

THE EFFECT OF POWERPOINT PREFERENCES OF STUDENTS ON THEIR PERFORMANCE: A Research In Anadolu University

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ABSTRACT

The aim of this study is to research the effect of the preferences of the students concerning PowerPoint presentations in financial accounting courses on their final scores. The data was collected from questionnaires that were applied to 77 students taking Financial Accounting I course in Anadolu University. According to the results of the study; The preference of the students about PowerPoint presentations have no significant effect on their final scores. However when the preferences about PowerPoint presentations are combined with an appropriate study environment, this effect positively increases the final score.

Keywords: PowerPoint; education technology; dual coding theory

INTRODUCTION

The visual and audio multimedia technologies which were improved in parallel with the rapid developments in the information technologies in recent years and could be used in education are named as "education technologies".

The usage of technology in education became considerably popular in recent years (Connor & Wong 2004: 228, Bartsch & Cobern 2003: 77, Acikalin & Duru 2005:1). Nowadays also there are perceptions regarding the education technologies as "necessity" (Thomas 2002: 1). Introduction of technology to the education environments enables to generate effective learning environments through developing learning materials. (Akkoyunlu & Yilmaz 2005: 9). The usage of computers in education (internet, simulations, animations, visual and audio presentations, etc.) ushers a new age in transmitting information and presents education tools which potentially can change some traditional and non-effective educational methods (Asan 2003:153). Technology is an important support element in the development of learning processes of the students; computers are tools which provide technologic support to the development of effective learning and teaching processes (Acikalin & Duru 2005: 1).

The reasons for using education technologies could be supporting the lecturer during the presentation of information, enhancing the success in the lessons, enhancing the permanence of information, improving the interest and motivation of the students for the lessons (Sen 2001:63).

The usage of education technologies, which is based on a well thought-out pedagogical context, positively contributes to the education processes of the students (Boyce 1999:192). As a result of usage of education technologies in the classrooms, the factors affecting the performance of students have increased.

Giving the lessons with PowerPoint presentations provides to present the information to students more effectively, more dynamically and more aesthetically. Furthermore, they make the information readily available to students 24 hours per day. Thus, this new technologies, increase the students' exposure to the information (Weatherly et al 2003 : 464).

Education technologies are effective on the accounting education, like on other education areas. Supporting the courses with computers is significant in order to fall in step with the recent developments in accounting education (Erdogan 2000:117).

The aim of this study is to examine the effect of PowerPoint presentations as a tool of education technology in accounting classrooms on the students' performance and also determine the attitudes of the students for the PowerPoint aided lessons.

POWERPOINT PRESENTATIONS AS A TOOL OF EDUCATION TECHNOLOGY

By the development of education technology the concepts of "computer aided education" and "computer based education" were occurred. Computer aided education is the utilization of computers in activities such as presenting the course contents directly, repeating the courses, solving problems as a learning-teaching tool. (Akçay et al 2003: 1). Nowadays, one of the most widespread tools that is used in the computer aided education is PowerPoint presentations which provide to transmit the course contexts visually to the students (Atkins-Sayre et. al. 1998: 3).

Originally PowerPoint was developed for commercial and business purposes by Microsoft before approximately 20 years. However it has quickly penetrated the scientific and educational circles as well (Szabo & Hastings 2000: 176). Microsoft estimates that 1.25 million PowerPoint presentations take place every hour (Levasseur & Sawyer 2006: 101).

In the traditional education environments, the duty of the students is to adhere the education activities as a passive receiver and memorize the content of the lesson (Surmeli 2007: 30). PowerPoint presentations create more powerful sensory alerts when compared with the traditional education materials (blackboard, overhead projections, etc.) While giving the lessons with PowerPoint presentations, the content of the lesson stays the same, but the form of transmitting the lesson to the student changes. The PowerPoint presentations which are prepared for lessons have the advantages such as having strong colors, gradual building of text, simple animation of diagrams, facilities for simple editing and updating (Lowry 1999:19). Thus it can be mentioned that the PowerPoint presentations provide significant time and force savings.

The usage of PowerPoint presentations would enhance internet based distance learning practices. The popularity of distance education has increased especially in the area of adult education such as bachelor's and post graduate degrees (Karatas 2008). As the popularity of the PowerPoint presentations increase, the studies concerning the pedagogical results of the usage of this tool increase. The advantages of giving lessons with the PowerPoint presentations could be generalized as follows in the light of the academic studies till now:⁸

⁸ It should be remembered that this is only a generalization and in some of he studies the converse of these advantaged could be met.

- PowerPoint contributes to properly forming the course content and giving lesson (Sugahara & Boland 2006: 392, Hlynka & Mason 1998: 47, Nouri & Shahid 2005: 55).
- It simplifies taking notes during the lesson⁹ (Cook 1998: 5, James et al 2006: 386)
- Students think that following the lesson from the screen is funny and interesting, so the PowerPoint presentations positively affect students (Parks 1999: 207, Nouri & Shahid 2005: 58, James vd 2006: 391, Atkins-Sayre et al 2006).
- PowerPoint motivates the students for attendance to the lessons (James vd 2006: 387, Sugahara & Boland 2006: 396).
- PowerPoint encourages students for learning (Harrison 2006: 10).

There has been a lack of consensus in the studies concerning "the effect of PowerPoint presentations on the student performance". Till now, the researches about this topic reached different results.

The Relation of Dual Coding Theory and PowerPoint

The theoretical framework of the effect of education technology tools, which have high visual effects like PowerPoint, on learning is "Dual Coding Theory" generated by Allan Paivio in 1986.

Dual Coding Theory is based on the assumption that the same information coding (presenting) in two different but supporting each other forms enhances efficiency in learning. Paivio began his studies concerning Dual Coding Theory in learning process in 1960s and the theory was developed in 1986. After 1980s, the significance of the theory was increased by the development of education technology practices (Aldag & Sezgin 2003: 125).

Paivio's Dual Coding Theory could theoretically explain the effect of PowerPoint in learning when it is thought with the information coding theory.

According to the information coding theory, the process of learning is as follows: (Tay 2004: 3)

- Information is received from external sources by senses;
- It transforms into specific forms by electing in sensory register;
- It is coded in short-term memory;
- The information in the long term memory goes back to the short term memory and integrates with the new information, becomes coded with this method and has a new meaning;
- The coded information storages in the long term memory.

There are three types of memory in the information coding process: sensory registers, short term memory and long term memory. The stability of the learned information highly depends on memory and memory and the learning processes are the processes that complete each other (Korkmaz & Mahiroglu 2007: 98).Sensory registers keep the sensory signals (Korkmaz ve Mahiroglu 2007: 97). Sensory registers hold the information for a short time period until they are recorded on the short time memory or lost (Nouri ve Shahid 2005: 56)

⁹ Sugahara ve Boland 2006 reached the reverse result in their study.

Information stays in the sensory registers less than half of a second; however the capacity of the sensory registers is unlimited. Sensory registers have a critical significance for the forthcoming stages of information coding process. If the information, which has reached to the sensory registers, does not rapidly coded, it disappears. Among the information which has reached to the sensory registers, only "attractive" ones are sent to the short time memory. The function of the short time memory is to storage the information in the long time memory and performing mental efforts for remembering the information through bringing it back from the long time memory. The capacity of the short time memory is very limited. Also the information that has reached to the short time memory could be kept maximum 20 seconds unless it has been repeated or sent to the long time memory by been coded. The information that has been sent from the short time memory is kept in the long time memory. The capacity of the long time memory is unlimited and the information can stay there forever(Korkmaz & Mahiroglu 2007: 95). The long time memory is like a library which includes information that is kept and available for usage when needed.

According to Paivio, memory has a special structure that can synchronously code the linguistic (written and verbal) forms and non verbal objects and events. In the sensory registers, there are verbal and non verbal units (Aldag & Sezgin 2003: 125). For example, the acoustic and written form of the word "waterfall" is recorded on the verbal system; whereas "the image and sound of waterfall" are recorded on the non verbal (imagery) system. Thus the perceptions about language are coded on the verbal system and effects the verbal system, non verbal perceptions are coded on the imagery system and effects the imagery system (Aldag 2005 : 33). The duty of the imagery system is to examine the visual, acoustic, tactile objects, events and situations that are not related with linguistic. The duties of verbal and imagery system differ from each other. The verbal system deals with solving crosswords, whereas the imagery system deals with solving puzzles (Paivio 2006:3). The most important factor, while transmitting the information from sensory registers to the short time memory, is attractiveness of the information (Akkoyunlu & Yilmaz 2005: 13) If the information is not attractive, it would be lost in the sensory register stage and can not be passed to the other stages. As Paivio stated in the Dual Coding Theory, the attractiveness of the information can be increased by imagery systems. Information is coded in two independent channels. One of these channels codes the verbal information such as text and expressions, the other one codes non verbal information such as visual presentation or voice. If the information that is perceived by senses is coded in these two channels together, remembering them would be easier than the information that is coded in one channel (Akkoyunlu & Yilmaz 2005: 11).

According to the several researches concerning Dual Coding Theory, individuals learn more effectively with the combination of verbal and visual information (Levasseur & Sawyer 2006: 105). Presentation of information to the students by education technologies that evokes the non verbal systems such as PowerPoint presentations, contributes to the process of transmitting the information to short term memory from sensory registers and then to long term memory after coding them. Through the usage of PowerPoint, during the lessons, the words or the concepts that should be emphasized could be also visually presented and the attractiveness of the information increases.

At the same time the cognitive load decreases that is needed to fulfill a meaning to the words that are heart. The importance of cognitive load arises in short time memory. The slights of the PowerPoint presentations become more attractive if they have the following characteristics (Albon 2005:12, James vd. 2006: 390):

- Quite presentation;
- 24–38 puntos;
- Sans-serif font (Arial) instead of Serif font (Times New Roman)
- An apparent background color;
- Graphics ;
- Web site link, if possible.

USAGE OF EDUCATION TECHNOLOGIES IN ACCOUNTING EDUCATION

Accounting education is a education process that could be succeeded with not only informing students about accounting, but also teaching the usage of these information and making them applicable (Demirkan 2001: 54). The accounting science includes several recent developments and requires transmission of them to the students rapidly (Bilginer 1999: 117, Karacaer & Tas 2004: 7). The causes which directly or indirectly force accounting education to develop could be named as; scientific, legal, social and economic changes, the development of the educational tools and methods, and the changes due to the information age (Sayın & Yeginboy 2001: 72). In the frame of this change and development process the accounting education programs should be redesigned in order to provide permanence and creativity. The aim of the accounting education is based on this approach (Sakrak 2001: 115-119). In the accounting education, the left side of the human brain which includes the characteristics such as logic, calculation and evaluation is mostly used. However this process could become more effective by supporting with the education technology tools which can evoke the right side of the brain that carries the characteristics such as imagery perceptions (Kaya & Karagul 2001: 154). It can be possible to enhance the presentation and expression quality of accounting courses by benefiting from PowerPoint presentations through sufficient technical substructures in universities. Usage of new education technologies in accounting education would result more effective learning of the students. (Kızıl 2003: 17)

LITERATURE REVIEW

The usage of PowerPoint presentations in the classrooms has attracted many researches from different scientific areas and from several countries. There is considerable research in the literature concerning the effects of the usage of PowerPoint. Some of these studies tried to measure the effect of power point presentations on the attitudes or behaviors of the students, while some of them focused on the success differentials between the lessons given via PowerPoint presentations and via black board. Furthermore some of the researchers studied on the effect of PowerPoint presentations on the short term memory.

According to the researches which concluded that the students are in a positive attitude towards PowerPoint presentations, (Atkins-Sayre et al 1998, Daniels 1999, Davis 1998, Luna & Mc Kenzie 1997, Sammons 1997, Pippert & Moore 1999, Susskind 2005: 208, Butler & Mautz 1996, Szabo & Hastings 2000, Nowaczyk et al 1998 , McConnell 1996, Bartsch & Cobern 2003, Evan 1998, Atkins- Sayre et al 1998, Nouri & Shahid 2005) the positive attitudes of the students can be summarized as; students' preferences of slights other than blackboard, their thought that slights contributes to the lesson, motivation for attendance, their request for the continuation of slight presentations, more effective note taking and more effective and interesting learning.

Against these positive attitudes, in their studies, Nowaczyk et al 1998, Pippert & Moore 1999 , Parks 1999, Amare 2006 concluded to the negative attitudes of the students such as; decreasing the lecturer-student relation and make the students sleepy.

After a detailed literature review, we concluded that there is no consensus in the literature about the effect of powerpoint presentations on the academic performance of the students. The studies about this topic generated dissimilar results. For example, the research of Bartsch & Cobern 2003, in Texas University covering 35 students taking Social Psychology course, concluded that the student performance of the lessons presented by PowerPoint presentations are 10% less than the student performance of the lessons presented on the blackboard.

Evan 1998, concluded a reverse result of Bartsch & Cobern. Harknett & Cobane 1997 found no significant difference between the student performance of the lessons presented via PowerPoint and via blackboard. Amare 2006, concluded that the student performance of the lessons presented via blackboard are higher than the student performance of the lessons presented via PowerPoint presentations. The result of the second section of the study of Szabo & Hastings 2000 is attractive. In the research covering the student groups in the Nottingham Trent University, the students were divided into three groups, the lesson was given via blackboard to the first group, via PowerPoint presentations to the second group, via PowerPoint presentations and the slight were given to the students of the third group. The average final score of the groups were realized as respectively: 49, 78, and 75.

Butler & Mautz 1996 and Nouri & Shahid 2005, reached to the positive conclusion of PowerPoint presentations on the short term memory. The usage of PowerPoint presentations and any other education technology in the accounting lessons were researched in Jensen & Sandlin 1992, Boyce 1999, Butler & Mautz 1996, Nouri & Shahid 2005 and Sugahara & Boland 2006.

Jensen & Sandlin 1992; researched the effect of computer aided education technologies on the student performance in the accounting classrooms. According to their results, the student performance of the lessons in which the multi media materials were used is higher.

Boyce 1999, examined the education technologies which can be used in accounting education and mentioned that these technologies positively contributes to the learning motivations and academic performances of the students.

Butler & Mautz 1996 concluded that the accounting courses given by PowerPoint presentations develop the short term memory. Also they mentioned that the students have a positive attitude towards the PowerPoint presentations and the lecturer in the accounting classrooms. Nouri & Shahid 2005, largely effected by the study of Butler & Mautz and followed the same method in their study.

Managerial accounting course were given to two groups by PowerPoint and on the blackboard. According to the results, PowerPoint presentations develop positive attitude towards the lecturer and the lesson. Furthermore, they concluded that powerpoint presentations develop the short term memory, however it does not make any effect on the long term memory.

Sugahara & Boland 2006 performed a research in Hiroshima University covering 132 students taking accounting courses. They focused on the relation between the usage of PowerPoint presentations and student performance. They concluded that the PowerPoint presentations have a negative effect on student performance in the accounting courses. Behind the studies of foreign literature, there are also several studies in Turkey concerning the accounting education and PowerPoint relationship.

Sayin et al 2005, in their study covering Dokuz Eylul University Accounting and Finance lecturers, they concluded that 36,4% of the lecturers partially benefit from the education technology tools, 27,3% of the lecturers fully benefit from them. Furthermore 40,9 % of the lecturers mentioned that education technology tools simplify teaching and learning. According to the results of the study of Hatunoglu 2006 covering 951 accounting students in totally 30 universities, 20,7% of the lecturers benefit from PowerPoint in the accounting courses, 44,7% of them partially benefit from PowerPoint in the accounting courses. 34,6% of them do not benefit from PowerPoint. 91 % of the students think that the usage of PowerPoint in accounting courses contributes to learning.

RESEARCH METHODOLOGY

The researches which investigate the effect of lectures presented via PowerPoint presentation on students' performance have reached different results, as mentioned previously. When these studies are examined, we conclude that they were conducted in two different ways generally. Researchers in the first group have arranged students in the groups. Then students in the first group were given the lectures via PowerPoint, while student in the second group were given the lectures using whiteboard and the relation between these groups was measured by holding examinations. On the other hand, researchers in the second group have determined students' opinions and preferences concerning lectures presented with PowerPoint by requesting them a questionnaire and have measured the effect of these preferences on final examination scores. A lot of limitations were observed in the studies performed by the first group researchers.

For example, if different topics were taught to the students in the different groups, the difficulty level of the topics would be different, if different examination questions were asked to the students in the different groups, the difficulty level of the question would be different, if the achievement and intelligence level of the students in the group were higher than the students' in the other group, if the lectures given the students in the different groups were given by the different lecturer, the results would be different because of the differences between lecturer's teaching style.

Hypotheses Development

In this study, we chose the method of the second group researchers' method by taking into account all limitation of the first group researchers' method. The effect of PowerPoint presentation on students success have been tried to be determined by students' preferences towards PowerPoint. However there are some limitations in this study as all empirical studies and they will be mentioned next section. The hypothesis in our study is as follows:

Hypothesis: Students' preferences for PowerPoint have no significant effect on their final examination scores.

Data Collection

The data used in this study's model was collected from a questionnaire administrated to 77 students which took Financial Accounting I lesson in autumn session at Faculty of Business Administration of Anadolu University. These students composed our study's sample and they took lectures with web-based in addition to Professor Seval Selimoglu's PowerPoint presentations. The lectures were presented 14 weeks and 3 x 45 minutes every week. Sometimes the instructor has used the whiteboard to emphasize subjects considered as necessary by her. The student could access to PowerPoint presentations used in the lectures on the Internet.

80-85 slides were presented every lecture and voices, slide transitions and animations were used in the slides. Moreover, instructor talked with students about lectures in 3 hours every week. In addition to the questionnaire, midterm and final examination scores of students and attendance list of students are among the data used in the study.

Questionnaire

The questionnaire used for data collection has comprised two pages and four sections. The subjects related with section are as follows:

- First section: Student's personal information
- Second section: Opinions concerning to accounting
- Third section: Studying environment for final examination of Financial Accounting I lesson
- Fourth section: Opinions about using PowerPoint in Financial Accounting I lesson

Questionnaire was not anonymous, students completed it by recording their name and student ID number; because the final examination scores must be matching to conclude the study. For the second, third and fourth section of questionnaire 5-point Likert scale was used.

The reliability of each scale existed in questionnaire was analyzed internally. The Cronbach's alpha value for each scale has been presented in Table 1. All scales have internal consistency because the Cronbach's alpha values for scales are close to 1.

Cronbach's Alpha Values

	Alpha Value
Second Section	0,877
Third Section	0,724
Fourth Section	0,833

Analysis Methodologies

To conclude our study, a regression analysis was conducted on the data obtained from the questionnaire and other methods. In our study the regression model which was developed by Sugahara and Boland (2006) was used by adopting the student profile in Turkey. The regression model used in our study is as follows:

$$FIEXM = \alpha + \beta_1 ATTEND + \beta_2 GEN + \beta_3 TERM + \beta_4 ACQ + \beta_5 SEVN + \beta_6 APR + \beta_7 PPTPR + \beta_8 SEVN * PPTPR + \beta_9 ATTEND * PPTPR + \beta_{10} TERM * PPTPR + \epsilon_i$$

FIEXM=Final examination scores of students

ATTEND=Percentage of student's attendance

GEN=Gender of students

TERM=Mid-term examination scores of students

ACQ=Information of whether the student's repeat the Financial Accounting I lesson or not because they stayed down

SEVN=Student's studying environment for final examination of Financial Accounting I lesson

APR=Student's perspective or preferences for accounting

PPTPR=Student's perspective or preferences for having lessons with PowerPoint presentations

The student's final examination scores were the dependent variable of the model; because it was a cumulative measure of student's success. Student's percentage of attendance, gender, mid-term examination score, whether they repeat the Financial Accounting I lesson or not, studying environment for examination, opinions about accounting and preferences for PowerPoint presentations were independent variables in the model.

Student's PowerPoint preferences were target independent variable of this model. However, beside the target variable other independent variables which could influence the dependent variable (final examination score) have been included in the model by taking into account the studies in the literature. Moreover when the general model was formed the interaction of independent variables which were interrelated has been taking into consideration beside the independent variable. (Interaction of attendance with preference for PowerPoint, interaction of attendance with preference for PowerPoint, interaction of mid-term examination scores with preference for PowerPoint)

RESULTS OF THE STUDY

Descriptive Statistics

Table: 1 presents the student's demographic characteristics. Table 2 illustrates the data concerning mid-term and final examination scores of Financial Accounting I lesson.

Table: 1
Demographic Data

	Female	Male	Total
Number of student's	22 (%28,2)	55(%70,5)	77
Age (mean)	20,9	20,8	
Number of students repeating the lesson	3	16	19

Table: 2
Examination Scores- General

	MID-TERM SCORE	FINAL SCORE
Minimum score	20	24
Maximum score	90	89
Mean	54,52	51,32
Standard deviation	14,79	14,49

Results of Regression Analysis

When the regression analysis was applied the model presented above, we could not reach any significant results; so the experiment on different version of the model has been investigated.

The model which has the lowest Residual Sum of Square (10825,37), the highest probability (-292,8764), the lowest Akaike Information Criteria (7,916703), the lowest Schwarz Information Criteria (8,040303) the highest Adjusted R² (0,28) has been chosen among different version of the model.

**Table: 3
Regression Results**

Variable	Beta Coefficient	Standard Error	t Statistic	P Value
Intercept	21,33160	6,394531	3,33591	0,001
SENV*PPTI	0,709336	0,329740	2,151194	0,034
TERM	0,453004	0,096551	4,691862	0,000
ACQ	-9,145322	3,370286	-2,71351	0,008

* Significance at the 0,01 level

** Significance at the 0,05 level.

The chosen model f-statistic is significant at (10,32810) 0,01 level. (p= 0,000) Table 3 shows the data related the most significant model. The results indicate that student's preferences for PowerPoint presentations do not have a significant effect solely on their final examination score.

Accordingly, study's hypothesis which is "Students' preferences for PowerPoint have no significant effect on their examination scores" has been accepted. However as can be followed from the regression analysis results in table 3, when the PowerPoint preferences of students were included the model with the studying environment; then statistical significant results have been obtained.

In other words, if students have enough time to study, adequate studying condition, lecture materials (PowerPoint presentations used in the lectures) and positive attitude towards PowerPoint presentation, these attitudes of students have positive and significant effect on their final examination scores. Another significant effect is the students' mid-term examination scores. If the students take the lesson again, it negatively affects their examination scores.

Student's Attitudes Towards PowerPoint Presentation

The questionnaire administrated to students included questions related to determine their attitudes towards lectures presented via PowerPoint. Students were given 4 positive and 5 negative attitude items related to comparison of lectures assisted with PowerPoint and lectures assisted with whiteboard and then students were asked whether they agree or not.

**Table: 4
Student's Attitudes**

Attitude (Positive)	Frequency	%
Learning is more entertaining	36	47
Easy to understand	30	39
Easy to follow	26	34
Easy to dialogue	18	23
Attitude (Negative)		
Faster Presentation	52	68
Note taking is more difficult	50	65
Less ambitious to attend	32	42
More talking	31	40
Less motivation	25	32

Table: 4 displays the results. 47% of students have mentioned that the lectures presented via PowerPoint presentations were more interesting than the lectures presented via whiteboard, 39% of students have denoted that the lectures via PowerPoint presentations were easier to understand than the lectures via whiteboard and 34% of students have believed that the lectures via PowerPoint were easier to follow the instructor than the lectures presented via whiteboard. Only 23% of students' have thought that the lectures presented via PowerPoint were easier to get across with the lecturer than lectures presented via whiteboard.

In other words, substantial portion of students' have difficulty to get across with the lecturer in the lectures via PowerPoint presentations. 68% students' have denoted that the subject recited quicker in the lectures via PowerPoint presentations than the lectures via whiteboard, 65% of student's have mentioned that note taking were more difficult in the lectures presented via PowerPoint than the lectures presented with whiteboard because of the darkness and 42% of students' have denoted that if the presentation could be obtainable they were less ambitious to attend the lectures via PowerPoint presentations, 40% of respondents' have denoted that students tend to talk each other in the lectures via PowerPoint than the lectures via whiteboard and 32% of respondents' have believed that the lectures via PowerPoint declined the students' motivation compared with the lectures via whiteboard.

CONCLUSION

The technological developments have a significant impact on the education area as well as other areas. Teaching methods, especially used in higher education undergo a change from the traditional teaching methods and are mainly benefited from computers. Lectures presented via PowerPoint presentations attract students because they provide them a different atmosphere. On the other hand, they give some advantages to lecturer as saving or updating the lecture materials. At the same time teaching with PowerPoint presentations enforce the learning effectiveness by stimulating student's imagery systems. There are a lot of studies in the literature concerning effectiveness of PowerPoint presentations and relating to various disciplines and using various methodologies. These studies have indicated very different results. When the results of this study was evaluated, a significant impact could not been found concerning the effect of the student's preferences for PowerPoint presentations in accounting lesson on final examination scores. However various relations were examined by developing the model used in the study and when the preferences for PowerPoint presentations analyzed with the studying environment, the results have indicated that this relation has an increasing effect on the final examination scores. In other words, positive preferences of students who access to slides and have enough studying environment effect the final examination score positively. Some limiting factors exist in this study as all empirical studies. First of all, the sample was only one class and one lecturer. The principal cause of this is to prevent the effects of differences as lecturer's teaching style and student success to analysis. However, when the general model's statistical fail is thought, the results which would be achieved by getting the analysis of questionnaire administrated in different classes remain as a question mark for the authors. The other limiting factor is student's monotony consisting answering the questionnaire, as in all questionnaire study. However, this effect was tried to prevent by include some reverse questions among questionnaire question. On the other hand R^2 value in the regression model is displayed considerably low level, 0,28. However, it must be emphasized that the model is the most reliably model among the models examined within the framework of general model.

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