The Effect of Different Presentation Patterns of Video Casting in Developing E-Books Design, Production Skills and Academic achievement motivation

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Abstract

T *he aim of this research was to investigate the effect of Presentation patterns of video casting in developing the skills of designing and producing e-books and academic achievement motivation during the spring of 2012. And a total of 75 students were divided into three groups, each group was subjected to a different Presentation pattern of video casting, the first group used for alternative pattern that gave students an explanation of skills through vodcasts rather than the teacher explained in the lecture. The second group was the supplementary pattern supported by using vodcasts for the demonstration which began with teacher face to face during the lecture. The third group was the innovative pattern which offered creative ideas represented the application of these skills. The results showed statistically significant differences between the mean scores in three groups, the innovative pattern were less equal groups. The results reflected that all the groups were highly motivated for academic achievement after being subjected to the three different patterns. And that was the best of all, the alternative pattern group. The study recommended wider use of video casting for improving the learning of students in different courses and diversity patterns submitted to meet the needs of learners.*

Introduction

The applications of web 2.0 have affected the elements of the educational system in many ways. These applications have contributed in supporting self–learning, enriching the content of the educational process, changing the role of the educational

institution, the teacher and the learner, and varied methods and forms of provision of educational content. Video casting is a web 2.0 application. Video casting is a term that refers to the process of distributing videos over the Internet and accesses the content via RSS site feeds that enable beneficiaries to participate in the TV channel via their computer or a mobile phone, or modern video players (Bilbao, et al, 2009). Support any technology for learning depends on the possibilities of this technology and method that employs it. Hence it is not enough to rely solely on video casting capabilities to support learning and should be employed with different patterns to meet the needs of learners to achieve more positive results.

Video casting

According to Schnackenberg (2009) Video casting provides support for learners who learn self-learning, and helps them to acquire various skills by watching the steps perform these skills and simulation. The value of video casting as an instructional tool for those involved in the teaching software use. Video casting improves learner efficiency through reduced information redundancy and a less abstract representation of the steps needed for effective software operation. It encourages a more flexible pattern to learning, offers a new element of learner independence and control, and improves student motivation for their learning. (Mount & Chambers, 2008).

This technology can also be an essential tool in helping students acquiring new skills and improving their academic achievement. (Cruz & Carvalho, 2007; Pena, 2011; Marencik, 2012).Video casting technology is characterized by a combination of sound and images which enhances the learner experiences according to multimedia learning theory, which indicates that animations that contain visual and audio elements provide a more effective learning experience (Gkatzidou & Pearson, 2007; Sugar & Luterbach, 2010). Moreover, This technology allows the possibility to download vodcasts automatically through RSS site feeds, and re watch them several times, and also feature this technology easily subscribe to the sites offered by (Donaldson & Piezon, 2007), in addition to the

flexibility offered by display lessons anywhere and anytime through computers or IPod devices, or mobile phones (Rocha, 2011 & Coutinho). Add to its ease of storage lessons, and the possibility of sharing on a large scale, and easily produced without the need for technical expertise or expensive material (Meng, 2005; Gale & Kung, 2009).

Rethlefsen et al (2009) noted to other advantages of video casting technology; it is a way to connect the compressed files that contain vodcasts and represents a good media to transfer information, technical feature video casting also by high quality, small file size compared to regular video files (Tanaka, 2010).

In addition, new learning scenarios can be applied, for example, the exchange of annotations among students or between students and teacher .This has been mentioned video casting technology increases educated students ' self-esteem, and respect for their peers, develop critical thinking abilities and creativity have, especially if they participated themselves in the design, production (Haines & Van Amburgh, 2010). Boggs, Bolliger & Supanakorn (2010) ensured also that video casting has a significant impact on the development of learners ' motivation to learn.

RSS

Associated video casting RSS service, RSS is short for Really Simple Syndication ' or ' Rich Site Summary, and this service is available through most web sites which notify subscribers of recent content when new items are added. In other words, this service informs the user in case new vodcasts are added to the Video casting channel. It is a web file which gathers information by sorting them out under various subjects on a webpage. Information is then sent to the subscribers who can submit requests to seek new items tackling certain subjects. The service requires a simple program such as a reader or aggregators. The program will regularly check the content of the video casting channel for recent added items to notify the subscribers who can in turn proceed directly to watch and download these items on the video casting channel (Cochrane, 2007).

RSS Features with a set of properties such as a global icon and a selection of other indicators from which the learner recognizes that RSS is available at the location, RSS is an XML format for easy distribution of content Online, plus all programs that read RSS compatible with various operating systems (Duffy & Bruns, 2006). It also protects learners' privacy as they can subscribe to newsletters and other services without giving a personal e-mail address. This adds to the learner's time which was spent in browsing to see what's new (Quentin, 2007).

Use RSS for several benefits to the educational process, where peers exchange a specific feed lists subject, also used to deliver a rich, active and social learning experience which achieved a high degree of personalization for the learner. It also provides an opportunity to cast a quick look at the updated content and what the learner needs to learn now and defers the rest for another time (Lee et al, 2008).

Presentation Patterns of video casting for learners:

Varied Presentation patterns of video casting technology for learners, it can be used in basic explanation of practical lessons for training on the skills as a substitute for the teacher in classroom. It can also be used in reviews by quizzes, as a means of self-evaluation for the learner, it expands learners ' knowledge and allow them to collaborate and participate in obtaining information, (Bilbao, et al, 2009). In addition to potential use of innovative ideas to practical application not included in the teacher's explanation in the classroom encourages students to Excel and open new horizons for learning and experimentation, video casting technology improves creative skills and critical thinking skills of students (Yamamoto, 2011).

Pearson & Gkatzidou (2007) were found that 85% of students interested in video casting technology as a basic form of providing educational material that supports self learning. In addition to use in revision to strengthen what they learned in lectures, and prepare well for the exam. it helps them focus on what they missed learning during the lecture thus represents a supplement to the lecture, and Marencik (2011) confirmed that

Students turn in reviews that precede the quizzes and final exam to use video casting technology that helps them to achieve high results. Tanka (2010) found video casting technology achieves the flexibility of learning for students, access to educational material and learning anywhere, and used as a reference for the future, although face-to-face practical training is preferred but the video casting technology Considered a good alternative to skills training in case of difficulty offer face-to-face training or insufficient, and this means video casting technology to yield positive results If used as a substitute for practical training or complementary if insufficient practice time.

Saucier said et al (2009) showed that video casting technology proved to be ideal in the self-evaluation of student assignments, which is a valuable reference for them, in which they complete the self-assessment of the performance of practical skills, so it is a complement to what they have learned in the classroom.

Rationale for the study

The main objective of this research is to investigate any Presentation pattern of video casting best in helping students to develop their skills in designing and producing e- books, and academic achievement motivation. Designing and producing e-books skills are taught within a programmed education course in the Master's program of Educational Technology.

Methodology

Presentation Patterns of video casting

Video casting is presented in this research three different patterns are alternative pattern, supplement pattern, and innovative pattern. In pattern is an alternative, students learned all skills online through video casting technology, The teacher received student comments and answered electronically through Video casting technology, the teacher may be required based on electronic student comments Work additional detailed vodcasts of some of the skills which the students felt they need to tailor its.

Either supplementary pattern, students attended lectures and technical demonstrations conducted face-to-face by the teacher, and discussed what they needed to understand face-to-face. Then using a video casting as an important complement to review and memorize information or repeat display of skill to facilitate What they missed or difficult for them to understand, while students learned in an innovative pattern by providing technical video casting, creative ideas they represent applying skills They learned through theoretical lectures and demonstrations in the class. The teacher in all patterns provided Evaluation e-books designed by the students, and their performance of assignments face to face once every two weeks.

Participants

Total students participating in this study were 75. They are taught in the second year of the master of Educational Technology, and enrolled in this type of education students who have completed their university education, and received a diploma in education as well as studying educational courses. At the end of the masters are preparing Thesis on topic related Educational Technology, this sample of adult females over the age of 23 years studying programmed education course, And research applied in the period from January to June 2012. The students were divided into three groups, the first group consisting of 24 students examined the alternative pattern which is taught all the skills through video casting electronically And the teacher only to evaluate their work and their performance of assignments, or discussing what they need to understand every other week face to face, the second group consists of 25 students studying the skills of designing and producing e-books in supplementary pattern which attended theoretical lectures for these skills and offered demonstrations by the teacher face to face, And then using the video casting as a complement to any review and memorizing information or repeating display of skill to facilitate what they missed or difficult for them to understand, While a third group of 26 students studying innovative pattern which provided them with creative ideas that represented the application of skills learned in the classroom, and the same

teacher taught in all groups, and all groups included students GPA ranged from 3.5 to 5.

Course overview

Students study the programmed education course in the second year of the master's Educational Technology by three credit hours per week for 14 weeks, and there were no pre-requisites for this course, Students studying strategies, procedures, and principles of individualized learning. Besides, the principles of programmed education. Moreover, throughout this course, students are expected to train on e-books design and production skills. It includes a theoretical and practical study.

For the assignments of course, students must design 3 e-books using different programs, two freeware, and In Design software over the course, and the design and development of these e-books according to specific criteria, educational and technical specified by the teacher. The teacher informed students these criteria at the beginning of course, and the grades earned by students in these projects are about 30% of the total degrees, of course, A passing grade (C) was 70%, a C+ grade, 75%, a B grade 80%, a B+ grade 85%, an A grade 90%, and an A+ grade 95%. Class activities included brainstorming, discussion, and teamwork projects. For assessment, 45% of the project score was allocated to educational criteria, 45% to technical criteria, and 10% to creative of idea and design.

Research questions:

The effectiveness of video casting in improving the educational process was substantiated by previous research; therefore, it has become evidently vital to analyze the various conditions for incorporating video casting to determine which factors can optimize learning. Thus, this research aims at investigating the effect of different presentation patterns of video casting in developing e-books production and design skills and academic achievement motivation among students master educational technology. So, the main question was proposed to be answered: What is the effect of pattern of video casting on developing e-books design and production skills, and academic

achievement motivation? This Main question was analyzed into the following sub-questions:

- What is the suggested design to video casting clips for developing students' E-books design and production skills according to instructional design models?
- Are there any effects of pattern of video casting technology on developing the cognitive aspects of E-books design and production skills?
- Are there any effects of pattern of video casting technology on developing performance aspects of E-books design and production skills?
- Are there any effects of pattern of video casting technology on developing students' academic achievement motivation?

Research and hypotheses:

Hypothesis **(1):** There is no a significant difference between the three means of the experimental groups on the academic achievement test attributed to difference in patterns of video casting.

Hypothesis **(2):** There is no a significant difference between the three means of the experimental groups in the post-application of evaluation product checklist attributed to difference in patterns of video casting.

Hypothesis **(3):** There is no a significant difference between the three means of the experimental groups on Academic Achievement Motivation scale attributed to difference in patterns of video casting.

Developing vodcasts clips according to Dick & Carry Model.

An instructional design was created to guide the process of planning for, developing, and publishing instructional video on YouTube. This model was chosen because it represents an integrated system concerned with the interrelationships between its parts and do not look for each component in isolation from each other.

- Identifying Instructional Goal: developing the skills of designing and producing e-books of the students' mastery Educational technology.
- Conducting Instructional Analysis: Identifying what a learner must recall and identify what the learner must be able to do to perform a particular task.
- Analyzing Learners and Contexts: Identifying the general characteristics of the target audience, including prior skills, prior experience, and basic demographics; identify characteristics directly related to the skill to be taught; and perform analysis of the performance and learning settings.
- Writing Performance Objectives: Objectives consisted of a description of the behavior, the condition and criteria. The component of an adjective that describes the criteria will be used to assess the learner's performance.
- Developing Assessment Instruments: design and construction an evaluation checklist for assessing the final projects that demonstrate proficiency learners for design and production skills e-books, as well as academic achievement test, in addition to select appropriate academic achievement motivation scale.
- Developing Instructional Strategy: Pre-instructional activities, content presentation patterns, methods of learner's participation, and assessment tools. Followed strategy based on the attraction of learners' attention and arouses their motivation to learning through video casting clips, as well as cooperative learning strategy: where learners were divided into small groups and each group was required to design an e-book as an interactive project. This was a mutual positive interaction where every learner felt it is responsible to learn and teach others to achieve common objectives, and the completion of the project, and the role of each learner was recorded in the project, on completion, learners these projects used to video casting clips. Also, students used brainstorming to generate the greatest number of ideas for the design of the e-book and

choosing the theme, content and organization, The process of evaluating these elements led to production and modification, the idea was put into implementation through the development of a project plan, they discussed elements of both goals, tasks, activity and knowledge sources And potential difficulties, and all they needed.

- Developing and Selecting Instructional Materials: technical sections of video casting clips were designed in accordance with the standards related to file size for easy uploading, and also Duration of the show, so as not to be too long, distract the learner always bored So as not to distract the learners and make them feel bareboat suitable to focus on skill and its details, as well as technical standards relating to the quality of sound and picture and synchronizing them Together and other technical standards essential to the success of the design of video casting technology clips.
- Design and Conducting Formative Evaluation of Instruction: researchers identified areas of the instructional materials that needed improvement. They used the formative feedback to modify the audio volume, clarify text formatting and other aspects of the video casting.
- Conducting formative evaluation of the vodcasts, revise Instruction: Through the piloting of vodcasts and assessment tools to determine if any modifications were warranted.
- Designing and Conducting Summative Evaluation: assessment tools were applied after its design to identify to what extent the objectives were achieved, this will be clarified through discussion search results.

Research Tools:

The research made use of the following tools:

- *An achievement test:* measured the cognitive aspects for E-books design and production skills. It consisted of 20 multiple choice questions. First, the test was designed according to test specifications, and then it was submitted

to university professors to check validity. The test was piloted on the sample to calculate the reliability and some items were modified to obtain the test final form. The total mark of the exam was 20.

- *A Product evaluation checklist:* measured students' performance of the skills of designing and producing e-books. The checklist comprised a set of rubrics encompassing various aspects of students' performance. In case a rubric was met, a student will get the full mark; on the other hand a student would not receive any marks if her performance did not meet the identified rubric. To check the checklist validity, it was submitted to university professors. Reliability was calculated, it was 0.87. The total mark of the Product evaluation checklist was 40.

- *Academic achievement motivation scale:*The research used a scale for academic achievement motivation of Farouk Abdel Fattah 1991 who quote scale for Arabic environment. This scale consists of 28 multiple choices. Each paragraph consists of an incomplete sentence followed by five alternatives (a, b, c, d, e). And before each alternative pair of parentheses, where the student has to insert (X) in front of the alternative that could complete the sentence. The scale has no specified time. Yet, but found that ordinary people have answered in between 35-45 minutes, after listening to the instructions and reviewing the examples (Abd El Fattah, 1991).

The reliability of the scale was calculated using the split-half method. The reliability coefficient was (0.81). In the current research, the reliability of the scale was investigated through piloting the scale on a sample of (27) students. The scale reliability was (0.84) in the first application, and (0,847) when the second application in two weeks interval. The coefficient indicates that the scale is a highly reliable.

The scale validity: the scale was realized, by its developer, by submitting it to a jury comprising university professors. Their estimations indicated that all paragraphs belong to the

motivation of academic achievement by agreement not less than (%. 7.5) is sufficient to consider reliable. The research investigated the validity of the current scale by calculating the scores of the pilot sample on the Academic achievement motivation scale. Then, comparing the score of each student on the scale to her totals score the first semester examination on and correlation coefficient (0.70) and was statistically significant.

The scale correction key: follow this scale method includes grades depending on the degree of positive paragraph, and has identified the negative paragraphs (9), the rest of the paragraphs (19) positive, in positive paragraphs given the alternatives (a, b, c, d, e) Grades (5, 4, 3, 2, 1) respectively, and in the negative paragraphs reversed the previous arrangement. According to this system the maximum scores obtained 130, and less is 28.

The scale marking key: The marks on positively- keyed items are ordered in a ascending way. Items (a,b,c,d,e) take (1,2,3,4,5) respectively. Yet, negatively-keyed items are reversely scored even in items followed by 4 alternatives. The number of negative items is 9, while the rest are 19 positive items. According to this scoring scheme, the highest mark obtained would be 130, while the lowest would be 28.

Experimental design

Experimental research design included three experimental groups. The first experimental group received the syllabus practical skills using video casting through a supplementary pattern, while the second experimental group received the same skills using video casting through alternative pattern, the third experimental group, however, was exposed to the innovative pattern of video casting to learn the identified practical skills.

Table 1. The experimental design of the research

groups	Pre-treatment assessment	Treatment	Post-treatment assessment
experimental group (1)	Achievement pre-test. Academic motivation scale	Video casting "supplementary pattern"	Achievement post-test Evaluation checklist Academic motivation scale
experimental group (2)		Video casting "Alternative pattern"	
experimental group (3)		Video casting "innovative pattern"	

Statistical analysis

Data were entered into SPSS (Version 16). ANOVA was used to examine the statistically significant differences between the mean scores of the three experimental groups on the achievement test, product evaluation checklist, and the academic motivation scale.

Results

Descriptive statistics

The achievement test and the academic achievement motivation scale were applied on the three experimental groups prior to the treatment to ensure the homogeneity of the groups before starting the experiment.

The mean score and standard deviations students obtained on the product evaluation checklist were calculated only after the treatment (see Table 1).

Table 2. Descriptive statistics of the three experimental groups.

Research groups						
Research variables	**Experimental (1) N = 24 Supplementary pattern**		**Exp. (2) N = 25 alternative pattern**		**Exp. (3) N = 26 innovative pattern**	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Post Achievement test	14.75	1.539	18.16	1.700	14.19	1.096
Product evaluation checklist	36.17	2.099	36.20	2.517	32.27	1.614
Pre-test of the academic motivation scale	92.25	10.76	93.72	7.71	93.23	9.11
Post-test of the academic motivation scale	114.79	6.136	122.08	7.376	114.31	8.894

- The results showed that there are statistically significant differences between the mean scores of the three groups on the achievement posttest. The alternative pattern group mean scores of (18.16) was higher than the other two

groups, (14.75) for the supplementary pattern group and (14.19) for the innovative pattern group.

- The results also showed that there are statistically significant differences among the three groups mean scores on the product evaluation checklist. In particular, the innovative pattern group obtained the lowest mean score (32.27). On the other hand, the two other groups obtained approximately equal mean scores; the supplementary pattern group and the innovative pattern obtained means scores of (36.17) and (36.20) respectively.

- The results indicated that there are statistically significant differences between the mean scores of the three groups on the academic achievement scale. Obviously, the alternative pattern group got the highest mean score estimated as (122.08), whereas the first and second experimental groups had approximately equal mean scores of (114.79, 114.31) respectively. Tables (3) and (4) illustrate the effect of using video casting pattern on the cognitive aspects of e-books design and production skills.

Table 3. One way ANOVA analysis of the three experimental groups on cognitive aspects

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**232.048**	**2**	**116.024**	**54.281**	**.000***
Within Groups	**153.898**	**72**	**2.137**		
Total	**385.947**	**74**			

Significant at 0. 01

Table 4.Significance of differences in the means scores of the three groups in the cognitive aspect

Scheffe	Supplementary	Alternative	Innovative
Supplementary pattern	**-**	**.000***	**.408**
Alternative pattern	**.000***	**-**	**.000***
Innovative pattern	**.408**	**-**	**.000***

Significant at 0. 01

Tables (3 and 4) indicate that there are statistically significant differences between the mean scores of the alternative pattern group, and those of the supplementary and innovative pattern group. However, no statistically significant difference was found between the supplementary and the innovative pattern groups. This might be attributed to training on skills through alternative pattern saved the lecture time for focusing on the cognitive aspects of these skills. On the other hand, for the supplementary and innovative pattern groups, the time of the lecture was divided between the cognitive and performance aspects of identifying skills. Tables (5) and (6) show the effect of Presentation patterns of video casting on E-books design and production skills

Table 5. One way ANOVA of Presentation patterns of video casting on E-book design and production skills

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	260.298	2	130.149	29.426	.000*
Within Groups	318.449	72	4.423		
Total	578.747	74			

Significant at 0. 01

Table 6. Significance of differences between the mean scores of three experimental groups on e-books design and production skills.

Scheffe	Supplementary	Alternative	Innovative
Supplementary pattern	-	.998	.000*
Alternative pattern	.998	-	.000*
Innovative pattern	.000*	.000*	-

Significant at 0. 01

Tables (5 and 6) show that there are statistically significant differences between the mean scores of the three groups with regard to the practical skills. However, no statistically significant difference could be detected between the mean score of the supplementary pattern group – those who attended the practical demonstrations and practiced in computer lab with a teacher, yet reviewed and confirmed the skills through

video casting afterwards- and the alternative group- those who watched these skills through video casting several times without the teacher's demonstrations. Innovative pattern group obtained the lowest mean score, because students have not mastered the performing skills due to the demonstration time is tight and may not be sufficient for a student Perform skill more than once (which may be due to the limited time provided for face-to-face demonstrations and subsequent drilling.)

Students in this group did not have a training reference to refer to with regard to the identified technical skills. Furthermore, students did not have access to written notes obtained during lectures to practically re-clarify some aspects of the skill demonstrated in video casting slips. On the criterion of creativity in the product evaluation checklist, which made up 10% of the total score, the innovative group's performance surpassed that of both the alternative and supplementary groups. This can be due to collaborative methods employed. In other words, innovated ideas are generated by the members of the group; however, that group still needs to master technical skills to achieve the level of professionalism. Tables (7) and (8) show the effect of using video casting on students' academic achievement motivation.

in these skills or write comments for the teacher to clarify certain parts of the skill practice in video casting section again Although this group has got 10% set for innovation in a product evaluation criteria, But I got two pilot groups on a large amount of that product to be mass produced and therefore breed creative ideas from the Group and they need only to the performing skills and professionalism.

Table 7. One way ANOVA of the Presentation patterns of video casting on academic achievement motivation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	950.450	2	475.225	8.246	.001*
Within Groups	4149.337	72	57.630		
Total	5099.787	74			

Significant at 0. 01

Table 8.The significance of differences on academic achievement motivation

Scheffe	Supplementary	Alternative	Innovative
Supplementary pattern	-	.005*	.975
Alternative pattern	.005*	-	.002*
Innovative pattern	.975	.002*	-

Significant at 0. 01

The results in tables (7and 8) show that there are statistically significant differences between the mean scores of the three groups on academic achievement motivation. Although all the groups, (with) exposed to different Presentation patterns of video casting, they had a high degree of academic motivation in the post test compared to the pre-test, the alternative pattern group's motivation was the highest. This is consistent with the high level of achievement this group could achieve with regard to the identified practical skills. This might be attributed to the fact that the time allocated to practical training in the class was dedicated to focusing on the cognitive aspects of the targeted skills and to students' collaborative discussion which enhanced their academic achievement and boosted their motivation as well.

Discussion

The current study aimed at examining the effect of different Presentation patterns of video casting technology in improving the teaching and learning process of students taking a course in programming teaching. Throughout the results of the study, it could be concluded that the alternative pattern of video casting have a positive effect on students' learning. This pattern of tackling video casting helped the instructor in saving time allocated during lectures for training on the practical skills to enrich knowledge and provide more opportunities for interaction and discussion between the teacher and students. The positive effect on the cognitive aspects was reflected in higher mean scores the students achieved on the test designed to measure students' knowledge of the syllabus content.

Moreover, the alternative pattern had positive results in training students with the skills of e-books design and

production. This pattern was used as a substitute for practice in class. Normally, the lecture duration is not sufficient for practice, i.e., only five hours every two weeks are allocated to lectures. Therefore, instead of wasting lecture time, the whole practice took place via video casting. The time of the lecture was thus dedicated to the theoretical aspects, activities, and discussions. Thus, it can be concluded that video casting can serve as a good alternative to traditional lecturing given the insufficient time available for face-to-face direct drilling. Moreover, the results showed that using video casting as an alternative pattern supported students' self-learning (Gkatzidou & Pearson, 2007; Tanka, 2010).

Likewise, the students considerably benefited from the supplementary pattern of video casting, particularly the review, which took place immediately subsequent to the lecture. Using video casting for reviewing the lecture content enabled the students to concentrate on what they have missed during the lecture. Also, Students indicated that using this pattern in final revision preceding the quizzes and the final exam helped them be well-prepared (Gkatzidou & Pearson, 2007; Saucier et al., 2009; & Marencik, 2012).

Comparing the self-assessment component in both the alternative and supplementary patterns, it can be realized that in the alternative pattern, students got feedback about their own progress through comparing their performance to what they had watched in the vodcasts. In the supplementary pattern, however, students got feedback from the teacher if encountered difficulty during the performance of the skill in the computer lab. Furthermore, students' self-assessed their performance and ensured that they perfectly mastered the skills by using the video casting for reviewing the lecture. No statistically significant differences between mean scores of students' performance in both groups could be found. Since the targeted e-books design skills are chiefly performance skills carried out on the computer, watching these skills as vodcasts several times and comparing one's performance to what was observed remarkably assisted students in improving their performance. This is consistent with

the findings of studies (Cruz & Carvalho, 2007; Schnackenberg, 2009; Pena, 2011; Marencik, 2012).

Hence, there is indication that students used both the supplement and the alternative pattern of video casting in obtaining a basic explanation of the practical aspects of each lesson. The teacher could alter or supplement what they did in class to provide more practice on the practical skills. Besides, students used the alternative and supplementary patterns of video casting in revision before performing some ultimate final project tasks which assisted them to perform the practical skills more accurately and perfectly (Pearson, 2007; Bilbao, et al, 2009; Tanka, 2010; Gkatzidou &Marencik, 2012).

The Contributed written comments by the students on the Vodcasts helped in increasing interactivity with teacher at times other than the time of the lecture. As the teacher reads these comments, he could modify the vodcasts, according to students' suggestions, for example by providing more detailed explanation of a certain skill or answering students' questions through vodcasts. Thus, this technology provided the opportunity for the students to constantly communicate with the teacher at all times, which contributed in achieving mastery of the targeted e-books design and production skills. This was particularly true with alternative and supplementary patterns which focused on the detailed explanation of practical skills.

Since 10% student's total score on the final project was allocated to innovative ideas, the innovative pattern was expected to enable students to achieve better regarding identified Innovative skills. The high score obtained might be attributed to using video casting in innovative applications of the skills learned by way of demonstration in the computer lab. However, the results show that students who are originally distinguished or who could achieve mastery regarding practical application of the skills using the alternative and supplementary patterns got this percentage also.

Despite of the allocated 10% of the innovative applications, 90% of the total shares of the project were specified for the other

skills. Then, the students who studied in the innovative pattern may not succeed in reaching the perfect level of all skills. Thus, they loosed a lot of scores. Therefore, the innovative pattern group had the lowest scores regarding the practical aspects of e-books design and production skills. Yet, the innovative pattern encouraged the students to be distinctive and opened new horizons for learning and trying (Yamamoto, 2011).

Video casting technology of different patterns encouraged students on learning, and hence increased academic achievement motivation, particularly "alternative pattern" That benefited of saving the time was devoted to practical training in the computer lab in enriching discussions of cognitive aspects, getting adequate feedback on cognitive aspects, more activities, and thus increased academic achievement motivation among this group significantly from other groups (Bolliger et al, 2010; Haines & Van Amburgh, 2010).

Conclusion

This research investigated the impact of Presentation patterns of video casting in developing e-books design and production skills, and academic achievement motivation. Video casting technology was presented in 3 different patterns, alternative, supplement, and innovative. In the alternative pattern, students learned the skills only through Video casting; teacher got and answered the students' comments electronically, either pattern in which students learned the complementary skills through attendance lectures and demonstrations, in addition to discussion face-to-face with the teacher, Then, using vodcasts as a complement for revision or repeating display of skill what they missed or difficult for them to understand. While the innovative pattern presented innovative ideas through vodcasts, which represented the application of skills learned through lectures and demonstrations. All patterns achieved positive results in improving learning, performance, and motivation, but alternative pattern was the best. The current research recommended more research in this field to propose a lot of Presentation patterns of video casting.

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