Developing of Short Educational Videos as a Teaching Skill in the College of Education at Kuwait University and Learning Performance Improvement from the perspectives of teachers and students

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Abstract

The main aim of the current study was to identify to what extent the design and producing of short educational videos can help students in the College of Education at Kuwait University improve their learning performance and understand the effect of active cooperative learning in helping students improve their learning performance. The study also sought to determine whether interaction with peers/ faculty helped students improve their learning performance through the design and producing of short educational videos. The study also aimed at determining the role of engagement in helping students improve their learning performance. The researcher used a cross-sectional survey to collect quantitative data from students enrolled in the College of Education at Kuwait University through a questionnaire that depended on a 5-point Likert scale. The results of the study revealed that: The design and producing of short educational videos helped students in the College of Education to significantly improve their learning performance. Interaction with peers/ faculty helped students to significantly improve their learning performance. Active cooperative learning helped students in the College of Education to significantly improve their learning performance. Engagement helped students in the College of Education to significantly improve their learning performance through the design and producing of short educational videos.

Keywords: Designing Educational Videos, Producing Educational Videos, Educational Videos, Teaching Skills, Kuwaiti Education.

تطوير مقاطع فيديو قصيرة كمهارة تعليمية بكلية التربية بجامعة الكويت
وعلاقتها بتحسين الأداء التعليمي من منظور هيئة التدريس والطلاب
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المستخلص

هدفت هذه الدراسة إلى تحديد إلى أي مدى يمكن أن يساعد تصميم وإنشاء مقاطع فيديو تعليمية قصيرة الطلاب في كلية التربية بجامعة الكويت على تحسين أدائهم التعليمي. كما استهدفت الدراسة فهم تأثير التعلم التعاوني النشط في مساعدة الطلاب على تحسين تعلمهم. كذلك فقد سعت الدراسة أيضًا إلى تحديد ما إذا كان التفاعل مع الزملاء / أعضاء هيئة التدريس قد ساعد الطلاب على تحسين أدائهم التعليمي أم لا، وكذلك استقصاء الدور الخاص بالمشاركة في تحسين أداء الطلاب. واستخدمت الباحثة مسح مقطعي لجمع البيانات الكمية من الطلاب المسجلين في كلية التربية في جامعة الكويت من خلال استبيان يعتمد على مقياس ليكرت الخماسي. وقد أظهرت نتائج الدراسة أن تصميم وإنشاء مقاطع فيديو تعليمية قصيرة ساعد الطلاب في كلية التربية بجامعة الكويت على تحسين أدائهم التعليمي بشكل كبير. كما ساعدت التفاعل مع الأقران / أعضاء هيئة التدريس على تحسين أداء الطلاب التعليمي بشكل كبير، وكذلك فإن عنصر المشاركة قد ساهم بشكل كبير في تحسين الأداء التعليمي للطلاب. وإضافة إلى ما سبق ذكره، فقد ساعد التعلم التعاوني النشط الطلاب في كلية التربية بجامعة الكويت على تحسين أدائهم التعليمي بشكل كبير من خلال تصميم وإنشاء مقاطع فيديو تعليمية قصيرة.

الكلمات المفتاحية: تصميم الفيديوهات التعليمية، إنتاج الفيديوهات التعليمية، الفيديوهات التعليمية، المهارات التعليمية، التعليم بدولة الكويت.

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Introduction:

The educational field is currently facing a considerable challenge with relation to improving the adopted learning and teaching practices side by side with research directions, and stimulating effective innovations through introducing state of art media technologies (Westera, 2012). Therefore, the educational system is recently witnessing rapid developments and various modern techniques are currently adopted, which in turn enhance the effectiveness of the teaching and learning practices. Due to the dominance of various media, such as magazines, books, and the internet, in all aspects of everyday life, teachers are responsible for raising their student's awareness regarding the use of various media types reasonably, without prejudice to the parent role in this regard (Sakat et al., 2012).

Background

The concept of multimedia refers to the use of various media types, like videos, images, sounds, numeric, animation, graphics, and texts in digital devices, as well as allowing users to interact actively without sequence. In other words, the term multimedia means the integration of more than one type of media in order to develop a sequence of programs having the effectiveness to communicate the intended idea, through using visual and audio means (Sakat et al., 2012).

The term digital media refers to any type of electronic file that could be presented in a video (visual) and/or audio (sound) format and could be seen and/or heard by others. Examples of digital media include music files, such as MP3, Midi, or WMA; video files created with a digital camera, such as MPEG, streaming videos published on the Internet, and animated Flash® or graphic design files and images, used to create interactive websites and games. Digital media files may be accessed using computers, mobile devices, video game consoles, projectors, television, and radio (Taylor, 2021).

Educational videos could be considered as a type of digital media frequently adopted in educational environments, and the effectiveness of its use side by side with textual content in

educational environments was proven through various recent literature, due to its validity for content memorization and enhanced concept comprehension (Mariooryad et al., 2014). Among the various favourable features of educational videos is the ability to record brief notes when attending a video lecture or write down explanations through the break times (Mayer, Fiorella & Stull, 2020). As stated by Almuslamani, Nassar & Mahdi (2020), educational videos also were proved to be effective for enhancing students' engagement in the classroom, and this effect could be even greater in case of allowing students to choose their videos by themselves. Teachers and instructors use digital video technology efficiently to communicate the required knowledge through the videos developed particularly for students in the classroom or any other audience (Zamri, Rabiatutadawiah & Abdul Mutalib, 2021).

Preradović, Lauc & Panev (2020) also concluded that the adoption of educational videos while teaching lessons affects the students learning positively, and also enhances students learning results. Also, the learning outcomes of students taught using interactive videos were slightly better when compared with their peers. The research also concluded that there the satisfaction with interactive videos was higher when compared with demonstration videos. While Iskru & Schulz (2020) indicated that students consider educational videos as an essential educational tool and that they are more likely to prefer to use videos instead of any other digital instruction mean.

The process of designing and creating videos enhances motivation, creativity, critical thinking, collaboration, and problem-solving skills (Brunetta, 2014; Morgan, 2012). This process provides learners with the opportunity to express their ideas in their creative way, and to develop a sense of empowerment (Abdulqadir et al., 2019). Allowing learners to design their videos enables them to create their teaching tools, review learned concepts, and present new ideas and information (Watt, 2019).

Team building and communication, both verbal and written, are vital to the design and production of an educational video. In order to plan, implement and edit a production, students must engage with

each other to meet deadlines. The team building and communication skills developed through designing and producing a video may subsequently assist learners to become effective members of a team in their work environments (Brunetta, 2014). Furthermore, learners can share their videos with a broader range of audiences by uploading them to online social media platforms, such as YouTube (Abdulquadir et al., 2021).

Video development technologies were used in the first place by only technology specialists, but now they could be used by anyone (Järvenpää, 2017). Also, efforts exerted at the university level for the development of educational videos were proved to be valuable, as these videos were properly adopted and valued by students in their educational experiences (Müller et al., 2019). Moreover, the development of student-centred educational videos has various benefits, as it is considered as an effective approach of self-production, through motivating students to design their videos, which in turn promote their learning experience side by side with its inspirational effect (Bijnens et al., 2007).

Designing and producing educational videos can have positive effects on students' academic performance. Martins & Oliveira (2018) have revealed that teams were able to design educational videos that have positive effects on learning outcomes, design skills, collaboration, technological skills, and knowledge-building. Educational video games have affected positively their accomplishment and competence.

Theoretical Framework

The five dimensions of critical digital literacy that, theoretically, may be developed and acquired by learners in the context of designing and producing educational videos are outlined as follows (Hinrichsen & Coombs, 2014).

Learning performance (LP) have received increased attention as a tool to estimate students' achievement over their learning process using the new Web 2.0 and social media applications they prefer to construct their learning environments, thus, using of video developing is very helpful for collaborative content production, sharing, commenting, reviewing, annotating, and communicating

(e.g., brainstorming) as well as for playing and acting in virtual 3-D worlds. Video can be integrated into each of the LP stages. It can be integrated into the different stages to represent the problem at hand and to trigger the problem-solving process (Rasi and Poikela, 2016). During other stages, video can be used as an information resource, and students can use their personal mobile devices for instant online searches for information such as terminologies, pictures, and video clips.

During the LP evaluation process, it may include the students producing of videos by themselves as a way to learn about the phenomena being studied, as well as a way to present and explain one's solutions to a problem, and after the knowledge acquisition (Rasi and Poikela, 2016). The rationale for students' own video productions is that when producing videos about the phenomenon they are studying, students will learn content as well as transferable skills such as collaboration and problem solving.

In a recent report, Laaser and Toloza (2017) presented this vision concerning the future of educational video on the Web:

- Video will be a standard part of education. Video´s role will grow beyond delivering content to students, serving purposes of communication, feedback, student´s assignments, and portfolios.
- Video will continue to enable flipped learning and distance learning.
- Video will enable innovative types of E-learning and teaching.
- Video will replace most textbooks.

These statements listed above are not isolated opinions but are also shared, at least in part, by a number of other writers as well (Laaser and Toloza, 2017).

Decoding

Learners need to engage with the structures and conventions of the digital media that they are creating, be sensitive to the different modalities of the media, and be confident in the use of the operational frameworks within which the media exist.

Using

Learners need to engage with the ability to deploy digital tools appropriately and effectively for the task in hand. They must be able to solve practical problems dynamically and flexibly as they arise, apply a range of methods and approaches, both individually and as a member of a team.

Making Meaning

Making meaning is a reflexive process whereby learners reflect upon the content, style and purpose of the educational video that they have created, and consider how and why their experience has contributed to an improvement in knowledge and understanding of the topic.

Analyzing

Learners must develop the ability to engage deeply in the design and production of an educational video, including analyzing and making informed judgments and choices, and applying critical, aesthetic and ethical perspectives.

Persona

When designing and constructing an educational video, learners must be sensitive to the issues concerned with the development of their personal identity in an educational institution, as well as how they interact and communicate with their peers and faculty, and the larger community, in the context of a digital globalized society.

Problem Statement

The five dimensions outlined above emphasize the fundamental problem that the development of critical digital literacy among pre-service teachers involves more than simply the acquisition of practical technological skills. In the context of an increasingly global society and rapidly changing educational technology, pre-service teachers need to become more active and engaged thinkers, to prepare themselves for a future in which teaching and learning through the use and producing of digital media, including short educational videos, is an integral part of communicating in the digital classroom (Watt, 2019). The need to develop critical digital literacy is challenging traditional notions of how to train new teachers, which

has generally been based mainly on the dominance of print-based media (Di Cesare & Rowsell, 2020).

More research-based evidence to elucidate the benefits of critical digital literacy must be collected and analyzed before digital media can replace traditional printed media as the dominant mode of communication in the classroom (Watt, 2019; Di Cesare & Rowsell, 2020). It is essential to obtain more research-based evidence in a diversity of educational settings, because the benefits of critical digital literacy depend, to a large extent, on the pedagogic, cultural, and social contexts in which technology is applied in practice (Abreu et al., 2016). For example, three Muslim students in the Somali-Canadian community created a short educational video entitled "Three Things You Should Know About My Hijab" which highlighted their lived experiences from cultural, critical, and creative perspectives. This video, which challenged stereotypical assumptions about Muslim women, highlighted how designing and creating a video opened up a new mode of critical digital literacy practice in the classroom that provoked a rethinking of the curriculum (Abdulqadir et al., 2019).

In spite of the widespread of educational videos in both formal and informal educational environments, there are still some concerns regarding how to develop and produce educational videos used as a basic tool in instruction (Ou, Joyner & Goel, 2019). In the same vein, the research of MacLean (2016), which addressed the problems related to the design and development of educational videos, indicated that teachers reported that educational video development is not an easy job and requires a lot of time.

With relation to the development of instructional content for research purposes, students anticipate having methodological information with relation to the video production process, like the theoretical framework of designing side by side with the tech technological requirements. However, none of the previous researches has explained whether the development of such videos depends on technological or language standards. Also, there is a gap in the literature concerning the educational background quality of

such educational videos and adopted in language researches, which will be addressed by the current research (Alyahya, 2021). As stated by Wang (2018), no need for the one-size-fits-all approach anymore while developing and producing educational videos for all students. In brief, it is of great importance to take into consideration the personal differences with relation to working memory capacity and inhibitory control upon the development of educational videos. This study aims to investigate the developing of short educational videos as a teaching skill in the College of Education at Kuwait University and the corresponding improvement of the learning performance from the perspectives of teachers and students.

Purpose of the Research

The purpose of the current research is to conduct a cross-sectional survey to collect quantitative data in order to explore the academic benefits of providing opportunities for small groups of pre-service teachers in the College of Education, the University of Kuwait to collaborative in the production of short educational videos and sharing their work with a wider audience.

Significance of the study

Taking into account the increasing importance of educational videos in helping students acquire a lot of knowledge and skills enjoyably and attractively, it has become necessary to focus on designing video content, especially short videos, which have become one of the most prominent phenomena that have spread widely in recent times at the level of various educational levels including the undergraduate level. This prompted many researchers in the academic field to highlight the importance of developing the skills of designing and producing short educational videos, as they are among the simplest ways in which the teacher can communicate different information to students using many forms of multimedia. Accordingly, the development of these skills has become necessary, especially at the level of pre-service teachers to help them later benefit from those skills during the actual teaching process. These skills are also considered among the critical technical skills that the teacher should master, especially considering that they are prominent skills of the twenty-first century. The importance of short

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educational videos has also increased in the recent period, especially in light of the Corona pandemic, as one of the means that helped teachers to communicate information in a simplified way to students. Based on what has been mentioned above, it has become of utmost importance to develop pre-service teachers' design and production skills.

Questions of the study

The purpose of this research is to conduct a cross-sectional survey to collect quantitative data in order to explore the academic benefits of providing opportunities for small groups of pre-service teachers in the College of Education, the University of Kuwait to collaborative in the production of short educational videos and sharing their work with a wider audience. The purpose of the research is underpinned by the following overarching research question (RQ1) regarding the training of new teachers in the 21st century:

RQ1: To what degree does the design and producing of short educational videos help students in the College of Education at Kuwait University improve their learning performance (LP)?

The sub-questions (RQ2 to RQ5), are as follows:

RQ2: To what degree does interaction with peers help students in the College of Education at Kuwait University to improve their learning performance through the design and producing of short educational videos?

RQ3: To what degree does active cooperative learning help students in the College of Education at Kuwait University improve their learning performance through the design and producing of short educational videos?

RQ4: To what degree does engagement help students in the College of Education at Kuwait University to improve their learning performance through the design and producing of short educational videos?

RQ5: To what degree does interaction with faculty help students in the College of Education at Kuwait University to improve their learning performance through the design and producing of short educational videos?

Limitations of the Study

The current study has many limitations that can be reviewed as follows:

- **Objective Limitations:** The current study is limited to designing and producing short educational videos as a teaching skill, no other topics will be included.
- **Place Limitations:** The current study will be conducted at the College of Education, Kuwait University.
- **Human Limitations:** The current study will be applied to a small group of pre-service teachers.
- **Time Limitation:** The current study will be conducted during the first semester of the academic year 2021-2022.

Terminology of the Study

- Learning Performance: means that students implement their learning based on their learning strategies and try their best to achieve their learning goals. During these processes, students could be aware of their performance with regard to certain learning goals, and monitor the appropriate learning strategies for achieving their goals.
- Interaction with peers: when children are playing, sharing, taking turns, and/or using verbal (talking) and non-verbal (smiling, waving) communication with each other. Peer interactions may be hard for some children with autism, so it is important to support these interactions throughout the day.
- Active cooperative learning: is a formal instructional approach in which students work together in small teams to accomplish a common learning goal.
- Engagement: In education, student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education.
- Interaction with faculty: The contact between the faculty and the student. This includes course related activities and

activities other than the course work/outside the course work.

Research Methodology and Procedures

The current research adopted the analytical descriptive approach using a customized questionnaire to examine the sample estimation of developing (designing and producing) short educational videos in accordance with some descriptive (demographic) variables (gender, job, and age), along with the dependent variables, in order to collect, analyze and then conclude the most important results related to the research subject.

First: The Research Population and Sample

The research population included the teachers and students of the College of Education at Kuwait University, while the research sample included (100) persons selected randomly, which equals 3.06% of the total research population of 2755 male and female students in addition to 510 faculty member in accordance with the statistics prepared by department of student affairs at college of education in Kuwait University, and the characteristics of the sample according to the research variables are indicated in the table No. (1).

Table No. (1): Sample Description

		Frequency	Percent
Gender	Male	50	50.0
	Female	50	50.0
Job	Teacher	50	50.0
	Student	50	50.0
Age	18 - 21 y	49	49.0
	22 - 25 y	16	16.0
	26 and above	35	35.0
	Total	100	100.0

Second: The Research Tool

The research tool was a tailored questionnaire which designed to estimate the usefulness of developing (designing and producing) short educational videos as a teaching skill in the college of education at Kuwait University from the perspectives of teachers and students, in accordance with the following steps:

- **The first step:** determining the study objective in accordance with the theoretical literature and previous researches related to the research topic.
- **The second step:** formulating the questionnaire items.
- **The third step:** paraphrasing and adjusting the questionnaire items and axes in accordance with the arbitrators' opinions and comments.

The designed questionnaire consisted of two parts, one addressed the demographic characteristics of the research sample, including variables (gender, job, age), while the second part addressed the research questions including (23) items.

The research used a 5-point Likert scale (strongly agree = 5, agree = 4, neutral = 3, disagree = 2, and strongly disagree = 1). For the purposes of analyzing and estimating the sample response degrees, and after reviewing the previous researches, the research sample estimation degrees with relation to the program were determined at three levels: high, medium, and low. Whereas (the highest value of the answer alternatives on the research tool – the lowest value of the answer alternatives on the research tool) divided by the number of the three levels (high, medium, and low) equals the class interval amongst the three levels (high, medium, and low): i.e. (5-1) ÷ 3 = 1.33.

1.00+ 1.33= 2.33, 2.33+1.33= 3.66, 3.66+1.33= 5.00

Therefore, the arithmetic mean values for the availability degree range between: (1.00 - 2.33) for the low values, (2.34 - 3.66) for the medium values, and (3.67 - 5.00) for the high values.

Third: Validity and Reliability of The Research Tool

To verify the validity and reliability of the research tool, the researcher presented the research tool to seven arbitrators specialized in the field of Curriculum and Instructions in the College of Education at Kuwait University, and the College of Basic Education in the Public Authority for Applied Education and Training. Then, all the comments and observations of the arbitrators were taken into consideration in terms of form and content, and then applied to the final version of the research tool. Then, the researcher applied the

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questionnaire to a pilot sample derived from the same research population, including (20) teachers and students with the same characteristics as the original research population. In order to verify the internal consistency of the questionnaire items with the total degree, the correlation coefficients between each statement and the total degree for the pilot sample (20 Participants, have the same characteristics of the study sample) were calculated before applying the questionnaire on the 100 participants. Correlation coefficients' results indicated that there is a positive significant correlation between each statement and the overall degree at the significance level of (0.01), as indicated in table (2).

Table No. (2): Correlation coefficients between each item and the overall degree of the questionnaire

Item	R	Sig	Item	R	Sig	Item	R	Sig
1	.682**	.001	9	.619**	.004	17	.880**	.000
2	.692**	.001	10	.826**	.000	18	.850**	.000
3	.569**	.009	11	.884**	.000	19	.848**	.000
4	.857**	.000	12	.736**	.000	20	.909**	.000
5	.865**	.000	13	.754**	.000	21	.791**	.000
6	.775**	.000	14	.643**	.002	22	.814**	.000
7	.794**	.000	15	.808**	.000	23	.875**	.000
8	.631**	.003	16	.696**	.001			

Finally, the researcher calculated the reliability using the Cronbach's reliability coefficient (α) for the whole research tool, which was estimated at a high degree with the value of (0.831), which is considered suitable for the research purposes, as indicated in table (3).

Table (3): The values of the stability coefficient of internal consistency (Cronbach's alpha) for the research tool

Variable	item	Cronbach's alpha
All items	23	0.969

Fourth: Statistical Processing Methods

The researcher used the descriptive-analytical method while carrying out the statistical possessing in the research, which included each of the following statistical tests: arithmetic averages (Means),

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standard deviations, frequencies and percentages of sample frequencies (Frequency-Percent), and inferential statistics (t-statistics) test, correlations, and finally one- way ANOVA test.

Data Collection and Analysis

A sample of 100 (50 male and female students & 50 male and female faculty members) existing at the College of Education at Kuwait University have been partitioned into 3 to 5 groups and given instructions on how to develop (design and produce) educational videos. Including an investigation questions to justify the reasons of enhancing the learning performance of students by addressing the LP four components, Interaction with peers, Active cooperative learning, Engagement, and Interaction with faculty. After the participants have finished this task, they have been asked to self-report their answers on the mentioned questionnaire, which used a 5-point Likert scale to rate their level of agreement with each item.

Partial least squares structural equation modeling (PLS-SEM) will be conducted to provide the statistical evidence to address the five research questions. PLS-SEM will be used because it is a modern non-parametric method, developed in the last decade, with the advantage that it does not have so many restrictive theoretical assumptions. The results are not so severely compromised if the data violate the assumptions of traditional parametric correlation and regression analysis, such as normality, co linearity, and homogeneity of variance (Hair et al. 2017).

PLS involves the construction of a path diagram before conducting the statistical analysis. A path diagram is a visual representation of the relationships between the questionnaire item scores and the latent variables, as illustrated in Figure 1. This diagram was drawn with the graphic user interface of Smart PLS software, using the methods described by Sarstedt and Cheah (2019).The oval symbols represent the five latent variables, which are operationalized as congeneric measures (i.e., an exact linear combination of a specified cluster of questionnaire item scores, based on the results of composite factor analysis). The unidirectional arrows directed out from the latent variables into the rectangular symbols represent the factor loading coefficients (i.e., the correlations between the latent

variables and their respective numbered questionnaire item scores). The standardized path coefficients are represented by the unidirectional arrows connecting pairs of variables, labeled β_1 to β_4. They represent the mean values of the standardized partial correlations between the latent variables, measured on a scale from -1 through 0 to +1. The statistical significance of each path coefficient is estimated by bootstrapping, using 5000 random samples drawn from the original matrix of 5-point questionnaire item scores. Also, the four path coefficients are greater than zero at the 0.05 level.
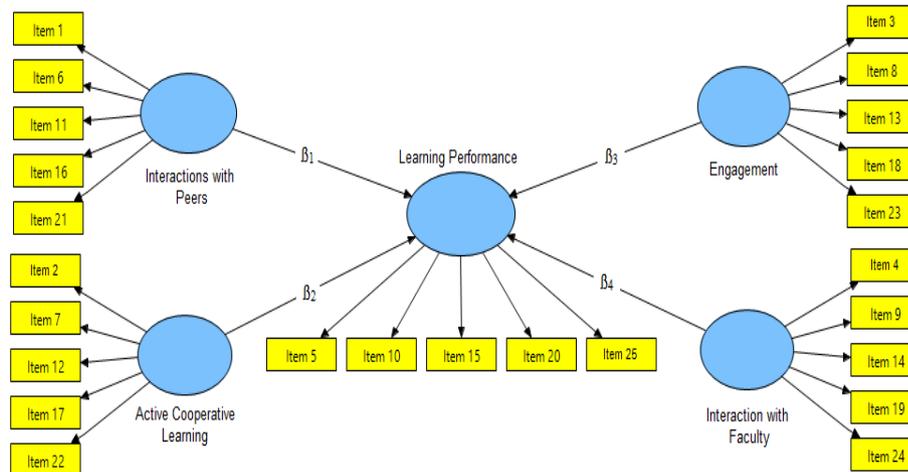

Figure 1: PLS-SEM Path Diagram

Research Results and Discussion

All following results were based on the customized questionnaire filled by the participants, and it was as follows:

The first question: To what extent does the design and production of short educational videos help students in the College of Education at Kuwait University improve their educational performance?

To answer this question, the arithmetic means, standard deviations, relative weights, estimation degrees, and ranks were calculated, and the results were as indicated in table No. (4).

Table No. (4): The arithmetic means, standard deviations, relative weights, estimation degrees of the research sample with relation to the program of designing and producing short educational videos (N=100)

Sr.	Items	Mean	Std. Deviation	Relative weight	Ranking	Degree of appreciation
1	Facilitated the producing of interactive educational videos with other students.	3.90	1.02	78.0	22	High
2	The design and production of educational videos helped me to cooperate actively with others in my learning experience.	4.08	1.06	81.6	13	High
3	I have developed the ability to participate in the design and production of educational videos, including designing, taking photos, and producing.	3.92	1.10	78.4	20	High
4	The design and production of educational videos facilitated my interactions with faculty members.	3.91	1.04	78.2	21	High
5	The design of educational videos helped me to improve my knowledge and understanding of a certain topic.	4.32	0.86	86.4	1	High
6	The design of educational videos facilitated my interactions with other students.	4.09	0.96	81.8	12	High
7	The design and production of educational videos allowed me to create my own learning experience with other students.	4.04	0.95	80.8	15	High
8	The design and production of educational videos helped me to develop my identity, and also improved my communication as a member of an educational institution in the context of a globalized digital society.	3.92	1.02	78.4	19	High

Sr.	Items	Mean	Std. Deviation	Relative weight	Ranking	Degree of appreciation
9	The design and production of educational videos provided me with the opportunity of getting the information required for me from the university.	3.88	1.03	77.6	23	High
10	I am very satisfied with my educational experience regarding designing and producing educational videos.	4.04	1.01	80.8	14	High
11	The design and production of educational videos enhanced my sense of belonging to the student community.	4.13	0.93	82.6	8	High
12	The design and production of educational videos allowed me to share my learning experience with other students.	4.11	0.92	82.2	11	High
13	The design and production of educational videos made tendencies more interesting.	4.20	0.90	84.0	4	High
14	The design and production of educational videos helped me to cooperate with faculty members.	4.00	0.97	80.0	17	High
15	The design and production of educational videos helped to improve my educational performance.	4.12	0.99	82.4	9	High
16	The design and production of educational videos enabled me to get familiarized with new topics.	4.22	1.00	84.4	3	High
17	The design and production of educational videos allowed me to share my own learning experience.	4.18	0.90	83.6	5	High
18	The design and production of educational videos allowed me to share my own learning experience.	4.15	0.90	83.0	6	High
19	The design and production of educational videos made me feel engaged in the educational community.	3.97	1.06	79.4	18	High

Sr.	Items	Mean	Std. Deviation	Relative weight	Ranking	Degree of appreciation
20	The design and production of educational videos helped faculty members to give their feedback to students.	4.13	0.87	82.6	7	High
21	The design and production of educational videos helped me to familiarize myself with the structures of digital media and the ways of their use.	4.03	0.98	80.6	16	High
22	The design and production of educational videos facilitated information exchange among students.	4.29	0.78	85.8	2	High
23	The design and production of educational videos helped me to improve my teamwork skills.	4.11	1.08	82.2	10	High
	The overall Arithmetic mean	3.88	1.03	77.6		High

As indicated in table No. (4) above, the arithmetic mean was estimated at (3.88), and a standard deviation was estimated at (1.03), with the relative significance of (77.6%), which indicate that the program of designing and producing short educational videos achieved a high satisfaction degree. The degrees achieved by all the items were (high), with the arithmetic means ranging between (3.88 - 4.32), and a relative weight ranging between (77.6 - 86.4%), which indicate that almost all the research sample members agree that they benefited from the program of designing and creating short educational videos. It is also clear from the above table that there is a high degree of agreement regarding items No. (5, 13, 16, 22), and such agreement could be attributed to the effectiveness of the program of designing and producing short videos in helping develop their knowledge, facilitate information exchange, get familiar with new topics, and enhance their interest in designing videos.

Item No. (9), which provides for "The design and production of educational videos provided me with the opportunity of getting the information required for me from the university", has achieved the lowest arithmetic mean (3.88), which indicates that the research

sample members, and the comparison of the rest of the questionnaire items, do not agree to the same degree that the program of designing and producing short educational videos has helped them get the information required by them from the university.

Taking into consideration the overall arithmetic mean, it has become clear that there is a high agreement degree among the research sample members on the effectiveness of the program of designing and producing short educational videos. This result goes in harmony with Snelson (2018) who has confirmed that video production projects positively affected information acquisition, literacy, and performance in content-area classrooms.

The second question: Are there statistically significant differences among the research sample members in the effectiveness degree of the program of designing and producing short educational videos in the College of Education at Kuwait University, due to the variables of (gender, job, and age)?

To answer this question: the researcher applied the (t) test to the independent samples for the variable (gender and job), and the (F) test for the variable (age), as indicated in the below table:

First: The Differences Related to the Gender Variable

It is clear from Table No. (5) that there are no statistically significant differences, which could be attributed to the gender variable (male/female), as the significance of (T) values was greater than (0.05), which means that the gender variable has no effect or relation with the effectiveness of the program, as both males and females benefited equally from the program. This result is not consistent with Wang (2018) who has revealed that there are individual differences among male and female students in designing instructional videos because of differences related to inhibitory control and working memory.

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Table No. (5): Athematic means, standard deviations, the value of (t), and its significance with relation to the gender variable

		N	Mean	Std. Deviation	df	t	sig
Overall degree	Male	50	3.96	.810	98	1.50	.136
	Female	50	4.19	.689			

Secondly: The Differences Related to The Job Variable

It is clear from Table (6) that there are no statistically significant differences, which could be attributed to the job variable (teacher/student), as the significance of (T) values were greater than (0.05), which means that the job variable has no effect or relation with the effectiveness of the program, as both teachers and students benefited equally from the program.

Table No. (6): Athematic means, standard deviations, the value of (t), and its significance with relation to the job variable

	Job	N	Mean	Std. Deviation	df	t	sig
Overall degree	Teacher	50	3.95	.713	98	-1.645	.103
	Student	50	4.20	.786			

Thirdly: Differences attributed to the age variable

It is clear from Table (7) that there are no statistically significant differences, which could be attributed to the age variable, as the significance of the (P) values was greater than (0.05), which means that the age variable has no effect or relation with the effectiveness of the program, as all ages have benefited equally from the program.

Table No. (7): The results of the one-way analysis of variance of the differences among the average responses of the research sample according to the variable of age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.720	1	.720	1.105	.307
Within Groups	11.728	18	.652		
Total	12.448	19			

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Summarization of the results:

1. The design and producing of short educational videos helped students in the College of Education at Kuwait University to significantly improve their learning performance.

2. Interaction with peers helped students in the College of Education at Kuwait University to significantly improve their learning performance through the design and producing of short educational videos.

3. Active cooperative learning helped students in the College of Education at Kuwait University to significantly improve their learning performance through the design and producing of short educational videos.

4. Engagement helped students in the College of Education at Kuwait University to significantly improve their learning performance through the design and producing of short educational videos.

5. Interaction with faculty helped students in the College of Education at Kuwait University to significantly improve their learning performance through the design and producing of short educational videos.

Recommendations and suggestions:

Based on what has been mentioned above, the current study can provide certain recommendations. Those responsible for designing the educational content provided to students of the College of Education should focus primarily on developing their technical skills, especially those related to the design of educational content, because of their positive impact on the students' academic performance. The element of interaction should also be emphasized as a means of identifying what students have acquired, which should be taken into account while designing video content in a way that helps students interact with teachers as well as their peers. It should also be emphasized the importance of teaching strategies that are used during designing such as active learning strategies such as constructivist learning and cooperative learning to enhance students' participation in the educational system and make them active

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learners. The researcher can provide certain recommendations that can be reviewed as follows: The researcher recommends conducting future studies that aim at investigating the effect of educational video production on pre-service students 'achievement motivation. Future researchers should pay great attention to investigating the pre-service teachers' understanding of the principles of educational videos and to what extent they can apply these principles while designing educational videos. Future researches can concentrate on studying the usability of designing short educational videos, especially in times of crises to maintain communication between students and teachers.

Conclusion

In this study, the researcher tried to shed light on the importance of educational videos for student teachers, as well as the significance of providing these students with the skills of designing and producing short educational videos to facilitate the learning process. In light of the findings, the researcher made several recommendations.

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