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The Role of Technological Creative Photography in the Framework of Contemporary Education in the Training of the Knowledge, Skills, and Abilities of Students in the College of Basic Education in Kuwait

Ahmad Alfailakawi

Associate professor, College of Basic Education,

The Public authority for applied education and training in Kuwait, Kuwait

Abdul Aziz Dakhil Al-Anzi

Associate professor, College of Basic Education,

The Public authority for applied education and training in Kuwait, Kuwait

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Abstract

The study aimed to investigate the role of technological creative photography in the framework of contemporary education in training students' knowledge, skills, and abilities at the College of Basic Education in Kuwait. The study used the survey analytical descriptive method. The study sample consisted of (278) students from the College of Basic Education, who were randomly selected. The researcher prepared to identify the role of technological creative photography, and it confirmed its sincerity and consistency The results showed that there were no statistically significant differences (= 0.05) attributable to the effect of gender on technological creative photography.

Keywords: technological creative photography, contemporary education, student knowledge, skills and skills training, college of basic education, Kuwait

1. Introduction

We live in a developed world based on technology and its tools in all areas of life, and technological advances have led to the emergence of new methods and methods of indirect education, relying on the employment of technological innovations to achieve the required learning, including the use of computers, smart devices ,and their innovations, satellites, and satellite channels, and the international information network, too make learning available to those who want to learn, so the computer and smart devices were carrying criadera forms of education, individual education, education, education and evaluation, and also formulate the means of the teacher, and also formulate the means. Educational that helps the teacher in his work inside and outside the classroom, these devices are a store of information that is used on request, and new science has emerged as a result of this technology such as: science of educational technology, which contributed to the production of educational means and help the preacher in presenting and explaining his scientific material and making the student dependent on himself in the process of learning, and there are several types of education technology such as: multimedia technology, computer technology, video technology and Internet technology.

Technology can be a powerful tool for understanding learning, and can help confirm and develop relationships between teachers and students, reinvent curricula in learning and collaboration, reduce gaps between equity and accessibility, and adapt learning experiences to meet the needs of all learners. In the context of contemporary education, schools, community colleges, and adult education center universities must be incubators of exploration and invention. Teachers must be cooperative in learning, seeking new knowledge, and constantly antsy acquiring new skills alongside their students, and education leaders must develop a vision to create learning experiences that provide the right tools and support for all learners to thrive. However, teachers need to use technology effectively in their practices to achieve the full benefits of technology in the education system and provide authentic educational expertise (2017).

Education technology and digital technologies have contributed to the development of teaching and learning processes at various educational stages, and teaching and learning techniques play an important role in the educational, teaching, and educational process. The need to keep up with society and prepare students for their roles in society are only two reasons for using technology in education. Teachers and researchers point to the potential of technology to increase learners' motivation and participation, meet different learning patterns and improve learning outcomes (Eady & Lockyer, 2013).

Digital learning sources support information processing by helping students develop mental representation through a combination of media elements provided to them. Digital learning sources include content and sometimes educational activities, combining multimedia elements including text, images, video, and audio to provide information. Research on multimedia learning has shown more positive results for students learning from resources that effectively combine words and images, rather than those that include words alone, and students' attention and interaction with these resources help them process information in their

memory (Mayer, 2008).

To keep pace with the scientific and technological progress in the world, it was necessary to switch to the use of digital technology in photography and cameras smart and mobile devices, which are used as a camera to take pictures and make videos with ease and can use microfilm to digital photography, which is very important, There are digital imaging devices from cameras, which can be transformed through special devices on CDs, computer systems are introduced into the process of displaying images within certain programs, equipped with printers and copiers, and digital imaging techniques enjoy high speed and accuracy in taking pictures. Technological creative photography has been used in the design of digital lessons, which involve the formation of a set of digital or paper-based lessons by university professors, based on certain contents (Itmazi & Ferchichi, 2012).

The curriculum specifically relates to mixed media imaging techniques, technical ideas for trickery photography, and fun and unique compositional strategies. Photographic education can provide a platform for visual intelligence competencies for students, visual thinkers and specialized visual practitioners and contribute to visual literacy.

However, the best institutions are those that can innovate according to the prevailing foundations of the environment in which they operate, they are one of the criteria for measuring performance, whether enterprise or individuals, technological innovation is an important and key factor in ensuring long-term success, and is a form of creativity that is one of the key pillars in building the competitive advantages of enterprises (Bousalami, 2013).

Where creativity and innovation represent the wings of modern education, and in light of current technological developments, and the growing capacity of the current generation of students to capture and store thousands of photos and videos, via their mobile phones, and the possibility of communicating and publishing with their counterparts around the world through social media platforms, it has become necessary to use this technological revolution to develop creativity and innovation, and it has become necessary for education stakeholders to commit to working together to use technology and its innovations such as Creative technology photography to improve education in Kuwait. These stakeholders include leaders, faculty and other teachers; researchers; and decision makers. Financiers. Technology developers, community members and organizations; learners and their families (AbdulMutallab, 2019).

Creativity has something to do with research and development as the main nutrient of technological innovation, and creativity is one of the most important elements of competitiveness, based on the introduction of new and value-added, and achieving excellence that guarantees enterprise excellence and leadership (Al-Jawzi, 2011).

In the light of his knowledge and research, the researcher found a dearth of relevant studies and research on the subject, so he investigated the role of technological creative photography in the framework of contemporary education in the training of students' knowledge, skills and abilities at the College of Basic Education in Kuwait.

2. Theoretical Framework

2.1 What Is Photography and Technological Creativity

Photography is used as a sophisticated educational medium, and educational or pedagogical photography of new terms in the learning process, and contributes to the learning process in providing learners with many skills, including creativity and technology. Photography has become a set of disciplines and each discipline has its own rules, standards and theories.

Digital photography can be defined simply as "art of drawing with light" (Tameti, 2014, p. 1), and this definition was derived from the analysis of the previous two words that make up the word photography, since when a photographer takes a particular image, he simply makes all the movement of things in a specific time and place. Photography does not require many tools and equipment, especially in our time, through the smartphone camera can start learning the basics of this beautiful art, then you can think of improving it and developing it by purchasing rings and other elements that are more professional and professional.

Shamseddine (2016, p. 1) defined photography as "a certain combination of different types of photography techniques that provide the viewer with a message or scene in an art template, 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 photography is a completely different technology and has another independent science and digital photography is much less expensive than film, as well as the speed of events and the speed of ensuring that the image is safe before printing. His idea came from video shooting or live clip, and the possibility of installing moving images and connecting them to the computer and also printing them, hence the idea of a digital camera that works without film but memory developed rapidly digital imaging technology related to the development of the amazing computer in recent times, but as for how digital photography is much easier than other sand faster and more and does not need a professional (Itmazi & Ferchichi, 2012).

"A quiet visual learning tool that evokes movement and emphasizes the impression and idea, can be used to show some detail or to give a full view of the material," said Wardinger and Allison (2017, p. 13).

Flata (2001) stated that photography is an educational medium subject to technical and educational criteria in the classroom, including knowledge of the contents of the medium, that the teacher has the scientific ability to efficiently manage the classroom, that he or she knows how to use the medium, and that his students are involved in employment, use, dialogue and discussion.

On the other hand, innovation technologies are often used to denote something new, witty, amazing, or unique, even when talking about ingenious ideas and the arts, without distinguishing between those things, especially in nature, and the fact that not everything is as good, wonderful or new is a technological innovation that enables the strengthening of the

capabilities of individuals and institutions. Technological innovation can be an administrative idea or in an unusual way of performing business.

Qureshi (2008, p. 136) defined technological innovation as "all new or every small or significant improvement in products and production methods that takes place with individual or collective effort, which proves technically or technologically successful, as well as economically effective (improving productivity and reducing costs)".

Ben Nazir (2012, pp. 145–146) defined it as "a new idea applied to create or improve a process, a commodity or a service".

He defined him (Amemer, 2018, p. 27) as "all new or every small or significant improvement in products and production methods that takes place with individual or collective effort, which proves to be technically or technologically successful as well as economically effective (improving productivity and reducing costs)".

The Tacondeau (Colonel, 2015, p. 44) defines the system of technological innovation as "a set of activities or functions designed to transform the idea of a product or production method, until it is accomplished and embodied in a concrete form." This allows for the passage of intellectual creativity based on intelligence and ideas to practical creativity through which these intellectual creations take shape until they exist.

Fernz-Walch (2010, p. 12) has defined creativity as "introducing something new, unknown."

According to Azahari, Asmail and Sosanto (2019, p. 81), the tool or camera is "a mechanical device that can be produced and enhanced by technological invention and revolution, its application is the same with other tools such as smartphone, computer, car, machine and many more to mention." Both types of still and moving images play a very important medium in providing different types of content and messages that become part of human civilization or culture.

- Accordingly, the researcher believes that the definition of **technological creative imaging** is not available in the studies and research esoteric, so the researcher will know it as "a contemporary requirement for education to develop the abilities, skills and knowledge of students through automatic sources of creativity and through that technology can be chosen as digital imaging devices (mobile cameras and smart devices) for innovation, development or improvement that can be adapted and improved, and technology is chosen through a set of steps such as identifying technological needs in light of the desired goals, and then directing sufficient educational attention to the system to guide students to knowledge acquisition, skills and modern capabilities."

2.2 The Importance and Advantages of Technological Creative Photography in Contemporary Education

Photography is about creating images using light, and is an individual way to interpret reality by a photographer. Many of the images have had a major impact on the people who have succeeded in changing the world, and photography today has become an almost essential necessity for the daily life of a modern individual, and the importance of photography and

representation in the contemporary world is accompanied by the rapid development of technology, which seemed the basics of life in its forms, especially the educational process. Photography is taking on a new dimension today, particularly thanks to the Internet and the availability of advanced digital cameras and smart devices, which are everywhere—globally. Students using different teaching tools are meant to get used to linking and building the meaning of their experiences and this work requires reflection (Rodrigues, 2017).

Photography has an important role that cannot be ignored for the purpose of entertainment, education, education, the preservation of values and ideals, and educational photography for which it is intended (Flath, 2001):

1) Optimize the use of the camera and get an image that achieves the educational purpose.

2) Save time, effort and money.

3) Achieving better communication between students and teachers on the one hand and from the image and educational material on the other.

4) Harness this technology to serve educational goals and preserve eternal spiritual values.

5) Develop creativity and beauty, and will lead to a fruitful use of student time both within and outside the educational institution.

Nofal (2007) stated that the educational image resulting from photography, a function that is unique to it—has a role in the development of the mental abilities of the learner/future of creativity, perception, thinking, and long-term remembering.

Flata (2001) points out that photography is distinguished from other means, arts or sciences that it is possible to practice without prior study or long experience. The big and small, the world and the public can carry any camera, whether in smart devices or digital camera and other use, take photos and videos by camera, and get a good picture that achieves the desired purpose. This photography feature makes it an excellent tool in learning and education, because it provides an opportunity for both the teacher and the student to make him practice this art to achieve different educational goals. The images are characterized by their ability to meet the requirements of modern education, because of its element of excitement, excitement, art, vitality and creativity. It is well known that the importance of photography and its representation in the contemporary world is accompanied by the rapid development of technology.

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 byod concept "Bring your device to class" will enable students to use technology to enhance their learning opportunities inside and outside classrooms.

Abu Amisha (2019) noted that the features of the camera and microphone in the mobile are enormous and innumerable, and can be employed in teaching. The teacher asks students to

photograph signs, texts and signs under their eyes to represent the lesson they have studied or the mistakes they have made in writing them, or to come up with authentic real texts to represent what they are studying. The voice recording feature is also very good in teaching Arabic, such as the learner recording his presentation about his studies and sharing with his colleagues, with the need to comment on each student with another registration, and so on a daily or weekly basis as required by the teacher's lesson, which brings language benefit, pleasure and suspense.

2.3 Key Elements of Digital Photography

In order to obtain an image drawn by light, you will need a set of important and necessary elements to achieve this, there must be these three elements of photography, if one of them is absent, the photographer will not be able to obtain an image drawn by light, and can be limited as follows (Tamayati, 2014):

1) Light: Which is the most important element in the world of photography, since in his absence the photographer cannot get any result without the darkness of the darkness.

2) Camera: Is the tool through which it can be painted with light, and produces a complete and complete final image, each of the known arts cannot be mastered without the necessary tools and equipment for it.

3) Goal: There must be a goal in order to film it, it is not possible to photograph the void because it will not express anything and will not have any value.

2.4 The Role of Technological Creative Photography in the Formation of Students' Knowledge, Skills and Abilities

Industrial Revolution 4.0 has become a new catalyst or catalyst for the process of transformation in everyday human life. It is ultimately a process of transformation and revolution where different areas such as services and production are involved in education, economics, production, media, transport, etc. The Industrial Revolution 4.0 stimulates and directly stimulates it towards a transformation in the world of education. It requires changes and transformations in content, particularly in Technical and Vocational Education, and the entire educational institution including administrators, academics and students, and physical facilities are required to be ready and will be affected by this development. It is necessary to add the curriculum in various disciplines, particularly new content, skills and knowledge, including information technology and advances in digital technology. Regardless, new educational programmes may have to be established and developed to meet current and future demands. With this current development, it also affects the development of media, visual studies (images) and areas of communication in studies including photographic education. All these themes are also linked to the development of the contemporary creative industry 4.0, which corresponds to the Industrial Revolution 4.0, which has become one of the important industries in today's global development. The subject of photographic education is shared directly when images are transformed from the traditional way or analogue mode to the advancement of digital technology. As a result of this revolution, production processes are faster, cheaper and easier to implement. Although images are easy to access, they require

certain levels of competencies to understand, read and interpret images rationally (Azahari, Ismail, & Susanto, 2019).

Many researchers (Abu Nyan, 2018; Costa & Kallick, 2008) That photography and the resulting images are important means to develop thinking skills, which are important basic skills in the educational fields in relation to the development of students' abilities and the development of their thinking, with the progress and cognitive development of our time, knowledge is not limited to what the student receives in the classroom, and is no longer an end in itself, but a means of learning and training in higher thinking skills so that students are able to face the difficulties of life and their problems and be able to make the right decisions in their lives. This requires directing students' thinking and training of their knowledge, skills and abilities, where teachers use many strategies to guide students through a period of reflection, provided by the teacher from various tools and means, including: discussions, interviews, interrogations, records, magazines containing text sand and images, another tool for student thinking, where images are educational tools especially educational technology-related photography.

Technology-based learning solutions allow individuals to define their learning path, achieve competencies and think through innovative new platforms, such as: photo programs, discussion boards, blogs, interactive exercises, simulations, and multimedia programs, all of which encourage learners to manage their learning process (Day, Harris, Hadfield, Tolley, & Beresford, 2000; Woods & Rosenberg, 2016).

Visual methodologies in education have the potential to involve students in the process of self-reflection and other thinking processes. Image-based methodologies such as: reflexive imaging in educational environments have significant benefits, including meditative thinking, critical dialogue and action, and it is believed that educational tools such as these can provide a sufficient incentive to engage learners in discovering knowledge and developing new skills simultaneously. In addition, some ideas are explored under experimental learning theory briefly based on the idea that knowledge is constantly derived from the learner's experience (Rodrigues, 2017).

Photography has been adopted as a method of learning and research successfully by a number of academics. This phase marks the beginning of the use of images to extract information from people, especially the use of images to provoke the response of learners, which became known as photo-capture technology (Harper, 2002).

Many researchers believe that it is necessary to introduce educational or educational photography in schools, colleges and universities to many requirements such as public relations, marketing and advertising, in addition to skills that students may benefit such as thinking, remembering, creativity, meditation and other skills. One of the objectives of using a set of tools in the field of education is to enhance the social responsibility of the teacher among their students, by exploring certain topics that generate the way to represent, the way new thinking and knowledge are disseminated based on perspective and ideas (Rodrigues, 2017; Chivers, 2019).

Rose (2007) noted that educational photography includes visual educational tools, educational materials that are used only for visual presentation and the formation of certain images in memory, which affect memory, understanding and interpreting the content of teaching, and also help students to think self-reflection.

Michel (2008) explained that in terms of education, a range of tools can be used to engage participants in visual research such as: (drawing, live cameras, video cameras, family photos).

Munday, Rowley and Polly (2017) said 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.

Mitchell (2011) stated that the visual image resulting from photography across its instruments creates a creative space for research, and therefore can look new as a liberal experience.

Rodrigues (2017) noted through his experience with graduate students of tourism at the Polytechnic Institute in Baja, Portugal, the aim was to explore impressions and opinions based on photographs resulting from photography, and a more interpretive technique for analysing data, such as content analysis, was needed. Accordingly, the web QDA image and text analysis program was used (Souza, Costa, & Moreira, 2016). Inverter as an example. It can be said that adopting visual methods and techniques in educational contexts that need to be thought-given provides new insights and perspectives that need to be further explored in the future within the framework of contemporary education.

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.

The researchers suggested using the visual medium for research in the field of anthropology, and sociologists began to realize that interviews respond to images without hesitation (Hurworth, 2003). Photography has been adopted as a method of learning and research successfully by a number of academics.

“Experimental learning is common among students because it is more fun and leads to deeper learning compared to learning methods,” said Wurdinger and Allison (2017, p. 15).

Ammar and Al-Qabbani (2011) added the importance of visual thinking to link ideas and information with images and forms that are easy to understand and understand, free the educated mind and thinking from restrictions and get used to specific fixed answers, and helps educational photography to develop the accuracy of observation when, access to information that is not apparent at first glance by reading forms and looking at images,

training the learner to see the internal relationships of forms and images, developing the ability of the learner to observe accurately, develop the technical skills of the learner, and acquire some important skills such as A comprehensive view and then accurate analysis as new relationships deepen and productive, as well as the development of motivation and curiosity among the learner towards discovering new relationships and characteristics.

Gaidan (2018) concludes that education technology and innovations are concerned with designing and producing targeted learning environments, which raise the efficiency and effectiveness of the educational process, and develop visual thinking among students. Visual thinking strategies aim to develop communication skills and creative thinking skills in an effort to understand the environment surrounding the learner through the language of image and form. In addition to creating a spirit of competition among learners in the internal and external environment.

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.

Azahari (2013) confirmed that photographs and animations provide the function of a mirror that provides an explanation for moving something beyond the surface of the image.

Photography in education focuses not only on what we see with the eyes; it involves what we see in the mind, which involves the process of creating thinking and analysis. The next industrial revolution will not focus on automated system or machine, but is likely to shift to a focus on the point of view of creativity.

Colonel (2015) points out that there are many sources of creativity that appear spontaneously, including internal and external, new knowledge, demographic changes, cognitive and sensory changes, the need for a method, inconsistent opportunities, and changes in the sector and in the market structure. Through this, technology can be selected for innovation, development or improvement, which can be adapted and improved. Technology is chosen through a range of steps such as identifying technological needs in the light of the goals to be achieved. The refore, the development of technological capabilities by creating a range of research and training facilities, the qualification and training of human skills, and directing sufficient attention to the educational system and guiding students towards acquiring modern skills to align the whole educational pattern with the needs to create the basic base of technological know-how, as well as flexibility in the long run and short-term. Technological innovation enhances competitive advantage.

Creativity lies in photography through the use of technology such as mobile phone, through imaging via mobile camera, information and all forms of intellectual production that can contain it takes images that may be in the form of audio recordings or live video footage of an event, or sudden recorded by the mobile camera, which is characterized by its ability to attract the attention of individuals, exchange of communication, the fact that individuals have common interests, consider the images filmed from the sources of information and knowledge, and the development of capabilities in dealing with technological software,

which helps to Develop different skills (Amer, 2015). Technological creative photography has become a contemporary global trend.

Itmazi (2010) stressed the importance of using photography in the learning process, where technology (mobile phone) can be used in the field of education, as most mobile and smart devices have digital cameras to take high quality photos and videos, store them in the device, or send them via multimedia messaging service, via Bluetooth, via the web, the Internet or others.

Many believe that the use of visual media is one of the necessary tools that teachers must use, and that it is necessary to integrate them into the curriculum, so that students can participate effectively in the learning process several times, and in multiple ways during each academic year. Photography is one of the means to help students develop and develop critical thinking skills, collaboration, teamwork, global communication, and media knowledge, and many organizations and institutes have supported that medium (Rodrigues, 2017; Azahari, 2013).

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.

Triacca (2017) found the importance of images in the learning and learning process through the actual use of photography in school.

Many studies and research have pointed to the use of photography in teaching and images in teaching practices, which is a need, an opportunity and a challenge for the modern teacher, because in the educational design process, teachers can be active and responsible digital learning images. The camera lens through which they tried to deal with the problem is neuroscience, as neuroscience and educational pathways can converge: contributions about the specificity of the visual brain, the value of the body in the aesthetic experience, and the teacher's interest, are already used to employ images on a large scale. Providing learners with a graph or symbolic representation supports brain function, and usually engages in the search for the basics within the flow of the world, making the learner work on a simplified scenario. The role of the teacher is to guide learners to deep understanding, and one way in which images support brain action is to visualize concepts (Rivoltella, 2012; Damasio, 2012; Freedberg & Gallese, 2009; Sontag, 2004; Triacca, 2017).

Research focuses on photographs: it's easy to capture controllable objects, thanks to digital convergence, where it allows you to post a photo taken with a smartphone on Instagram or send it to the WhatsApp group (Gardner, 2009).

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.

3. Previous Studies

The study of Khasawneh, Khasawneh, Abdul Hafiz and Al-Omari (2010) aimed to identify the differences in the process of technological integration in its four stages (readiness, experimentation, integration, creativity) combined and at each stage individually among the faculty members of the 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 The Hashemite University and Zarqa Community University are also known. The study sample consisted of (98 faculty members in the various departments of The Hashemite University and Zarqa Community University, selected in a random way, and the descriptive method was used to suit the nature of the study.

Al-Jawzi Study (2011) aimed to identify the role of technological innovation in enhancing the competitiveness of Arab countries. To know the role of technological innovation in enhancing the competitiveness of Arab countries. The results of the study showed that the six Gulf Arab countries and Tunisia, which topped the innovation index, which is the ability to innovate and scientific and technical progress, topped the global competitiveness index globally, so the Arab countries must continue the reforms that they have begun, especially those related to education at its various stages with a focus on secondary and higher education, which enhances the factors of innovation and scientific progress.

The Triacca study (2017) aimed to identify teaching and image learning through the use of photography in primary schools. Many tools were developed with the aim of focusing on educational practices on the use of photography in the context of primary school. In the case of the study, the types of lesson activities designed using (or making) photographs will be identified; IWB is a common support for viewing images and short text, browsing the web, or as an interactive surface that allows objects to be edited and processed. The teacher was very interested in archiving the educational materials produced, even in light of the possibility of reusing them in subsequent lessons. In almost all cases, the images were also printed to be pasted to children's notebooks. Textbooks have never been used. The teacher emphasized that third-grade children participated in photography language projects. Photography was used for storytelling. The images were suggested in various activities. A lesson was designed and conducted with techniques. During the hours of the lesson, the teacher used the camera to take selfies that are the subject of analysis and discussion with students. The Teacher used the Smartboard Notebook to compile digital materials for lessons (collections of photographs, optionally accompanied by capital-written explanatory comments). The teacher has used images and educational activities in the class, scenario 1 (from photographs to lesson activity), scenario II (from lesson activities to photographs): the teacher imagines a lesson, and realizes once designed that the inclusion of some images may be somewhat useful, interesting, stimulating and illustrative. The results showed that photographs helped simplify concepts and had a decisive impact on learning, as children analyzed structure and characters, identified Propp cards and wrote in original fairy tale pairs. After the photography sessions, the children produced the audio narrative.

Pesik Study (2010) aimed to reveal the improvement of the student's performance and

writing skills using photography, self-photography and music. The sample of the study consisted of (19) students from Keywatin Community College, the70th school district in Port Alberni, and included the sample (12) students from social justice, and (7) students of the alternative program in the classroom. Some students at Keewatin Community College raised emotional feelings about songs and images in the community. Which contributed to improving their performance and writing skills in different age groups. The use of automatic photography in conjunction with music of different races, genders and nationality will help them to express their beliefs and ideas, which they will not be able to express only when using social art forms and dominant forms of media. In general, it may help develop a society that relies on social justice for all.

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 indication 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 due to the changes of study: gender, university, and study stage.

Garcia Lazo's study (2012) aimed at identifying the impact of images on students living in a photo-saturated world and how critical thinking skills can be developed in students through photo capture. The study found that the creation of images inspired students' thinking.

Lavalle and Briesmaster (2017) aimed to investigate the use of image descriptions as a strategy to develop and enhance communication skills among eighth-graders attending a private English school in Chile. The results showed that students' communication skills increased as a result of the integration of image descriptions into classroom activities, which in turn enhanced students' overall participation.

3.1 Commentary on Studies

The current study on previous studies was characterized by the fact that, according to the researcher's knowledge, it was the first of its kind in Kuwait with regard to the subject of the study, which sought to investigate the role of technological creative photography in the framework of contemporary education in the training of the knowledge, skills and abilities of students in the College of Basic Education in Kuwait, and has benefited from previous studies in terms of sample, methodology and statistical methods, in addition to the benefits in the preparation of the current study tool, and the results of the studies.

4. The Problem of Study and Its Questions

Each successful educational system relies on educational means within the framework of contemporary education, ensuring its success and contributes to improving the process of teaching and learning through the formation of the knowledge, skills and abilities of students,

any means used to serve education such as photography is considered an educational tool, and the success of this medium depends on providing sensory awareness, arousing and arousing the learner, providing concrete real experiences, and continuous development of thinking to the learner. Technological innovation is an essential element in the global competition between educational and economic institutions in general, which are keen to compete and retain the value of technological development and its innovations in the context of contemporary educational, and for qualified outcomes of the labor market, and to achieve the educational system the teacher needs: information, skills dealing with modern technology, and modern technologies.

- According to the knowledge and knowledge of the researcher—did not get studies and related research, and may be the first study of its kind, so the researcher considered investigating the role of technological creative photography in the framework of contemporary education in the training of the knowledge, skills and abilities of students in the College of Basic Education in Kuwait, by answering the following main question: "What is the role of technological creative photography in the framework of contemporary education in the training of **the knowledge, skills and abilities** of students in the College of Basic Education in Kuwait?".

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

1) Are there statistically significant differences at the level of significance (≤ 0.05) between the mathematical averages in the role of technological creative photography in the framework of contemporary education in the training of the knowledge, skills and abilities of students in the Basic Faculty of Education according to the variable (gender)?α

5. Study Objectives

The current study aims to achieve the following:

1) Exploring the role of technological creative photography in the framework of contemporary education in training the knowledge, skills and abilities of students in the College of Basic Education.

2) To detect statistical differences in the role of technological creative photography within the framework of contemporary education in the formation of the knowledge, skills and abilities of students in the College of Basic Education according to the variable (gender).

6. The Importance of Study

The importance of the study lies as follows:

1) To define the role of technological creative photography in the framework of contemporary education in the formation of the knowledge, skills and abilities of students in the College of Basic Education.

2) To reveal the importance of technological creative photography within the framework of contemporary education in the training of the knowledge, skills and abilities of students in the College of Basic Education.

3) The study may contribute to other studies in the field of technological creative photography within the framework of contemporary education in the formation of the knowledge, skills and abilities of students within new variables, where there are no studies on the subject.

4) In light of the results of the current study, it may give useful indicators in the development and diversification of teaching methods, and educational tools in the light of technological innovation by identifying sources of creativity and choosing technology such as photography, and educational programs, which contribute to the learning process.

7. Study Terms

- **Photography:** "Technique of recording an object's image through light or radiation on a light-sensitive material" (Rosenblum, Grundberg, Gernsheim, & Newhall, 2018, p. 1).
- **Technological innovation:** "A complex interaction process at the first level;
- **Technological creative imaging:** The researcher defines it procedurally as "a contemporary requirement for education to develop the abilities, skills and knowledge of students through automatic sources of creativity and through it technology can be selected as digital imaging devices (mobile cameras and smart devices) for innovation, development or improvement that can be adapted and improved, and technology is chosen through a set of steps such as identifying technological needs in the light of the objectives to be achieved, and thus directing sufficient attention to the educational system to guide students towards acquiring modern knowledge, skills and capacity."

8. Study Limits

1) Objective limits: The study limited the disclosure of the role of technological creative photography in the framework of contemporary education in the training of students' knowledge, skills and abilities at the College of Basic Education in Kuwait.

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

3) Time limits: During the second semester 2020/2021.

9. Method and Procedures

9.1 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.

9.1.1 Study Community

The study community is made up of all the 680 faculty members of the College of Basic Education in the General Authority for Applied Education and Training in Kuwait for the 2017/2018 academic year.

9.1.2 Study Sample

The research sample consisted of (278) members and faculty members of the College of Basic Education, and the sample included (164) males and (114) females, randomly selected for the second academic year 2020/2021.

Table 1. Iterations and percentages by study variables

	Categories	Iteration	Percentage
Gender	MALE	164	59.0
	Female	114	41.0
	Total	278	100.0

9.1.3 Study Tool

To achieve the objectives of the study, the researcher prepared the questionnaire in the light of his knowledge of the theoretical literature and previous studies available although rare, and there are no studies related to the variables of the study, so the researcher prepared a questionnaire formed from (26) paragraphs. Indicators of honesty and consistency of the tool have been verified.

9.1.4 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 the resolution is taken out in its final form.

9.1.5 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 (40), and then the Pearson correlation coefficient was calculated between their estimates twice.

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

9.2 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: creative and technological photography.

- The researcher conducted a survey of previous studies that dealt with each variable separately in Arab and foreign environments, and did not get the researcher studies related to the variables combined - 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.

10. 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.

10.1 View and Discuss the Results

Question 1: "What is the level of the role of technological creative photography in the framework of contemporary education in the training of the knowledge, skills and abilities of students in the College of Basic Education in Kuwait?"

To answer this question, the mathematical averages and standard deviations of the role of technological creative photography in the framework of contemporary education in the formation of students' knowledge, skills and abilities were extracted from the point of view of the faculty at the College of Basic Education in Kuwait, and the table below explains this.

Table 2. Arithmetic averages and standard deviations for paragraphs related to the level of the role of technological creative photography in the framework of contemporary education in the training of the knowledge, skills and abilities of students in the College of Basic Education in Kuwait ranked descending according to the mathematical averages

Rank	Number	Paragraphs	Average arithmetic	Standard deviation	Level
1	1	Technological creative photography contributes to continuous improvement of students' intellectual abilities and thinking.	4.02	.901	High
1	2	Providelearners with tangible real-life experiences to improve learning performance and media knowledge.	4.02	.891	High
3	3	Provides a sensory perception for learners.	4.00	.927	High
4	11	Encourages competition and knowledge among students to achieve qualified outcomes for the labor market.	3.97	.903	High
5	18	Photography is associated with educational environments that encourage design, critical thinking, contemplative, innovative and comparative.	3.96	.940	High
6	6	Helps to develop inference, analysis and conclusion skills.	3.95	.892	High
6	12	Contributes to providing learners with technology skills and cognitive processes.	3.95	.932	High
8	9	Learners develop creativity and beauty when taking pictures with practice.	3.94	.826	High
8	8	As an educational tool, it guides students' thinking during the lesson.	3.94	.938	High
10	5	Images and videos from photography allow learners to identify and achieve competencies.	3.93	.928	High
10	13	Images translate ideas and concepts derived from the cultural environment that stimulate self-reflection.	3.93	.926	High
12	4	As an effective visual means of teaching, the objectives of the educational system serve to excite learners and excite them with contemporary learning.	3.92	.904	High
12	10	It is used to express the content of a particular situation for the purpose of communicating information to students to give them a variety of mental skills and abilities.	3.92	.963	High
12	17	Facilitates the course of the lesson, quickly reaches the goal, and illustrates a particular vision.	3.92	.973	High
15	7	Contributes to saving time, effort andmoney.	3.91	.889	High
15	21	Images as the outcome of creative and creative activities attract attention, focus students deeply and achieve their role in education.	3.91	.903	High
17	19	It aims to promote the way knowledge is disseminated to increase efficiency and efficiency as a key factor in competition.	3.90	.916	High
18	14	Helps rich learning, participation and collaboration among learners.	3.89	.960	High
19	15	Works to support greater choice of learner, creativity, reflective thinking and self-guidance for**students.**	3.86	.960	High
19	16	Contributes to research and development as a source of technological creativity among students.	3.86	.864	High
19	20	Develops visual thinking skills such as visual relay skills, visual visualization skills, visual translation skills, visual recognition, and visual visual ization skills.	3.86	.968	High
19	22	Helps innovation, new ideas, building new information and translating it into innovation or development of educational outcomes.	3.86	1.034	High
19	23	Develops communication and creative thinking skills in an effort to understand the environment around the learner.	3.86	.970	High
19	24	Contributes to the introduction of new products and technical and technological methods using a mobile or digital camera (innovation of methods).	3.86	.900	High
25	25	Introduced through the use of new processes to satisfy the needs and desires of learners and achieve learning goals.	3.84	.913	High
25	26	Helps connect university learners to the outside with existing and potential competitors.	3.84	1.046	High
		College degree	3.98	.607	High

Table 2 shows that the arithmetic averages ranged from (3.84–4.02), where poverty came tan No. (1,2) which states that "technological creative photography contributes to continuous

improvement of the mental abilities and thinking of students. The paragraph provides learners with tangible real-life experiences to improve learning performance and media knowledge. “In the first place with an average account of4.02, paragraph 3, which states that “provides a sensory perception of the learners. “In second place with an average calculation of4.00 and poverty no. (11) which states “encourages competition and knowledge among students to achieve qualified outcomes for the labor market. “In third place with an average of3.97, while poverty tan no. (25, 26) and its text “is provided through the use of new processes to satisfy the needs and desires of learners and achieve the goals of learning. “The paragraph “helps connect university learners with the outside environment with existing and potential competitors. “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 8.3.9.

The results of the current study showed the great role of technological creative photography in the framework of contemporary education in the formation of the knowledge, skills and abilities of students in the College of Basic Education department of learning technology, and the result was high. The mathematical averages of the level of educational images as an educational tool ranged from (3.84 to 4.02) to a high degree, and the overall score (3.98) was high. The researcher attributes the result to the awareness of faculty members of the importance of using modern methods and methods within the advanced technology in education, in particular the technologies available to students and the university, and their awareness of the role played by digital and smart devices that are almost accessible to all such as mobile phone and the use of camera in it for photography in the framework of contemporary education, Digital, smart and mobile devices are a source of creativity that exists automatically, and the need for a method or method of creativity through which the right technology is chosen in contemporary education for development, improvement or innovation, and mobile camera photography in education has a major role in the formation of abilities, skills and knowledge of students in learning, such as : Developing technological capabilities, modern skills to harmonize the contemporary educational pattern, and creating a competitive advantage among students in the internal and external environment, technological innovation enhances competitive advantage, develops communication, cooperation and participation skills, creative and innovative thinking, and refines their talents in photography that may be a future career, in addition to a factor Thrill and flexibility in photography, you don’t need experience or professionalism, but it needs the teacher to be able to design and produce targeted learning environments, use software and media that produce images artistically and videos, and deal with applications that deal with the image to produce it appropriately and technically, thus educating students to produce images. In the light of the field experiences of faculty members with their students, it seems that technological creative photography works to raise the student’s ability to self-learning, self-reflection, meditation, mental abilities, and media knowledge within the framework of tangible real-life experiences, as well as to enhance the student’s perceptual perception, and to disseminate knowledge through the dissemination of images and videos taken through various educational and communication sites, Photography helps students analyze the output (image or video), inference, inference, comparison, exploration, imagination, visual pleasure, acquisition of new information, as well as the abilities of students to evaluate, and communicate the output

of photography through their visual language and writing, as well as to enhance their attitudes towards contemporary learning. The results of the current study were agreed with a study (Triacca, 2017; Pesik, 2010; Azzam, 2017; Garcia Lazo, 2012; Lavalle & Briesmaster, 2017; Al-Jawzi, 2011).

Question 3: "Are there statistically significant differences at the level of significance (≤ 0.05) between the mathematical averages in the level of technological creative photography in the framework of contemporary education in the training of the knowledge, skills and abilities of students in the College of Basic Education in Kuwait according to the variable (gender)?"α

To answer this question, the mathematical averages and standard deviations of the level of technological creative imaging in the framework of contemporary education were extracted in the training of the knowledge, skills and abilities of students in the College of Basic Education according to the variable of gender, and to show the statistical differences between the mathematical averages the test was used "T", and the grandfathered below explained this.

Table 3. Arithmetic averages, standard deviations and the "T" test of the impact of gender on the level of technological creative photography in contemporary education in the training of the knowledge, skills and abilities of students in the College of Basic Education

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

Table 3 shows that there are no statistically significant differences (= 0.05) attributable to the effect of gender on technological creative photography. The researcher attributes the result to the fact that students of different gender are attracted by learning through photography and the resulting images and videos draw their attention, and the outputs increase students' understanding of the content, increase their concentration and reflection, reflection, analysis and conclusion, especially through cooperation and participation among their colleagues, enhance competition among them, enthusiasm to learn production and design, and spread knowledge, so creative technological photography works to create the skills and knowledge of students easily and clearly, and does not cost them effort and money. The current result was agreed with a study (Al-Azzam, 2017; Pesik, 2010)

11. Recommendations

In light of the results, the researcher recommends:

1) Providing digital and smart devices at the university to facilitate students and use them in the learning process.

2) Qualifie faculty members to enable them to use private media and software to produce and deal with images and videos to produce them artistically.

3) Provide special imaging laboratories equipped to produce and edit images and audio, introduce audio and text, and convert lesson synoun activities and lessons into images, and images into lesson activity.

4) Create an educational site where the result of technological creative photography is disseminated from images, videos and written texts for comment, discussion and analysis with others, to create a spirit of innovation, art, beauty, and talent.

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