors that affecting students' academic achievement. That can be useful in enhancing students' achievement and the use of IT in Kurdistan Universities in general and Koya University environment in particular.

KEYWORDS Attitude towards PowerPoint, Students' Academic Achievement, Students' disciplines.

INTRODUCTION

PowerPoint presentation (PPP) was developed to improve learning by providing the means to develop presentations that are more structured and interesting to audiences (Amare, 2006). Unfortunately, the system of higher education in Iraq at the current stage is suffering from underdevelopment, which is still working within the ancient rules that do not fit with the nowadays principles of the contemporary education system and theories (Haidari, 2011; Muslim, 2010). Furthermore, the Ministry of Higher Education in Kurdistan regional/ Iraq has actively encouraged lecturers to integrate technology into the curriculum especially the PPP which every lecturer has required using it to improve the quality of teaching and learning process. Even though, the government is trying to improve the educational program, the pedagogical and academic state of the program is not much better today than it was before. Despite employing modern technology such as computers and Projector (LCD) in Iraq and Kurdistan Universities, it would not exceed a means to display the content of the same conventional approach, which leads to the low level of academic achievement and in particularly in recent years (Juma & Ahmad, 2012).

Indeed, the quality of PPP depends mainly on the lecturers. They should have enough knowledge and ability to prepare PPP in terms of not only the physical structure but also the content. The PPP could be turned in to typical teacher-centered instruction if instructors do not encourage student participation by either asking discussion questions or having students participate in activities (Acikalin & Yücel, 2011). Consequently, the experiences and the lecturer's level of knowledge in using the technology means, might affect the students' attitudes towards the use of PPP in class. In recent years, the integration of PPP into classrooms at the Universities has increased significantly, which has impressed many researchers to examine its effect in education. Some of the studies tried to investigate whether PPP improved students' attitudes compared with traditional classroom presentations, while others focused on its effect on the students' academic achievements. For instance, many studies reported a positive attitude toward the use of PPP in class, such as, (Acikalin & Yücel, 2011; Alderschew, 2011; Anh, 2011; Apperson et al., 2006; Frey & Brinbaum, 2002; Susskind, 2008). The current study attempts to examine students' attitude towards PowerPoint and to indicate whether there is a significant difference between science and art students in terms of their attitude towards PPP on one hand and the relationship with their low academic achievement on the other hand. The issue of students' academic achievement has become an important point (Eret et al., 2013); students' achievement is one of the key contributing factors determining the student's success in various subjects and areas (Shukakidze, 2013). Recent studies conducted on the effect of PPP and the traditional lectures on students' academic achievements, showed that the use of PPP in lectures had an influence on student academic achievement in comparison to traditional lectures (Erdemir, 2011; Lai, Tsai & Yu, 2011, Kozub, 2010).

However, user expectations and perceived outcomes of technology are not well understood (Parker,Bianchi, & Cheah, 2008) which means the effectiveness of PowerPoint presentation debate is continuous. To illustrate, recent study have indicated that PowerPoint has negatively affected students' performances and achievements (Khoury & Mattar, 2012). Additionally, Davis (2012) has claimed that the use of technological instruction did not increase student academic achievement. The results were mixed based on the studies above. Hence, the present study attemptes to determine whether the use of PPP by the lecturers has any relation with students' low academic achievements at Koya University.

METHODOLOGY

OBJECTIVES

This study aimed to concentrate on students' attitudes at Koya University regarding the use of PowerPoint by lecturers in class, and the relationship with their academic achievements concerning their disciplines (Art and Science).

RESEARCH QUESTIONS

In this study the following research questions were examined:

RQ1: What are the Science and Art students' attitudes toward PowerPoint?
RQ2: Is there any significant difference between Science and Art students' attitudes toward PowerPoint?
RQ3: Is there a significant relationship between students' attitudes toward PowerPoint and their academic achievement?

RESEARCH DESIGN

This study used a quantitative approach with a survey design. The data collection instrument which was prepared in Kurdish language was adapted from Frey and Brinbaum (2002); in order to examine the undergraduate students' attitudes towards PowerPoint. It consists of 12 items used a Likert scale from 1 (strongly disagree) to 5(strongly agree). After Validity test by specialists and experts numbers of items were deleted and some items were added which become 15 items. The questionnaire was pilot tested on a broad sample (n= 300) at Koya University, and two items were removed because of low corrected item. The reliability for the 13 items was established at .86.

SAMPLE SIZE

The study was conducted at Koya University; the respondents randomly selected from the second and fourth year undergraduate students using the proportional stratified random sampling procedure. They were consisting of 800 participants (450 Art, and 350 Science).

RESEARCH PROCEDUERS AND DATA ANALYSIS

After the distribution of questionnaires; only 681 questionnaires were valid (85.1 %.), including 335 Art field (49.2%) and 346 Science field students (50.8 %). For the data analysis the Descriptive Statistics, Independent-Samples t Test, and Pearson correlation were performed to answer the research questions.

RESULT

RQ1: What are the Science and Art students' attitudes toward PowerPoint? Table 1; shows the mean and the percentages of the responses given by respondents to each statement. As seen in Table 1, 62% of the respondents (Q8, M= 3.62) had positive attitudes toward the use of PPP by lecturers in class. The students' attitude towards PPP was statistically significant (M= 48.53, SD= 8.17); this means that students had positive attitude toward the use of PPP by their lecturers in class.

As shown in Table 1, the majority of respondents (507 respondents = 75% of the total respondents of (675) would like to see PowerPoint in their future classes, because (81%) believed that PPP help them to recall the content during exams (M=4.17) and (67%) of them (M= 3.82) stated that the PowerPoint handouts help them to take better notes during classroom lectures.

Similarly, 68% of them mentioned that PowerPoint hold their attention (M= 3.37), while (59%) believed that lecturers who use PPP are more organized in their presentations (M=3.60). Additionally, (71%) think that PowerPoint slides reinforce what the lecturers presents in classes (M= 3.8) and (53%) of them were motivated to attend classes when PPP are used during the lectures (M= 2.75).

Moreover, 83% of them preferred to provide the opportunity for the suggestions to improve PowerPoint (M= 4.21) such as, seeing the PowerPoint slides before class, as (79%) believed it will help theme to understand the materials and contents of the class (M= 4.11). Likewise, (64%) of the respondents stated that the printed handouts of PowerPoint slides help them to study for exams (M= 3.74). Thus, although the respondents' attitude towards PPP had been positive (69%) they still believe that it is appropriate for the large lecture section (M= 3.85).

Some interesting students' responses towards (Question 5: I prefer bullet-point, text only PowerPoint presentations over presentations with audio, video, graphics) 26% of respondents had disagreed and 38% had stated agreed while 35% were not sure (M= 3.11); the reason for these responses may be due to the lecturers' use of PPP in class which had been reliant on the text only instead of using the audio, video, and graphics with which the respondents were not really familiar.

TABLE – 1
PERCENTAGES OF THE RESPONCES FOR EACH STATEMENTS

	Items	SD %	D %	N %	A %	SA %	M
1.	PowerPoint presentations hold my attention.	48	51	116	283	178	3.37
2.	PPP handouts help me to take better notes during classroom lectures.	35	50	134	241	216	3.82
3.	Handouts printed from PPP help me to study for exams.	35	59	148	237	197	3.74
4.	Lecturers who use PPP are more organized during their presentations.	44	80	151	229	172	3.60
5.	I prefer bullet-point, text only PPP over presentations with audio, video, graphics.	71	108	240	189	68	3.11
6.	Visual images presented in PPP lectures help me to recall content during exams.	23	24	78	241	310	4.17
7.	I am less motivated to attend class when PPP are used during the lecture.	173	183	160	126	69	2.75
8.	I have a positive attitude towards PPP.	45	53	160	271	146	3.62
9.	PowerPoint is appropriate for large lecture section.	27	41	143	261	204	3.85
10.	Being able to see slides before class helps me understand the material and content of the class.	17	31	95	250	283	4.11
11.	I think that the PPP slides reinforce what my lecturer presents in class.	23	37	132	289	195	3.8
12.	I would like to see PowerPoint in a future class.	30	36	103	284	223	3.94
13.	It is better to provide the opportunity for the suggestions to improve PowerPoint	12	21	78	264	301	4.21
14.	Mean						48.53
15.	SD						8.17

RQ2: Is there any significant difference between Science and Art students' attitudes toward PowerPoint? The independent sample t-test was used to determine the differences between the two groups; students' attitudes toward PowerPoint. Table 2, shows that the Art students' attitudes toward the PowerPoint came in a mean score of (M= 48.81, SD = 7.70) and the mean score for Science students was (M= 48.26, SD= 8.61). Although a difference between the two groups' means was observed, the t-test analysis has illustrated that the difference of (t (67) =.870, p= 0.38) was found to be statistically non-significant (p> 0.05). The t-test analysis indicates that the achievement of the Art students was higher compared

to the achievement of the Science students. More specifically, the difference of (t (64) = 3.36, p= 0.00) between the two groups' means, Art students (M=2.92, SD=.96) and Science students (M= 2.69, SD= .80) was statistically significant (p<0.05) in favour of Art students

TABLE – 2
THE t-TEST FOR ATTITUDE TOWARD PPP BETWEEN ART AND SCIENCE

Variable	Group	N	M	SD	T	df	Sig
PPP Attitude	Art	331	48.81	7.70	.870	67	0.38
	Science	344	48.26	8.61			
Achievement	Art	335	2.92	.96	3.36	64	0.00
	Science	346	2.69	.80			

RQ3: Is there a significant relationship between students' attitude toward the use of PowerPoint in class and their achievement? Based on the Pearson correlation test this correlation was not found to be statistically significant, the students' attitude toward the use of PowerPoint scale was not correlated with students' academic achievement (r =.015, p> 0.05); Table 3.

TABLE – 3
CORELATION BETWEEN ACHIEVEMENT AND ATTITUDE TOWARD PPP

Attitudes	n	Achievement	r	p
Attitude toward PPP	675	Level	.015	.695
		Grade	.029	.451

CONCLUSIONS

The purpose of our study was to determine the relationship between students' attitude towards PPP and their academic achievement concerning the students' disciplines. The study found that students' attitude towards PPP was statistically significant. No statistically significant difference between Arts and Science students were found in their attitude towards PPP. There was no statistically significant relationship between attitude towards PPP and achievement. It could be concluded that the low academic achievement might be dependent on the course or subjects, rather than on the methodology employed.

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