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The Effectiveness of Integrating Technology in the Development of Digital Photography Skills among Students of the Basic Education College in Kuwait

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Abstract

The study aimed to identify the effectiveness of integrating technology in the development of digital photography skills among students of the Faculty of Basic Education in Kuwait. The researcher used the survey descriptive method. The researcher prepared a questionnaire of (26) paragraphs. The sample consisted of (288) members and faculty members of the Faculty of Basic Education, and the sample included (169) males and (119) females, who were randomly selected. The results showed the effectiveness of integrating technology in the development of digital photography skills among students of the Faculty of Basic Education in the Kuwait Department of Learning Technology, and the result was high. The average calculation of the development of digital photography skills among students ranged from (3.84-4.02) to a high degree, the overall score (of 3.98) was high. The results showed that there were no statistically significant differences (8.05) attributable to the effect of gender in the effectiveness of technology integration in the development of digital photography skills in students.

Keywords: technology integration, effectiveness, digital photography skills development, students of the faculty of basic education, Kuwait

1. Introduction

Many educational systems try to help teachers find successful ways to integrate technology into their curriculum, teach all subjects, and increase their productivity, including the production of multimedia tools such as: video editing tools, Digital Camera, CD drives, Scanner, and other different technology tools. To achieve the goal of integration or integration,

teachers must be prepared to do so by selecting the appropriate technology to increase their professional productivity and use, and planning and implementing lessons to include their use of technology tools in the teaching and learning processes within the courses.

Digital cameras are now the most popular technology, especially for use in the classroom, because they have many advantages: access to images, easy transfer of images from the camera to computer, and saving them saving different styles and formats, keeping in mind that not only do digital cameras use images, but digital cameras have become an important tool to help teachers and students explore and understand many different topics (Miller, 2002).

Rivard (2004) emphasized that digital cameras are more than just photo-taking, digital cameras are now being used as an educational tool, supporting a meaningful vision of the curriculum, the learning process, as well as the processes of thinking and evaluation.

Richardson & Ryan, 2007, argues that instant digital photography through digital cameras, as well as low cost, has led to many advantages that have contributed to the integration or integration of digital learning and curriculum, which will enhance curricula and improve skills in many areas.

Accordingly, the researcher saw the importance of digital photography to investigate the effectiveness of integrating technology in the development of digital photography skills among students of the Faculty of Basic Education in Kuwait, as a result of the rapid developments in the field of technology and the urgent need to prepare students and teachers before service in a technological environment to enhance the teaching process, by providing courses that try to instill the use of different types of technology, and to develop positive attitudes among students (future teachers) towards the use of teaching technology, as well as technology-free teacher training programs. Contemporary.

2. Theoretical Framework

2.1 The Concept of Digital Photography

There are many definitions that highlight the concept of digital photography and related complex concepts, and we will present some of those concepts.

Webopedia Computer Dictionary (2007: 234) defined digital photography as “the art and science of digital image production and editing, which can be produced directly through a digital Kamia, a snapshot of a video, or a traditional image scanner, and a digital image scanner is added to many special effects through drawing software, printed on a regular printer, or through a photography studio, and can be downloaded and displayed on websites.”

Perrin (2017:1) defined in the Dictionary of Photographic Terms that photography or (photography) was “a relatively modern art and integrated science, born of the association between fine arts and modern technology, and, as in any science or discipline, it has its own terminology and composition that has emerged and evolved over the years.”

Shamseddine (2016:1) defined photography as “a certain combination of different types of

photography techniques that provide the viewer with a message or a scene in an art form, and the most important factors that help get the best images are the right angle, the right lighting, the good lens, and the lenses must be changed according to the lighting and the type of image to be taken."

Digital Camera was defined as "an electronic device that performs digital image conversion" (Cavanaugh & Cavanaugh, 2006: 6).

Abdel Hamid (2005:20) defined photographs as "photographs taken by well-known cameras, and photographs may be images of people, landscapes, ordinary objects used by a person in his life or otherwise".

Afi (2009: 51) defined digital images as "photographs taken with digital cameras to achieve a specific educational goal, according to a predetermined scenario".

He referred to Georgi Gatchev's definition of the image as "the complex completed whole that includes the sensory, mental, cognitive and creative gamer", and explained that the image is "the one that embodies the concept, diagnoses the meaning, and makes the sensory more sensual, and in its holistic sense is not a visual and creative expression that takes the form of imagination and translation of ideas with meanings derived from the cultural environment in which the image's discourse moves".

Al-Ghadami (2004:21) defined the images as "the cultural image, thought, economic and technological production, and not just fun or artistic simulation, a modern language in which words are required to match the truth with the verb, and to represent the technological truth since the image is a technological marker, a production indicator and a future logic". From this concept the dimensions of the picture seem to be more utilitarian.

2.2 Digital Photography and Its Skills and Characteristics

Today, visual elements are increasingly present in teaching and education, as evidenced by the integration of images accompanying texts in textbooks and university courses, images used in learning guides, classroom presentations, virtualization, television and counterprograms. Throughout history, there is a correlation between the display of text information and images. With the development of multimedia technology, there is a clear shift from a culture of long-term memory and text-recalling skills, which were appropriate to earlier times, to another way of acquiring analytical and innovation skills, which are now desirable in modern cultures and contemporary progress (Afi, 2009).

Digital environments, design skills and digital competencies in art and design will provide students with new opportunities for self-expression, creating business opportunities in the visual arts and computer digital technology, as well as digital technology for teachers and students alike to access new tools, organize information presentation and lessons through diverse multimedia (Phelps & Maddison, 2008).

Rivard (2004) noted that digital cameras today are the most widely used technology by school and university students, due to the fact that more students have become visual, as a result of their knowledge of video games, computers and movies, which is particularly

important in terms of the use of images that have become more prevalent in our society.

Paul & Bell (2005) confirmed that digital cameras have become the most widely used technology today because of their low prices, students' love for them, as well as the assertion by many experts and educators that digital images achieve many methodological goals.

(Afi, 2009; Park, 2002) noted the characteristics and features of digital photography as follows:

- Instant photography allows for instant shooting so that they are used at the learning moment, and unwanted images can be easily deleted.
- View photos: Digital cameras through the LCD display enable you to see educational images, where you can see exactly how the image is made before deciding to save it.
- Image processing: It's easy to process the digital image, reed it with digital effects on it, or integrate it with other software.
- View photos: It's easy to view digital images on a different or TV display in the classroom without the need for a computer.
- Storage: Digital images can be stored in several different ways, such as: camera internal memory, or portable storage media such as external memory, floppy disk, hard drive, compact flash cards, and smart multimedia cards.
- Low cost: After initial expenses for purchasing a digital camera, and memory card — the minimum one-time cost — it can be invested and invested in the education process for several years.

Supon (2006) explained that the digital camera provides illustrations, which in turn contribute to the concept of memory activation, digital photography is a powerful tool for teaching and strengthening the content of the curriculum in all educational areas.

Green (2006) added that digital images have become a key element in teaching, due to the speed of digital development, the use of digital images has made teaching a clear and easy process for many teachers in college colleges, and others of them went on the impact of digital images in teaching even further, from their point of view, digital images will revolutionize teaching, because of the great potential of these images; Accessibility, global accessibility, flexibility, sharing and sharing among many users, as well as being available in the hands of each teacher, are ready to be restored and displayed very quickly, as well as on the potential of the features that digital images currently offer in their teaching or in their students' rich presentations of images, whether in classroom experiences, classrooms or

student research and study.

Both Bill and Thompson (2004) point out that the proliferation of technology everywhere across society provides an opportunity for schools to integrate them into the curriculum, digital camera technology facilitates educational uses of digital images in the curriculum, and achieves many educational goals that could not be addressed before.

Afi (2009) stated that digital photography skills included electronic communication, the use of the World Wide Web, the creation of web pages, and digital cameras. There appears to be an interest in many educational institutions in developing teachers' skills in digital photography and its educational uses, so that students' skills will be developed. Developing teachers' skills in digital photography enhances the teaching and learning process ahead, as it is a powerful tool that clearly supports both teaching, learning and thinking processes, and enhances the productivity of teachers and students. Many educational institutions adopt the preparation of courses and training programmers to develop the digital imaging skills of pre-and post-service teachers, as well as to provide that skill to education technology specialists and those working in distance education programmers in order to enhance their productivity.

Rose, 2007, stressed that the role of photography has grown and is important in education, and was essentially important for conveying the necessary and meaningful information to students in order to better understand and understand easier, and help to remember and think.

"Digital photography" is an ideal tool for classroom use to teach all different subjects in addition to being an important teaching tool, the camera has become a powerful educational tool because of its spread in society, low price, ease of use, and democratic.

2.2 The Effectiveness of Technology Integration in the Development of Digital Photography Skills

Many studies and research have pointed to the multiple benefits of using images in teaching and learning processes, particularly in VLE's visual learning environments, and have shown that the use of images increases students' recollection and a better understanding of new learning topics, as well as stimulates discussion and enhance interest. Technical Advisory Service for Images, 2008: b).

Afi (2009) explained the impact of photography on language development among deaf and disabled people, where photography is used by creating visual learning tools, which stimulate the interest of deaf students in general, increase their desire to learn, develop language acquisition and reading skills by using photography as a way to record their experiences to become more exciting and relevant to students' experiences and environments. This is done by enhancing the learning process by taking pictures from their local natural environments, and images of daily events are displayed in the classroom to enhance the learning process, then children are asked to express one word for each image displayed, then the word is placed in a sentence, in sequential steps and gradually students learn to put descriptive and verbal sentences, thereby enhancing the skills gained from digital photography through photographs and improving students with special needs to acquire language, reading skills, and protecting

their learning shares.

Many researchers have indicated (Cavanaugh & Cavanaugh, 2006; Richardson & Ryan, 2007; Technical Advisory Service for Images, 2008) to the possible use of digital images when integrated into different curricula effectively used such as: science teaching, language arts, mathematics teaching, and other curricula and courses. Digital images are a means of building, analysing and creating scientific meanings and concepts among students, contributing to scientific communication between the scientific community, building meanings and concepts in classrooms, especially science, transforming the student's role from passive recipient to observer and participant in the learning process. Digital camera photography can be used in laboratory experiments and educational projects for students, used to photograph observations, and document laboratory results, digital technology is used to effectively enhance teaching, influence teaching and learning, and generate a strong student sense of science education. Digital images are also used to acquire reading and writing skills by creating digital comic books, and contribute to the development of linguistic communication through image as well. Digital photographs contribute to the teaching of social studies, by enhancing the skill of historical thinking, historical analysis, interpretation, research and case analysis.

Ohler (2005) confirmed through a practical project in a school in Oregon, which resulted in students understanding engineering concepts using digital photographs, where the impact remained in the student learning process, enhanced critical thinking, contributed to students' reports in the form of multimedia, and that digital photography, and digital comics contributed to the explanation of some engineering concepts in mathematics when employing optimal employment.

Afi (2009) noted through the experiences of many researchers in teaching teachers' ways to integrate photography into curriculum activities, as teaching methods, and has achieved many objectives such as improving teachers' experiences by learning about basic concepts of photography models, how to integrate them into the curriculum, enhancing teachers' creativity, improving cognitive and creative fields in their curricula, as well as improving students' cognitive and creative skills.

Bouchama (2013) summed up that in the light of the development of learning, the control of globalization and technology, the learner of a day needs a realistic image accompanying the word as a means and an educational tool, and the images are closely linked to the material and educational objectives, in addition to the processes of thinking, the image eliminates the learner from theoretical thinking, develops the skill of asking question and mental thinking, and the ability to store and evoke the image.

The Aga (2015) believes that image-supported learning software plays a major role in the development of visual thinking, especially visual, because it provides visual simulations of sound, image and movement of forms, and provides the learner with a wide variety of information on the subject or new concept with the possibility of representing that information in different and multiple situations, which helps to the multiplicity of visions and the diversity of observations about the idea of subject or educational attitude. It facilitates

thinking, improves the reading skill of visual forms such as images, provides feedback to the learner, and allows it to process and correct errors.

According to Rodrigues (2017), digital photography is an important visual tool in teaching and learning, as it has the ability to engage students in the process of self-reflection in an effort to change behaviors, meditative thinking and critical dialogue, to provide sufficient motivation in discovering knowledge and developing new skills, the most important of which is self-thinking.

Today, teachers can use technology to develop students' creativity and encourage them to use different digital media through their own digital devices, in producing and disseminating their educational projects through social media sites, where students compete in the production of projects that are diverse ideas, practically viable, and according to Nicole Flynn, the application of the body concept "Bring your device to class" will enable students to use technology to enhance their learning opportunities inside and outside classrooms.

Munday, Rowley and Polly (2017), male academic teachers in higher education are expected to create opportunities for their students to participate in learning, which is linked to real-world experiences by providing authentic learning environments such as educational photography and photography as an educational tool, including rich learning and participation in higher thinking skills. In many cases, students adapt to the new educational practice in contemporary education quickly if they are meaningfully integrated into the curriculum and relate to real-world experiences, and the symbolic nature of the visual image enables a broader understanding of the self, and the use of photography in education develops creativity and beauty.

Azahari, Asmail and Sosanto (2019) believe that with the latest technological developments, images can be easily captured and recorded by the latest digital cameras or gadgets such as smartphones or mobile phones.

Yakovleva and Yakovleva (2014) stressed the need to use interactive teaching methods in contemporary higher education, and that the main strategy for modern education should focus on the student's independent activity, effective and technological training of professional competence, and his training to acquire learning and technical skills, such as: learning through photography, this form of teaching helps to stimulate students' creative skills.

Mohammed (2014) achieved the effectiveness of using multimedia to acquire the skills of producing digital photographs for students, and the ability of students to learn to produce digital photographs, as well as to produce them in a distinctive art form, and the results of students were satisfactory in cognitive achievement and skilled performance after learning.

Gulbahar (2008) noted the need to provide technology courses at the university level to instill technology among students and teachers of the future before service, and that teacher preparation institutions seek to instill technology in their rehabilitation curricula, a clear vision to integrate technology into the learning process. The new ones have new roles for teachers, and the success of the integration of education, information and communication technology in the classroom depends on the ability of teachers to build a learning

environment in non-traditional ways, encouraging interactive approach, collaborative learning and working in small teams, and this requires the development of a set of professional skills for the teacher at the classroom level.

One of the most important skills that students and teachers must acquire is digital photography skills in order to increase productivity and enhance the teaching and learning process (Green, 2006; Supon, 2006).

In his study, Afi (2009) stated that the integration of technology in its forms as the design of a proposed module in the course of designing and producing educational means to develop digital photography skills and educational applications among students has had a profound impact on the development of those skills, and the ability of students to conduct educational projects to integrate digital images into curriculum activities, such as: students' skills in dealing with digital cameras and operating and using them efficiently and effectively, and skills enabling students to digital photography rules, skills and techniques, and student skills and skills to integrate digital cameras into methods of integrating digital cameras into methods of integrating digital cameras into methods. Digital images in curriculum activities and the development of positive attitudes towards it. Teaching methods have varied to achieve goals such as individual learning through the e-learning program and practical presentation, to train students in practice in digital photography skills, rules and techniques, theoretical lectures, workshops to discuss students' work, and analyze their photographic skills.

The study and its implementation required a multimedia laboratory, and the availability of tools and materials such as digital cameras and various specifications, accessories from external memories, tripods for cameras and other accessories, also require computers to connect digital cameras to them, and to save images in them, Editing and processing, as well as a television set to connect the digital camera to it, reviewing digital images on its screen, as well as a data projector, various printers to connect digital cameras to print images directly, paperwork for printing digital photographs, and the necessary inks.

2.3 Previous Studies

The study aimed to identify the differences in the process of technological integration in its four stages (readiness, experimentation, integration, creativity) combined and at each stage at a time at the faculty of Hashemite University and Zarqa Community University. The differences in the degree of constraints due to the use of the technological integration of faculty members between Hashemite University and Zarqa Community University are also known. The sample of the study consisted of 98 faculty members in the various departments of The Hashemite University and Zarqa Community University, selected in a random manner, and the descriptive curriculum was used to suit the nature of the study. The results showed that the faculty members of these two universities demonstrated the effectiveness of the stages of readiness and experimentation in general and the superiority of the faculty members of the Hashemite University over the faculty members of Zarqa Al Ahli University in the process of technological integration as well as in the few obstacles due to the use of the technological integration process.

Al-Jabriti Study (2008) aimed to explore a proposed program to develop the skills of using digital imaging technology for students of education technology. The researcher used the experimental method. The researcher prepared an educational program in the light of the list of skills to develop the skills of employing digital photography in the specialist of education technology, and the researcher has developed a list of a set of key skills (78) skills , and (385) sub-skills needed for students of education technology in the Faculty of Quality Education, distributed in three axes: digital image acquisition skills, digital image processing skills, digital image output skills, digital image output skills. The researcher has built a program containing eight computer modes, covering the most important digital imaging skills in its three axes. The results showed the effectiveness of the proposed cognitive and skill supplication program in developing some skills using digital photography technology in students of education technology at the Faculty of Quality Education, and the results showed the validity of the study's assignments.

Afi Study (2009) aimed at investigating the effectiveness of the design of a module in the development of digital photography skills among student teachers. The researcher used the experimental method. The researcher prepared the proposed teaching unit in the development of digital photography skills and educational applications among student teachers, and the trend measure. The sample of the study consisted of (32) students' teachers at the Faculty of Education in Dammam. The results of the study showed statistically significant differences between the average grades of the tribal and dimension application of the student performance card in digital imaging skills, in favor of the dimensional application. The results showed the effectiveness of the module in developing the digital photography skills of teacher students to a large extent, its effectiveness in developing the products of teacher students in educational projects to integrate digital images into curriculum activities, and its effectiveness in developing the trends of teacher students to integrate digital images into curriculum activities.

Abdul Azim Study (2010) aimed to identify the educational digital image-making skills needed for students of educational technology, and the criteria for the Internet-based program in the development of those skills cognitively and performancely. The researcher used the descriptive method to determine the skills of digital image training and the semi-experimental method to experiment with the program and compare its results to two experimental and controlled groups. The study sample consisted of (25) students. In obtaining the results of his study, the researcher relied on the application of three tools, namely, questionnaire seeking students' opinions on educational digital image training skills, a digital image training skills observation card, and a cognitive test to measure students' achievement in those skills. The results showed statistically significant differences in favor of the experimental group in cognitive attainment, and the digital image composition skills note card was attributed to the Internet-based program.

Farwaana Study (2012) aimed to identify the effectiveness of the use of video sites in acquiring digital image design skills among students of the Faculty of Education at the Islamic University of Gaza. The researcher used the experimental method. The researcher built the study tools consisting of a cognitive test, a note card for digital image design skills

using Photoshop, and a product evaluation card for an educational poster designed using Adobe Photoshop. The study sample consisted of (50) students divided into two groups (experimental and female). The results showed the effectiveness of using electronic video sites in the acquisition of digital image design skills by students, where the researcher developed a list of digital image design skills using Photoshop and came (7) skills. The results showed that there is no statistical indication among the average grades of female students of the control group and the experimental group in the dimensional cognitive test of digital image design skills, and that there is a statistical indication among the average grades of female students of the control group and the experimental group in the dimensional application of digital image design skills for the students of the experimental group. There is statistical significance among the average female students of the control group and the experimental group in the dimension application of educational poster design skills for the benefit of the students of the experimental group. The results showed that the level of mastery of the students of the experimental group and the officer in the skills of digital image design reached 80% after the experiment, and the level of mastery of the students of the experimental group and the officer in the skills of the design of educational posters reached 80% after the experiment.

The Sadiq Study, 2013, aimed at exploring how to improve the learning process by using images in the curriculum with three objectives, improving students' cognitive level, easy interpretation of context by faculty members and a smooth understanding of learners. The tools of the Teacher Competency Assessment Model (TEAP), the Student Understanding Assessment Model (SCAP), the Time/Cost Impact Assessment Model (TCEAP) were usedon different samples.

Al-Anzi Study (2015) aimed to investigate the importance of the use of pictorial methods in the classroom and the importance of teachers in Kuwait. The results showed that visual media such as images made it easier for students to understand the concepts of scientific subjects, particularly biology, physics and chemistry. Displaying images in education helps to develop students' own ideas and opinions, thereby enhancing their personal skills while questioning the validity and importance of the concepts put forward. easily understood. The results showed statistically significant differences attributable to the gender variable in favor of males.

The Suksai's Study, (2016), aimed to discover the effectiveness of e-learning lessons and compare the proficiency of the lesson with the principles of the digital photography course in photography technology, using the module program - dynamic guided learning environment (Moodle) and learner satisfaction. The study's results showed that the average score of content and educational design was high, and the average score of e-learning was higher than 80/80 the specified criterion.

Al Azzam Study (2017) aimed to measure the degree of use of smartphones in the educational process: a field study from the point of view of students of educational technology in private Jordanian universities. To achieve the goal of the study, a resolution tool has been developed related to the degree of use of smartphones in the educational

process. The study results showed that the degree of use of students in private Jordanian universities for private smartphones in education was moderate, and also showed no statistically significant differences in the level of significance in the degree of reference in the degree of use of smartphones in the educational process: from the point of view of students of educational technology at Jordanian private universities attributable to the variables of the study: gender, university, and study stages..

The Triacca's study (2017) aimed to recognize teaching and image learning through the use of photography in primary schools. The results showed that there is actual use of photography in primary school by teachers, that they use images frequently in class, that teachers design lessons by developing activities designed with photographs, teachers have taken pictures to support them, that the teacher's activity focuses on three components (design, communication, evaluation), and used a set of images created or compiled in particular Through web search in each lesson. IWB In the student books. Textbooks have never been used. The results showed that images helped simplify concepts and had a decisive impact on learning.

2.4 The Problem of Study and Its Questions

Each successful educational system relies on educational means in the context of rapid advances in technology, ensuring its success and contributing to improving the process of teaching and learning through the development of students' skills, the integration of technology facilitates students' use of technology for learning and communication, develops knowledge products, improves the quality of the learning system, and according to the researcher's work, the acquisition of digital imaging skills as outputs of the labor market is an urgent necessity, in order to increase their production and enhance the process of teaching and learning, to know the role that digital cameras can play in the performance of students, and how digital cameras can contribute as a learning tool to enrich the many aspects of students' learning. According to the researcher's knowledge and knowledge, the study may be the first of its kind in Kuwait, so the researcher considered investigating the effectiveness of integrating technology in the development of digital photography skills among students of the Basic Education College in Kuwait, by answering the following main question: "How effective is the integration of technology in the development of digital photography skills among students of the **Basic Faculty of Education in** Kuwait?" .

The following sub-questions are branched out from the main question:

Are there statistically significant differences at the level of significance (≤ 0.05) between the mathematical averages in the effectiveness of the integration of technology in the development of digital photography skills among students of the Basic Education College in Kuwait according to the variable (gender)?

2.5 Study Objectives

The current study aims to achieve the following:

1) To investigate the effectiveness of integrating technology in the development of digital photography skills among students of the Basic Education College in Kuwait.

2) To detect statistical differences in the effectiveness of technology integration in the development of digital photography skills among students of the Basic Education College in Kuwait according to the gender variable.

2.6 The Importance of Study

The importance of the study lies as follows:

1) Identify the digital photography skills of basic faculty students that can be developed through the integration of technology.

2) To reveal the effectiveness of technology integration in education and development in the training of digital photography skills among students.

3) The study may contribute to further studies in the field of technology integration and innovation and the effectiveness of the development of digital photography skills among students within new variables, due to the scarcity of studies that addressed the topic.

4) Given the results of the current study, it may give useful indicators in the development and diversification of teaching methods, educational tools and means through the integration of technology and its innovations such as digital photography and educational programs, which contribute to the learning process.

2.7 Study Terms

- **Digital photography:** A form of photography, but it uses digital technology to process images without chemical processing, and can be printed but is not a substitute for traditional film photography (Hunter, 2018: 97).

- **Integrating technology:** The process by which software and Internet tools such as: PowerPoint, Microsoft word, Blackboard, Search engines, Hypermedia, and other multimedia tools are integrated into the educational process by faculty members, with the aim of improving students' performance and achievements by placing them in new learning environments (Khasawneh, Khasawneh, Abdul Hafiz, & Omari, 2007: 329).

2.8 Study Limits

1- **Objective limits:** The study limited the effectiveness of technology integration in the development of digital photography skills among students of the Faculty of Basic Education in Kuwait.

2- **Human boundaries:** The study was limited to faculty members in the Faculty of Basic Education in the General Authority for Applied Education and Training in Kuwait.

3- **Time limits:** During the first semester 2022/2021./2021.

3. Method and Procedures

3.1 Study Methodology

The descriptive analytical approach, which is concerned with presenting the measured phenomenon as it is, has been used, as it is appropriate for the objectives and purposes of the current research and its variables.

3.2 Study Community

The study community is made up of all the faculty members of the Faculty of Basic Education in the General Authority for Applied Education and Training of higher education in Kuwait for the academic year 2022/2021, which number (690) members and faculty members.

3.3 Study Sample

The research sample consisted of (288) members and faculty members of the Faculty of Basic Education, and the sample included (169) males and (119) females, randomly selected for the first academic year2022/2021.

Table 1. Iterations and percentages by study variables

	Categories	Iteration	Percentage
Gender	Male	169	59.0
	Female	119	41.0
	Total	288	100.0

3.4 Study Tool

To achieve the objectives of the study, the researcher prepared a measure in the light of his knowledge of the theoretical literature and previous studies available related and related to the variables of the study, and the researcher prepared a questionnaire formed from (26) paragraphs. Indicators of honesty and consistency of the tool have been verified.

Believe the study tool

The researcher made sure of the sincerity of the tool to measure the apparent honesty by presenting it to a number of arbitrators specialized in the curriculum and education technology in order to make sure to measure the appropriateness and affiliation of the paragraphs, the clarity of the phrase and the integrity of its formulation, and make proposals for modification or addition or deletion, the arbitrators have made the observations and appropriate opinion, and have been introduced and made formal adjustments in the drafting, and output of the questionnaire in its final form.

The stability of the study tool

To ensure the stability of the study tool, the test-retest method was verified by applying the scale, and reapplied two weeks later to a group outside the study sample of (30), and then the Pearson correlation coefficient was calculated between their estimates twice.

The stability factor was also calculated in the manner of internal consistency according to the Kronbach Alpha equation, which was (0.88), and these values were considered appropriate for the purposes of this study.

3.5 Procedures for the Implementation of the Study

The researcher prepared this study according to the following steps:

- The researcher prepared the theoretical framework for the study after reading the theoretical literature, and identifying the variables: integrating technology, developing the skills of digital photography among students of the Faculty of Basic Education in Kuwait.

- The researcher conducted a survey of previous studies - according to the researcher's knowledge - the study is almost the first of its kind.

- The researcher processed the tools of the study and confirmed its sincerity and stability through the sample and after presenting it to a committee of arbitrators.

- After ensuring the sincerity and stability of the tools in many ways, the researcher identified the sample of the study and applied the tools to it.

- The researcher came up with a set of results after emptying the scans and conducting statistical analysis using appropriate statistical treatments, and then interpreted them in the light of the theoretical framework and previous studies.

- Based on these findings and their interpretation, the researcher came up with a set of conclusions, and accordingly made several recommendations for use in the field of work education technology, and proposed several topics for future studies.

3.6 Statistical Treatment

In the light of the study's questions, the researcher used the appropriate statistical treatments through analysis on the SPSS program, the researcher has used mathematical averages and standard deviations, the coefficient of internal consistency kronbach alpha and the stability of replays and repetitions, in addition to analyzing the four-way contrast to show the variables of the study, and the use of the Chevy method of dimensional comparisons of the effect of variables.

4. View and Discuss the Results

Question 1: "How effective is the integration of technology in the development of digital photography skills among students of the Basic Education College in Kuwait?"

To answer this question, mathematical averages and standard deviations have been extracted from the effectiveness of technology integration in the development of digital photography skills among students of the Faculty of Basic Education in Kuwait, and the table below shows this.

Table 2. Arithmetic averages and standard deviations related to the effectiveness of technology integration in the development of digital photography skills among students of the Basic Education College in Kuwait

Descending order by calculation averages

Rank	Number	Paragraphs	Average arithmetic	Standard deviation	Level
1	1	Integrating technology contributes to efficient, efficient and efficient handling of digital cameras.	4.02	.901	High
1	2	The student is able to master the rules of digital photography and his skills and techniques.	3.94	.938	High
3	3	He knows how to integrate digital images into curriculum activities.	3.89	.960	High
4	11	The student differentiates between photography and digital photography.	4.02	.891	High
5	18	The student determines how digital cameras work and their basic and non-core parts.	4.00	.927	High
6	6	The student rides the memory inside the camera and takes it out.	3.97	.903	High
6	12	The student can take pictures with the digital camera.	3.96	.940	High
8	9	The student connects the digital camera to devices such as television and computer and reviews images.	3.95	.892	High
8	8	The digital camera connects different printers to print digital images directly.	3.95	.932	High
10	5	The digital camera is simplely maintained.	3.94	.826	High
10	13	The student knows the configuration elements in the photograph.	3.93	.928	High
12	4	Determines the right location for the target (distance, angle of view).	3.93	.926	High

Rank	Number	Paragraphs	Average arithmetic	Standard deviation	Level
12	10	The target position determines the background and the aesthetics of the composition in the photograph.	3.92	.904	High
12	17	He knows digital imaging techniques such as focusing.	3.92	.963	High
15	7	Adjusts the degree of exposure (light force control).	3.92	.973	High
15	21	The effect of colors is known in the photograph.	3.91	.889	High
17	19	Determines the image quality and appropriate shooting size.	3.91	.903	High
18	14	Introduces some effects and processors to digital images.	3.90	.916	High
19	15	He knows the importance of using photographs to enhance the teaching and learning process.	3.86	.960	High
19	16	Identifies digital photo apps in classroom activities.	3.86	.864	High
19	20	He knows the specifications of good educational images, and their production criteria.	3.86	.968	High
19	22	Defines ways to integrate digital images into different curriculum activities to enhance the teaching and learning process.	3.86	1.034	High
19	23	The rules for publishing digital images in participatory content are known as websites.	3.86	.970	High
19	24	Defines digital copyright and ethical rules.	3.86	.900	High
25	25	It is an educational project using digital images.	3.84	.913	High
25	26	Prepares a teaching action plan to use digital images to explain a lesson.	3.84	1.046	High
		College degree	3.98	.607	High

Table 2 shows that the arithmetic averages ranged from (3.8-4.02) where poverty cametan No.1 (1,2) which states that “the integration of technology contributes to the efficient handling, operation and efficient use of digital cameras. The second paragraph states that “the student is able to master the rules of digital photography, his skills and techniques.” In the

first place with an average account of (4.02), paragraph 3,3 which states that "knows the methods of integrating digital images into the activities of the curriculum. "In second place with a mathematical average of 4.0 and poverty number (11), which states that "the student differentiates between photography (film) and digital photography. "In the third place with an average of 3.97, while poverty no. (25,26) and its text" is an educational project using digital images. "The paragraph" is a teaching action plan to use digital images to explain a lesson. In the last place and with an average of 3.84. The rest of the paragraphs were high. The average calculation for the total score as a whole was 3.98.

The results of the current study showed the effectiveness of integrating technology in the development of digital photography skills among students of the Faculty of Basic Education in Kuwait Department of Learning Technology, and the result was high. The average calculation of the level of development of digital photography skills among students ranged from (3.84-4.02) to ahigh degree, and the overall score (3.98) came high. The focus may be on the practical aspect of activities and procedures when integrating technology to meet the needs of students, and the diversity of technology learning sources in various forms seems to have increased their effectiveness, through multimedia, models and programs used in image processing, editing, etc., as well as the diversity of teaching methods from individual learning, group learning, interactive learning, and active through workshops, evaluation and analysis of the work of colleagues. All these measures have enhanced the growth of students' skills, abilities and outputs. This is to provide the full opportunity for each student from the actual practical training in photography skills, and to borrow some external devices and tools to practice training activities, which has been reflected in their effectiveness in achieving the goal. The researcher attributes the result to the fact that the integration of technology in its forms provided a basis for knowledge and understanding of the uses of digital photography and its integration into curriculum activities, and the development of practical skills for digital photography among students, which was reflected in their products of educational projects. The current result was agreed with a study (Triacca, 2017; Suksai, 2016; Sadiq, 2013; Farana, 2012; Abdul Azim, 2010; Afi, 2009; Al-Jabriti, 2008).

Question 3: "Are there statistically significant differences at the level of indication (≤ 0.05) between the mathematical averages in the effectiveness of the integration of technology in the development of digital photography skills among students of the Faculty of Basic Education in Kuwait according to the variable (gender)?"

To answer this question, mathematical averages and standard deviations were extracted for the effectiveness of the integration of technology in the development of digital photography skills among students of the Basic Education College of Kuwait according to the gender variable, and to show the statistical differences between the mathematical averages the "T" test was used, and the grandfather and below explained this.

Table 5. Arithmetic averages, standard deviations and the "T" test of the impact of gender on the effectiveness of technology integration in the development of digital photography skills among students of the Basic Education College in Kuwait

		Number	Average arithmetic	Standard deviation	Value "T"	Degrees of freedom	Statistical significance
Digital photography skills	Male	159	3.95	.586	.695	410	.488
	Female	253	3.91	.556			

Table 5 shows that there are no statistically significant differences (= 0.05) attributable to the effect of gender in the effectiveness of the integration of technology in the development of digital photography skills in students. They are skilled in learning the rules of digital image dissemination in participatory content on websites, and the process of integrating digital images into activities enhances their learning and learning process, increases their concentration, reflection, analysis and conclusion, especially through collaboration and engagement among their colleagues, enhanced competition among them, enthusiasm to learn production and design, and the dissemination of knowledge, so digital photography through the integration of technology creates the skills and knowledge of students with ease, ease, clarity and effectiveness. The current result was in agreement with a study (Azzam, 2017; Alenizi, 2015). It came with differences in male interest.

6. Recommendations

In light of the results, the researcher recommends:

1) The use of modules as one of the main units in the study and enrichment of educational technology and educational methods courses.
2) Strengthenmultimedia laboratories in basic education colleges with digital cameras and different models, computers, data projectors, printers for printing digital images, memories and external batteries attached to cameras, and other digital camera accessories where these tools provide opportunities for actual practical training.
3) Work to develop students' knowledge and skills to effectively integrate technology into teaching and learning attitudes in light of quality standards.
4) The need to provide digital cameras and accessories in learning resource centers in schools to disseminate the experience to general education, so that teachers and students can use them and use digital images in curriculum activities.
5) To draw teachers' attention to the importance of using digital images in their curriculum activities, as well as to the importance of education based on digital image-based education projects.

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