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THE EFFECT OF E-TUTORIAL PROGRAMS ON IMPROVING THE PRODUCING DIGITAL CONTENT SKILL

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ABSTRACT

This study aims to determine how e-tutorial programs affect students with the best return on investment by improving their skill performance when producing digital content. A control group that studied the course on digital content development using the conventional approach and an experimental group that studied the course using the e-tutorial programs method made up the research sample. Each group has 32 learners in it. The goal of this research was accomplished using a note card for skill performance. According to the study's findings, there is a statistically significant difference in favor of the experimental group among the adjusted earnings ratios for the students' scores in the two groups on the skill performance level for producing digital content. This difference is at the level (0.05).

Keywords: E-tutorial programs; e-learning; digital content; face-to-face learning; Skill performance

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INTRODUCTION

With the advent of the Internet, which was accessible to everyone in every country, the information revolution and the steady doubling of methods for creating, processing, and storing information have made it possible for students to access information at any time with ease and speed. Along with the development of multimedia and the ensuing use of its components in the transmission and presentation of that information in various learning programs [1, 2]. Additionally, there is a related need for new educational approaches, such E-tutorial programs, to help learners take advantage of computer capabilities that depend on their incredible speed as well as human skills that depend on their creativity and intelligence [3-6]. As one of the contemporary approaches based on the use of educational technology in creating new educational situations, e-tutorial programs combine the traditional method of face-to-face learning with e-learning via the Internet to guide and assist the learner through each stage of learning [7, 8].

There is still a lot of confusion surrounding what is meant when the term "e-tutorial programs" is used, despite the fact that it has grown relatively popular in academic circles [9, 10]. E-tutorial programs are distinct from concepts like open learning, distributed learning, e-learning, and flexible learning. E-tutorial programs have also gained attention thanks to the introduction of new technologies to the teaching and learning process [11, 12]. In response to the often-excessive usage of technology, the term "e-tutorial programs" has been introduced. Traditional learning had to stop because of e-tutorial programs, which also provide a safe refuge for e-learning companies [13]. In order to create learning environments that encourage interaction and the development of ideas, teachers use a variety of materials and activities [14, 15].

E-tutorial programs are a word used to refer to a solution that incorporates a variety of delivery techniques, including EPSS, Web-based learning, collaborative software, and knowledge management procedures. E-tutorial programs are used to combine several event-based activities, including in-person instruction, real-time e-learning, and independent study. In other words, e-tutorial programs combine instructor-led instruction with synchronous online meetings and asynchronous, self-paced learning. According to this description, e-tutorial programs combine the following components [16, 17]:

- Different presenting tools.
- Self-paced, solo & collaborative, and group-based learning activities.
- Knowledge management and electronic performance support.

E-tutorial programs employ contemporary technology while maintaining the traditional elements of instruction [18-20]. Direct connection with contemporary communication tools like computers, networks, and learning management systems is prioritized in the classroom [21]. This education can be defined as the way that the learner is given information, attitudes, and educational experiences that are arranged through multimedia made available by contemporary technology or information technology [22, 23]. Because diverse challenges call for varied solutions

(various combinations of media and presentation), e-tutorial programs are also replacing e-learning as the upcoming big thing [24]. Some think that in order to do this, the appropriate combination must be applied to the specific work challenge, and traditional learning is then successfully replaced by e-tutorial applications [25, 26]. He claims that any successful e-learning program will develop into a programmer of e-tutorial programs [27]. Learning management systems and e-tutorial programs that support them can assist make sure that intellectual capital management initiatives are successful [28].

E-tutorial programs combine a number of instructional activities, including the transmission of numerous approaches, resources, and learning opportunities collected from multiple information sources [29]. Additionally, e-tutorial programs have possibilities outside of the conventional classroom [27, 30]. E-tutorial programs make use of a variety of learning activities and settings, and they focus on enhancing the benefits of various learning activity and setting kinds in order to accomplish all-encompassing educational objectives [21]. It can be characterized as a learning program that employs several delivery methods in an effort to enhance learning results and lower program delivery costs [31]. As a result, it is possible to say that e-tutorial programs are focused on enhancing the attainment of learning objectives by implementing the proper educational technology that corresponds with the proper learning style to transfer the proper skills to the right person at the right time [32].

The e-tutorial programs offer a chance to encourage and maintain the sharing of those thoughts and experiences [33]. The use of e-tutorial applications is becoming more popular due to these complimentary benefits. Additionally, the study Alhalafawy, Najmi [34], , which examined how fully traditional learning, e-tutorial programs, and fully online learning differ in terms of the sense of community, revealed that e-tutorial programs cause a stronger sense of community belonging than traditional study and online study. A key component of e-tutorial programs is the use of instructional designers to assess learning programs, segment them into modules, and choose the most effective delivery method for the student. E-tutorial programs are increasingly necessary to achieve complicated and constantly changing learning objectives because content and skills are also becoming more complex and changing quickly [35, 36]. Others believe that online tutorials assist strike a balance between live engagement and flexible presenting possibilities. Additionally, by emphasizing what the learner is doing, the setting of e-tutorial programs tries to support students in taking more responsibility for their learning [37].

The ability to perform a task entails mental and cognitive processes, making it a type of learning as well [38]. . Preparation, which is a part of mental processes, is the first phase of skill learning [39]. As a result, the talent has more than just a motor component; it also has a cognitive and cerebral component. Specifically, the capacity to employ knowledge quickly and effectively in a performance setting. Performance is what results from observable behavioral activities, and performance includes performance standards. Skill as a type of learning does not appear except through performance [40]. The ability to perform a task entails mental and cognitive processes, making it a type of learning as well [37]. Preparation, which is a part of mental processes, is the first phase of skill learning [38]. As a result, the talent has more than just a motor component; it also has a cognitive and cerebral component. Specifically, the capacity to employ knowledge quickly and effectively in a performance setting. Performance is what results from observable behavioral activities, and performance includes performance standards. Skill as a type of learning does not appear except through performance [41]. Knowing the results and feedback: Without knowing the results, or what is known as Informative Feedback, motor abilities cannot be learned. Increasing the feeding delay slows learning, but a minor delay has no impact [42]. Directing and guiding the learner toward the nature of good performance: If the teacher has sufficient knowledge of the nature of good performance, which necessitates an analysis of the skill using various job analysis methods, educational guidance and counseling plays an important role in the process of skill acquisition. Negative practice: If the learner is fully aware that he is practicing the incorrect answer, practicing errors while learning the skill can assist the learner eliminate these errors. The current study investigates how e-tutorial programs affect students pursuing the Optimum Investment Diploma's ability to produce digital material.

This search was initiated as a result of the focus placed on how crucial it is for students to be adequately prepared for their new duties. In view of the new tasks and responsibilities allocated to them in light of the significant technological advancement in the field of education, this is done to develop their training courses. Additionally, a researcher is instructing the second-level students with the Optimum Investment Diploma in the creation of digital material. The researchers observed the low level of student production of digital content due to a lack of related abilities, which they researched in the traditional manner, by monitoring the students' projects and through a survey of experts and students. The researchers considered that the employment of this method might be helpful in boosting the skill performance of producing digital content among students of optimal investment in light of the outcomes of applying the e-tutorial programs technique in earlier studies.

METHODOLOGY

The study's use of a semi-experimental methodology necessitated the employment of a pre-post experimental design with two equal groups, one being an experimental group and the other a control group.

Table 1: Design of research

	Pre-test	Treatment	Post-test
Experimental group	Observation card	E-tutorial programs	Observation card
Control group		traditional learning	

RESEARCH TOOL

This card was created to assess the students who were pursuing the Optimum Investment Diploma's proficiency in creating digital material. The final version of the card had (261) sub-skills in addition to (24) primary skills. The logical sequence in which the skills are listed has been considered. For determining the students' proficiency levels in each skill, the researchers also used quantitative grading assessments. Due to the interdependence and sequential nature of the sub-skills that make up each primary skill, if a learner forgets one, they are unable to do the subsequent sub-skills. This led the researchers to look for a system to guarantee the students' consistency in using the skill. According to Likert, this was accomplished utilizing rating scales with five levels.

A checkmark (√) is placed in front of the performance level appropriate for the student's performance to register their performance. These scores are added up to give the student a total score, which is used to assess how well he performed on the skills listed on the card. As a result, there are (522) total points on the observation card. The notes cards' directions were written with clarity and precision by the researchers. The card's purpose is also made clear so that anyone can utilize it correctly. The observation card was created in its initial version after the observation card's goal was clarified and the main and supporting abilities were identified. The card's reliability and validity were afterwards checked to make sure they were appropriate for use as a tool for assessing the required skills. A group of arbitrators and specialists in educational technologies, curricula, and teaching techniques examined the note card to confirm this. By ensuring that the procedural text on the card is accurate, understandable, and that the performance can be seen, this will help to confirm the authenticity of the card. Additionally, the Cooper equation was used to determine the coefficient of agreement between the estimates of the several observers on one student's performance in order to calculate the stability of the observation card. The observation card is presented to three expert faculty members so they can learn about its contents and usage guidelines before helping with this. Following this, three students' performances were observed, and the coefficients of agreement between the three observers were calculated separately for each student. As the average coefficient of agreement between the observers for the three students was 88%, this indicated that the observation card was stable to a point where it could be used as a measurement tool. As a result, the observation card took on its final shape after being checked for validity and stability. It is now valid to gauge how well students are performing in terms of their ability to produce digital material.

RESEARCH SAMPLE

The current study's sample included 64 students who were enrolled in the Department of Curriculum and Teaching Methods' optimal investment diploma program; their average age was 26.1 years, and the standard deviation was 6.74. The random approach was used to divide the study sample into two groups. 32 learners made up the control group, who learnt digital content creation the old-fashioned way. The experimental group (32 learners) used an e-tutorial program technique to study the identical course.

Ensure that the Two Groups Perform Similarly in Terms of Skill

Through the pre-measuring of the observation card, it was possible to confirm the homogeneity between the two groups (experimental and control) in the practical performance of the digital content production skills:

Table 2: Significance of the disparities between the two groups in the observation card's pre-measurement

	Sum of Squares	DF	Mean of Square	F. ratio	Sig.
Between Groups	5.9	1	5.9	0.624	0.715
Within Groups	5716.3	62	125.2		
Total	5722.2	63			

The value of F reached (0.624), which is not statistically significant, as can be seen in the preceding table, indicating that there are no appreciable differences in the tribal measurement between the two groups. In other words, prior to exposure to the study experience, the skill performance of the two research groups in producing digital material was homogeneous.

Experimental Processing Material

The experimental group, meantime, investigates the stages involved in creating digital content based on e-tutorial platforms:

- Holding a first meeting with the experimental group's pupils to go over how to give each student their own unique username and password so they can log in to the platform. The weekly study schedule should also be specified, along with the course's goals and significance, the times of in-person lectures, the communication and evaluation procedures, and the division of the class into smaller groups.

- Two hours each week of online chat meetings between the experimental group's pupils that are coordinated with the professor.
- Through a course forum, experimental group students can communicate asynchronously with one another and with the professor.
- Each subgroup's students collaborate to complete the weekly assignment before sending it to the lecturer via the program portal.
- Each of the group's members responds independently through the platform to a building test that concludes each unit of the course.
- For the last in-person test, students bring a group to the classroom.

The control group's students complete their coursework for the course in the assigned classroom, where a weekly four-hour lecture is held, in the conventional manner in accordance with the conventional study schedule.

RESULTS

We examine the following statistical methodologies employed after finishing the basic experiment and observing the levels of pre-application and post-application with regard to the practical performance observation card of digital content production skills. According to the following table, the researchers used the T-test to assess the significance of the differences between the adjusted earning percentage for the students' scores in the two experimental groups and the control group in terms of their proficiency in producing digital content.

Table 3: Significance T of the difference in the modified earning percentage between the control group's performance note card scores and those of the students in the two experimental groups

Group	M	SD	Mean Difference	T. Ratio	Sig.
Experimental group	511.4	8.6	47.2	7.34	0.039
Control group	463.2	9.4			

It is evident from the previous table that the modified earning percentage difference between the scores of the students in the experimental and control groups on the performance observation card's T value was 7.34. The students in the control group received an average grade of (463.2). While the experimental group students' average score was (511.4), we draw the conclusion that the T value is statistically significant. Additionally, the experimental group (who received instruction from e-tutorial programs) receives the greatest average statistical significance level. In other words, the adjusted earnings ratio for the test results of the students in the experimental group show a statistically significant difference at the level of (0.05). It performed better than both the control group, which studied using traditional methods, and the experimental group when it came to digital content production skills.

DISCUSSION

According to the findings in Table 3, there was a statistically significant difference in favor of the experimental group among the adjusted earning percentages for the students' scores in the two groups on the skill performance level for producing digital content. This is a good signal showing the value of utilizing E-tutorial programs, which would result in the growth of the skill performance of the production of digital material for the benefit of the experimental group among the students pursuing the Optimum Investment Diploma. According to the researchers, the following information can explain this result:

- Due to the student's interaction with the offered content using multimedia elements including sound, vision, and movement, the learning effect persisted and was evident in the growth of skillful performance.
- The ability to repeatedly observe the processes of a practical skill on an online educational website without being constrained by time or location helped the learner comprehend and evaluate the talent.
- The environment of the online tutorial programs, which enables face-to-face interaction between the student and the lecturer, allowed the student to practice the skill in the lab through trial and error as well as watch it on the program platform, which sped up the process of mastering the skill.
- With a chat room and discussion board, students talked with each other and the lecturer to solve the issues they experienced while practicing the skill.
- Each student may view the skill's steps more than once in accordance with his or her own rate of learning in order to fully master it, taking into consideration the individual disparities between pupils.

This outcome is consistent with the findings of earlier studies and research that focused on the impact of e-tutorial programs, such as the Elbourhamy, Najmi [43], Elfeky and Elbyaly [44], Elbyaly and Elfeky [45], Elfeky and Elbyaly [46], Elfeky and Elbyaly [47], Elbyaly and Elfeky [48], which demonstrated the impact of e-tutorial programs on beneficiaries' acquisition of skill.

RECOMMENDATIONS

The researchers suggest the following in light of the research findings, debate, and interpretation:

- Use the online tutorials in comparable classroom settings.
- Using the e-tutorial method for teaching digital content development to students pursuing an optimal investment diploma.
- The significance of giving students practical skills through hands-on training in the lab to achieve the best educational process effectiveness.
- Through faculty capacity development courses offered at universities, training is provided to faculty members on how to adapt their courses to be compatible with online tutorial programs.

SUGGESTED RESEARCH

The researchers propose the following research subjects in light of the findings of the current study and after examining earlier research on the subject:

- A training program to equip academic staff with the knowledge and abilities needed to create educational programs based on online tutorials.
- The impact of using online tutorials instead of traditional classroom instruction on the acquisition of practical skills.
- A training program that would give College of Education students the knowledge and abilities to work with Internet-based instructional applications.
- A training program is being considered to help students pursuing an optimal investment diploma hone their abilities in using chat rooms and discussion forums for online learning.
- The effects of a virtual reality-based learning environment on the students' development of skill performance in their optimal investment diploma programs.

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