



T.C.
ÇANKIRI KARATEKİN UNIVERSITY
INSTITUTE OF FINE ARTS
DEPARTMENT OF ART AND DESIGN

**USING COMPUTERS IN BLENDED-LEARNING
METHODS IN CONTEMPORARY IRAQI ART
EDUCATION**

RANA ABDULRAZZAQ ATTA

MASTER'S THESIS

Supervisor
Prof. Dr. Ersoy YILMAZ

Çankırı – 2023

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BİLİMSEL ETİK BİLDİRİMİ

Yüksek Lisans olarak hazırladığım *Using Computers in Blended-Learning Methods in Contemporary Iraqi Art Education* adlı çalışmanın öneri aşamasından sonuçlanmasına kadar geçen süreçte bilimsel etiğe özenle uyduğumu, tez içerisindeki tüm bilgileri bilimsel ahlak ve kurallar çerçevesinde elde ettiğimi ve sunduğumu, doğrudan veya dolaylı olarak yaptığım her alıntı için kaynak gösterdiğimi ve yararlandığım eserlerin kaynakçada gösterilenlerden oluştuğunu; ayrıca, yazılı izin alınmış olması dışında tezde herhangi birisine ait kişisel veri bulunmadığını, tezin bizzat teslim ettiğim basılı veya elektronik kopyasında bulunan bana ait kişisel verilerin tezde yer alması için izin verdiğimi ve telif hakkı başkasına ait olan yazılı, görsel, işitsel veya başka biçimdeki herhangi bir malzemenin ancak bilimsel etik ilkeleri çerçevesinde ve/veya gerekli izinler alınarak tezde kullanıldığını beyan ederim.

15 / 06 / 2023

Signature

Rana Abdulrazzaq ATTA

TEZ KABUL VE ONAY

ÇANKIRI KARATEKİN ÜNİVERSİTESİ GÜZEL SANATLAR ENSTİTÜSÜ

Rana Abdulrazzaq ATTA ATTA tarafından hazırlanan *Using Computers in Blended-Learning Methods in Contemporary Iraqi Art Education* başlıklı bu çalışma, 22/06/2023 tarihinde yapılan Tez Savunma Sınavı sonucunda oybirliğiyle başarılı bulunarak jürimiz tarafından Sanat ve Tasarım Anabilim Dalı Sanat ve Tasarım-İngilizce Programında Yüksek Lisans Tezi olarak kabul edilmiştir.

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ONAY

Bu tez, Çankırı Karatekin Üniversitesi Güzel Sanatlar Enstitüsü Yönetim Kurulunun 19/06/2023 tarih ve 20/04 sayılı kararıyla belirlenen jüri tarafından kabul edilmiştir.

Prof. Dr. Ersoy YILMAZ
Enstitü Müdürü

FOREWORD

I would like to express my sincere appreciation and thanks to Prof. Dr. Ersoy Yilmaz, and also to Prof. Dr. Namer Kassem Khalaf. I also extend my thanks to my husband, family, friends, and everyone who supported me and stood by me during my studies.

15 / 06 / 2023

Rana Abdulrazzaq ATTA

ABSTRACT

Thesis Title : Using Computers in Blended-Learning Methods In Contemporary Iraqi Art Education

Author : Rana Abdulrazzaq ATTA

Supervisor : Prof. Dr. Ersoy Yilmaz

Thesis Type : master's degree

The research examines the advantages and disadvantages of using blended learning in contemporary Iraqi art education. The main aim is to question the effectiveness of this type of learning method. The research was conducted on a sample group of students from the Faculty of Fine Arts at Diyala University in Iraq to identify the main characteristics of the artworks produced by the students. The research attempts to show the significant effects of the use of computers in blended learning methods used by art students to produce contemporary artworks. The study also attempts to document that blended learning has an impact on the development of students' skills, improving their abilities and raising their awareness to produce works of art characterised by their contemporary style by students of fine arts faculties in Iraqi universities. Through the descriptive analysis of samples and models of selected artworks produced by students through blended learning, it was found that there is a development in the way the works are executed using the computer. This is obviously reflected in the production of the artwork in terms of its form and content.

Keywords: Art, Education, Iraq, Computer, Blended-Learning

ÖZET

Tezin Başlığı : Çağdaş Irak Sanatında Harmanlanmış Öğrenme Yöntemlerinde Bilgisayar Kullanımı

Tezin Yazarı : Rana Abdulrazzaq ATTA

Danışman : Prof. Dr. Ersoy Yılmaz

Tezin Türü : Yüksek Lisans

Araştırma, çağdaş Irak sanat eğitiminde harmanlanmış öğrenme yönteminin kullanılmasının avantaj ve dezavantajlarını incelemektedir. Temel amaç, bu tür bir öğrenme yönteminin etkililiğini sorgulamaktır. Araştırma, öğrenciler tarafından üretilen sanat eserlerinin temel özelliklerini belirlemek amacıyla Irak'taki Diyala Üniversitesi Güzel Sanatlar Fakültesi'nden örnek bir öğrenci grubu üzerinde yürütülmüştür. Araştırma, sanat öğrencileri tarafından çağdaş sanat eserleri üretmek için kullanılan harmanlanmış öğrenme yöntemlerinde bilgisayar kullanımının önemli etkilerini göstermeye çalışmaktadır. Çalışma ayrıca, harmanlanmış öğrenmenin öğrencilerin becerilerinin geliştirilmesi, yeteneklerinin artırılması ve Irak üniversitelerindeki güzel sanatlar fakültesi öğrencileri tarafından çağdaş tarzlarıyla karakterize edilen sanat eserleri üretmek için farkındalıklarının artırılması üzerinde bir etkisi olduğunu belgelemeye çalışmaktadır. Harmanlanmış öğrenme yoluyla öğrenciler tarafından üretilen seçilmiş sanat eserlerinin örnek ve modellerinin betimsel analizi yoluyla, eserlerin bilgisayar kullanılarak gerçekleştirilme biçiminde bir gelişme olduğu tespit edilmiştir. Bu durum, biçim ve içerik açısından sanat eserinin üretimine açıkça yansımaktadır.

Anahtar Kelimeler: Sanat, Eğitim, Irak, Bilgisayar, Harmanlanmış Öğrenme

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1. INTRODUCTION

The world is currently undergoing a remarkable technological upheaval that is reshaping every facet of existence, education included. Higher education establishments, in particular, confront substantial hurdles as they integrate technology into their foundational operations. In the past, educators served as the primary wellsprings of knowledge, but in today's landscape, active student-teacher interaction has become imperative. Furthermore, following the conclusion of the COVID-19 pandemic, there is an increasing emphasis on the fusion of various teaching approaches, known as blended learning., the convergence of electronic communication with face-to-face education has led to the emergence of a hybrid form of communication. This hybrid communication approach integrates traditional teaching methods, where students acquire knowledge directly from the instructor, with electronic access to educational materials. This combination gives rise to what we commonly refer to as blended learning. This particular blend of learning methodologies offers increased flexibility and convenience in both the learning and teaching processes. (Youssef et al., 2021, p. 219).

Blended learning methods, as is customary, have been applied in all scientific disciplines in Iraqi universities. This method included the majors of the faculties of fine arts, including the majors of painting, in which contemporary art styles are taught, which took into account the employment of modern teaching methods. It also came as a result of the steady increase in professors' awareness and their need to change the traditional pattern in the education process and find educational alternatives and methods compatible with the great scientific and cognitive development in our contemporary world.

In turn, these elements led to the application of new educational methods and methods that are capable of integrating with traditional methods and promoting the learning process to its best levels. Workers in the educational field mastered these methods and skills, and the necessary capabilities were available to them (Ghubari & Abu Shaira, 2008, p. 183). From this point of view, recent years have witnessed a great interest in teaching fine arts subjects according to blended education methods and in developing

those who teach according to these methods and qualifying them in a way that enables them to do their work best.

Modern technology has provided means and tools that have helped develop teaching and learning methods, and the computer is one of the most prominent of these tools. The use of the computer spread rapidly, its industry developed, its costs decreased, and its effects became tangible in all fields and certainly extended to the education sector (Qeladah, 1987, p. 214). The study is among the studies that keep pace with modern educational trends emphasizing the need to take advantage of the computer in all educational activities. The computer represents the pinnacle of what modern technology has produced, as it has entered various aspects of life, starting from the home and ending with outer space. It also affects people's lives directly or indirectly.

Moreover, due to its advantages not found in other educational means, its use has expanded in the educational process. The most important of these interactive features is when the computer responds to the learner's event and decides the next step based on the learner's choice and the degree of his response. Through this, it is possible to measure its effectiveness in developing learners' skills, especially in contemporary plastic arts (Rahi & Rashid, 2011, pp. 191-192).

1.1. RESEARCH TOPIC AND CONTEXT

The present research focuses on the utilization of computers within blended learning approaches in the context of contemporary Iraqi art education. The significance of this research lies in the necessity of incorporating modern educational methods across various disciplines, including the teaching of contemporary visual arts at Iraqi universities and institutes. One such progressive approach involves the integration of computers into blended learning, a method that has proven to be highly effective, particularly in the post-COVID-19 era where there has been a shift from traditional teaching methods to blended learning. Recognizing the importance of this subject, this research delves into several local experiences, as manifested in the artworks produced by students for their graduation projects at the Faculty of Fine Arts, Diyala University.

These experiments were analyzed according to a set of characteristics that depend on the requirements required by this subject, according to the directives of the subject

professor, electronically, through electronic communication through classes and electronic platforms. The college prepared and tangibly applied these classes and platforms using the computer. Then they were applied practically using traditional means of implementation to produce works of art with their idea, subject, and visual and intellectual impact. In order to achieve these goals, a specific question must be asked that the research will try to answer: How important is the computer in affecting blended learning in contemporary Iraqi art?

1.2. FOCUS AND SCOPE OF THE THESIS

The importance of the topic comes from offering a group of samples that were studied via the Internet at a time when the world stopped completely. The research sheds light on those samples, which are the graduation projects of some students at the University of Diyala in Iraq. Furthermore, the importance of the topic lies in explaining the disadvantages and advantages of blended learning and the use of computers in contemporary Iraqi art. The current research identified a set of limits, including the objective limit, represented by *Using Computers in Blended-Learning Methods in Contemporary Iraqi Art Education*. There is also the spatial limit, represented by a set of graduation project models for a group of students at the University of Diyala in the department of fine arts - majoring in painting. In addition, there is the temporal limit, which is the artworks executed by students of the department of fine arts in the college of arts at Diyala University for the academic year 2021-2022, using the blended learning method.

1.3. THE RELEVANCE AND IMPORTANCE OF THE RESEARCH

The current research sheds light on the effectiveness of *Using Computers in Blended-Learning Methods in Contemporary Iraqi Art Education*. This is done by explaining the importance of teaching methods, including blended learning methods, especially if they are used correctly so that the professor and the learner interact with them. Based on the preceding, the research problem is using the computer in blended learning methods in contemporary Iraqi art. It also sheds light on the effectiveness of this method by analyzing a group of artworks produced by students at the department of fine arts at Diyala University during the academic year 2021-2022.

1.4. RESEARCH OBJECTIVES AND QUESTIONS

The current research aims to identify the effectiveness of using the computer in blended learning methods in contemporary Iraqi art. It also sheds light on the impact of blended learning in developing students' skills, improving their abilities, and raising their awareness to produce works of art characterized by their contemporary style by students of fine arts faculties in Iraqi universities. The research is also based on conducting a descriptive and analytical study of samples of students' work carried out using the blended learning method during the academic year 2021-2022 using the computer in order to identify the extent of the student's development and the extent of his understanding and the link between blended learning and traditional learning.

The study also presents proposals for the development of blended learning in contemporary arts through the use of computers that help raise the efficiency of the means of implementation by the student. The study proposes, through selecting the subject of its study, a set of hypotheses and hopes that these hypotheses will be answered, including the effectiveness of *Using Computers in Blended-Learning Methods in Contemporary Iraqi Art Education*. A set of organized steps must be adopted in the stages of blended learning and communication between the student and the professor. In order to achieve the objectives of the research, a set of questions were identified that the research will answer in the coming chapters, including:

- What is the effectiveness of using the computer in blended learning methods in contemporary Iraqi art education at undergraduted level?
- What are the most important advantages of using computers in blended learning for students of fine arts faculties?
- What is the extent of the contribution of blended learning in developing students' skills to produce contemporary works of art education at undergraduted level in Iraq?

1.5. LIMITATIONS AND STRENGTHS OF THE RESEARCH

This study had many strengths, the most important of which is that it clearly identified the disadvantages and advantages of blended learning at Diyala University. Several

research papers issued by that university were selected and analyzed. The research shed light on the effectiveness of using the computer in blended learning methods in contemporary Iraqi art. Hence, the research followed the descriptive analytical approach to achieve its objectives and answer the research questions by conducting a descriptive-analytical study. The research was framed within a narrow circle, represented in the University of Diyala in the department of fine arts. The university was chosen due to its growing interest in art and design, and it uses blended learning in most of its lectures and lessons. The study also had many limitations, represented by the need for more existing studies in Iraq, so the study was narrowed to one university, the University of Diyala. There is also difficulty in identifying some of the artworks produced by the students because these works were not archived electronically but relied on printing only.

1.6. STRUCTURAL OVERVIEW

The current study consists of five chapters. The first chapter included an introduction to the research, research topic, context, thesis focus and scope, research significance and significance, research objectives, questions, limitations, research aspects, structural overview, research methods, and literature review. The research problem was identified by defining the effectiveness of computer use in blended learning methods in contemporary Iraqi arts and highlighting the effectiveness of this method by analyzing a group of artworks produced by students at the faculty of fine arts at Diyala University during the academic year 2021-2022. The second chapter included the skills of education and thinking in the arts. The third chapter included the study of blended learning, its elements, and its types. The fourth chapter dealt with the research samples, which are six samples. The fifth chapter focused on the results and conclusions, which showed the effectiveness of using the computer in blended learning methods applied by art students to produce contemporary Iraqi artwork.

1.7. METHDOLOGY

The researcher relied on the descriptive-analytical methodology in her study, aligned with the study's objectives to ensure accuracy and objectivity. Therefore, she had to prepare a tool to measure the development of computer skills in murals. This was

accomplished by preparing a test battery to measure the extent of implementing the requirements of this subject and how to execute them.

The Chosen Community for Research:

The research community is one of the contemporary Iraqi artworks produced by students of the department of fine arts at Diyala University for the academic year 2021-2022. Using a mixed education method, where research samples consisted of the fourth stage students in the department of fine arts at the faculty of fine arts, who number (31) male and female students of (23) females and (8) males. One work has been chosen for each male and female student, knowing that the department of fine arts at Diyala University contains three scientific departments, which is the department of fine arts, department of art education, department of film and television arts, and it has two morning and evening studies.

Samples of the Research:

Regarding the research sample, the research sample consisted of (6) students (female and male) who were randomly chosen from among the members of the research community and by (3) males and (3) females and all of them have studied in the manner of integrated education. The researcher chose murals, one of the subjects that are taught in the fourth stage in the fine arts department. This subject is used different skills in its education, including the skill of using the computer as well as integrated education. Her teaching is under the supervision of Professor of Article Professor Dr. Namir Qasim Khalaf, Professor of Design and Arts in the Department of fine arts at the department of fine arts at Diyala University.

As for the chosen artworks, three works were presented by each male and female student. After that, the researcher, with the professor of the article, chose an intentional sample that represents one work of each student, as it reached (6) artworks. These works were published by the students on the electronic platform, Classroom, for murals and executed by them, according to the directives of the professor of the article.

Exploited Study Sample:

The survey sample included students of the first stage in evening studies in the department of fine arts. It was aimed at measuring the efficiency and stability of the research tool, as the tool was tried on the survey research sample in the first semester (2022-2023).

The Tool of the Research:

The researcher designed a form to analyze the content of sample models, whose components were organized by relying on the elements and foundations of art. The form consisted of 4 paragraphs, which is the idea of work, technical elements, technical relations and methods of distribution, the method of implementing work.

Truthfulness of the Tool:

To ensure the appropriate research and analysis tool and know the extent of its comprehensiveness of the analysis paragraphs associated with the topic of research, the researcher presented it to a group of specialized arbitrators with experience in the field of art, graphic design, technology, and education technologies at Diyala University. Their observations were indicated on their paragraphs, as the notes were taken, and the correction was made until they were ready to analyze the research forms after the final agreement on them.

The Stability of the Tool:

Since the research tool that obtained the confidence of experts is a honest tool, and for the purpose of making sure of its stability, the researcher resorted to finding the stability coefficient by relying on the analysis of examples of contemporary artwork produced by students of the fine arts Department with two academic analysts at the university. They were trained in the analysis form and how to use it and ensure the clarity of its paragraphs. The stability coefficient has been calculated for each of the research samples, which are contemporary artworks using the Holsti equation. It turns out that the agreement of the agreement between analysts is equal to 0.92, which is a good and acceptable stability coefficient through which the analysis tool can be trusted.

Standards of the Scale Evaluation:

To know the quality of a specific adjective in a specific position, such as the positions where performance has multiple aspects so that each side can be estimated at a specific scale, the researcher ranked levels of performance in the skill of artwork in murals according to the scale of the sixth gradient (40-100). Depending on the results obtained by measuring the extent of accuracy and rapprochement of the vertebrae of the stomach in the scale by the researcher, which is the search tool test battery.

Standard:

Considering the prepared standard, the researcher set a schedule to evaluate a battery skill of artwork drawing in murals that included six levels by dividing the small degree (40) and the major degree (100) (see Table 1). It is also noted that the researcher excluded any result less than these levels, because it does not achieve the lowest requirements for the evaluation and according to the prepared scale.

Level	Degree	Proportion
First	100-90	Excellent
Second	90-80	Very Good
Third	80-70	Good
Forth	70-60	Intermediate
Fifth	60-50	Acceptable
Sixth	49-40	Weak

Table 1. How to give the degree to the six study samples

Steps to Apply the Search Scale or Battery:

The researcher in the application of the search tool followed the following steps:

- A form for each student is determined.
- Each step is noticed by the requirements to produce artwork by the student.
- That each of the artworks produced by students, such as contemporary artworks or an abstract style, takes place at an appropriate estimate and according to the extent

of accuracy and its proximity to the requirements established by the professor of the article.

- Emptying the results of each form in a schedule in which the final grades are collected to know the level of quality and low skill for the student.

The Validity of the Virtual Tool:

After the researcher had completed the development of the measurement scale she proceeded to validate its authenticity using an evaluation method. Subsequently the researcher introduced the scale to a group of experts and specialists, from fields including art education, color theory, photography, measurement techniques, evaluation methods and design principles. The main objective was to ensure that the scale was both valid and comprehensive. This evaluation method focused on assessing aspects related to skill performance. The experts reached a consensus of 81% and this result promised by the researcher an indication of her sincerity.

The Basic Applied Study

After the investigation of the validity of the research tool and its steadfastness, the researcher made the basic study on the research sample that (6) students from the fourth stage students in the fine arts department for the academic year (2021-2022), and in the second semester, was the following form:

- Create a scale that includes (4) axes.
- Requesting students to adopt various technologies in implementation, including the use of acrylic colors, oil colors and various materials, according to the requirements of integrated education. This is by preparing an initial model in the computer and sending it to the professor of the material via the electronic platform.
- Giving students an introductory introduction to the requirements of productive work and its importance for them and in a way that motivates them to work. This is through their accumulated knowledge experience through the previous academic stage or through their life experience in distinguishing contemporary artistic works and trying to simulate them according to the scale models.

- Note students 'performance during the implementation of the skill test parts and follow -up to work production through the electronic platform first and attending during the urban classroom secondly. Collecting business after finishing students from implementation.
- At the end of the lesson requirements, the researcher has (6) forms that show students' ability to produce artwork according to contemporary abstract technical schools.
- Then the researcher used the most likely medium to extract the result of the evaluation of the technical work for each student from the research sample. Regarding the evaluation of the results obtained, the evaluation method relied on estimating the paragraphs of each form for work executed by each student. After that, the results of all the paragraphs and for all students are discharged and the weighted medium is extracted in the paragraph to compare it to the hypothesis of the vertebrae of the scale.

Statistical Means

The researcher used the following statistical means:

- Chi-Squared Test to extract the honesty of the tool.
- Adopting the weighted medium for each of the paragraphs of the form to know the significance of the differences between the averages to determine the skill level.

1.8. LITERATURE REVIEW

Since the current study aims to fill some gaps that are believed to have not been addressed previously, which is to identify the advantages and disadvantages of using the computer in blended learning methods in teaching contemporary Iraqi art, it was noted that many previous studies and research dealt with these topics, but from Other broad aspects, including the following:

1. A study entitled *Using the Computer to Determine the optimal teaching methods for student learning* by Hassan Thabet Rashid and Qahtan Fadl Rahi (2011). This study came to keep pace with modern educational trends emphasizing the need to use the

computer in all educational activities. This study discussed the interactive features of the computer and the way it responds to events emanating from the learner.

The current study is distinguished from the previous one in that it dealt with a group of samples that a group of students produced through blended learning. It is an applied, analytical study, not a theoretical one, as is Rashid and Rahi's study. The study was also determined by a set of temporals, spatial, and objective elements, which aims to reveal the advantages and disadvantages of blended learning in contemporary Iraqi art. In contrast, the above study set its objectives to explain the importance of computers for students in education in general.

2. A study entitled *Using Educational Skills for Artwork Considering Contemporary Technological Developments for Art Education Professors in Iraq* by Uday Kazem (2019). The study dealt with modern technological means that art education professors in Iraq can use. The research sheds light on the importance of developing the educational process in schools and universities, as well as the need to increase interaction between students in exchanging and obtaining information without needing to be in the same place. This study explained, in general, the importance of blended learning, especially in the field of art education in Iraq.

In contrast, the current study aims to identify the effectiveness of *Using Computers in Blended-Learning Methods in Contemporary Iraqi Art Education*. It also sheds light on the impact of blended learning in developing students' skills, improving their abilities, and raising their level of awareness to produce works of art characterized by their contemporary style by students of fine arts faculties in Iraqi universities. On the other hand, the current study is distinguished by its analysis of a group of graduation researchers conducted according to blended learning via the computer. In contrast, the above study did not deal with its study's descriptive and analytical aspects but rather adopted the theoretical aspect only.

3. A study entitled *The Impact of Blended Learning on the Achievement of Students of the Institute of Fine Arts in Colors* by Abeer Qasim Khalaf (2021). This study was unique in showing the effect of blended learning within a narrow specialization, which is the subject of colors at the institute of fine arts in Baghdad. In her study, Khalaf

chose fifty female students as a sample for the research, and she used many statistical methods, including the T-test.

The current study differs from the previous one in that it is unique in demonstrating the effectiveness of computer and blended learning in studying contemporary Iraqi arts. The study tried to fill some gaps by showing the pros and cons of blended learning within the art major, and it also gave students an idea about how to develop these computer skills by studying a group of graduation researchers produced through those methods under study.



CHAPTER TWO

2. EDUCATION AND THE ARTS

2.1. EDUCATION AND THINKING SKILLS IN THE ARTS.

Most interested in education agree that the educational process does not stop at transferring knowledge or providing learners with information, as many consider developing each student's ability to think of an educational goal that they place at the top of their priorities. The progress and development of any society depend on the quality of its members, and the growth of the individual is based on the quality and skills of his thinking and the extent of his mental ability to come up with innovative new things that keep pace with his time and contribute to the growth and progress of society.

According to John Dewey the key challenge, in education is finding ways and techniques to foster thinking and enhance its impact, on life. (kazem & Zaki, 1973, p. 137). Interest in modern education methods, including blended learning, can be seen in all countries. It emphasizes dynamic knowledge and problem-solving, language meanings, and methods of guessing and thinking. These elements are among the most important tools that man uses to help him adapt and confront contemporary scientific and technical developments characterized by a great acceleration that is difficult to follow or keep up with traditional methods.

Therefore numerous nations and governments, across the globe have prioritized the inclusion of art in their systems. This emphasis is rooted in the belief that contemporary arts foster critical thinking skills and empower individuals to harness their energies. By equipping educated individuals with these abilities they can better navigate the challenges that lie ahead and achieve success, in their endeavors. (Al-Khazendar et al., 2006, p. 3). Art, in general, transforms what is in the scope of the individual's thinking into aesthetic images using various artistic methods and encouraging them as the individual artistic style.

Contemporary arts play a role, in nurturing creativity and encouraging individuals to express their thoughts, feelings and emotions. By engaging in endeavors people can

find an outlet for their desires and unleash their true potential. Arts education serves as a means to channel suppressed emotions and desires through forms like writing and poetry. These creative outlets offer pleasure and allow individuals to momentarily escape from life's complexities by immersing themselves in the artistic process. It is, through art that one can find solace and detachment from life's challenges. (Al-Shaheen, 2006, p. 38).

Contemporary arts, including plastic arts, seek to create a new form of unfamiliar activity in which the individual is capable of creation and creativity, thus giving the opportunity to every individual. Fine arts subjects encourage the growth of multi-directional art among educated students and call for each student to have his legal right to practice the artistic direction he tends to. It also aims at the growth of freedom in artistic expression so that the student expresses his feelings and emotions to satisfy his needs, as it avoids coercion and takes its role in the form of playing with materials and enjoying them, provided that the student achieves consistency, compatibility and organization between his shapes and colors.

The study materials in art education and drawing majors depend on the characteristic of thinking and imagination more than on technical skills. This ensures the development of individuals' creative abilities and artistic experiences through expression. It also helps them acquire styles that can adapt to different environmental conditions and empower them to confront their challenges. (Al-Khazendar et al., 2006, p. 7). Art is an educational tool, just like other means of expression, such as language and writing, in that it has expressive elements and tools for thought, perception, and physical action.

Art was found in the field of education as a part of development. It is regarded as an activity, with physiological benefits in addition to its educational role. Psychologists emphasize the significance of art and its impact on an individual's life. Throughout childhood, adolescence and adulthood art plays a role that cannot be overlooked. It enriches our senses with pleasure making it essential to provide ample opportunities, for artistic expression. the learner to carry out his own experiences without interference and to keep him away from all external influences capable of deviating from his original artistic capabilities that leave a bad impression of his art.

These things can lead to describing his works as poor and controlling everything he portrays, in addition to the dangerous psychological effects of these influences on his life. Art lessons should also receive a great degree of importance in education and the dissemination of art and aesthetic education on a large scale in the school and its environment. Philosophers of aesthetics affirm that man constantly tends to what is beautiful and that tasting beauty has been a natural matter for man since the beginning of creation. As for animals, they do not know the beautiful and the ugly.

From this point of view, arts education is concerned with developing the artistic taste of the individual in general and the art student. It means an ability or an educational goal through which the learner is trained to enjoy what he perceives of moral or material subjects and to feel pleasure in them. This is a major goal for art education and plastic arts lessons, through which it aims to create a taste among the learners for the completion of works, the accuracy of ideas, and the beauty in nature. These things arouse in the soul a sense of beauty and enjoyment, and here it is necessary to focus on the ability of the learner to absorb the relationships between the elements and the formation of abilities as an end when the goal of the learner is to develop taste (Al-Munif & Saleh, 1988, p. 38).

There is an urgent need imposed by the learner's need to study contemporary arts and the taste value it leaves for the learner, as its importance lies in several points, briefly including the following:

- Learning the arts enriches the learner's aesthetic experiences and helps develop visual perception and the values of beauty in life and art.
- Learning contemporary arts is a real path that paves the way for the individual to innovation or the creative process.
- Tasting beauty through artistic production refines feelings and behavior and connects the connoisseur's thought with the creatures created by the Almighty Creator in this universe.
- By learning contemporary arts, there is a kind of language that brings people and societies closer together to understand beauty and art.
- Learning the arts supports the student's thinking and makes it easier for him to read and analyze visual symbols and helps broaden his horizons culturally and

improve his behavior aesthetically (Al-Shaheen, 2006, p. 37).

2.2. ARTS AND TEACHING METHODS

Contemporary arts aim, through education, to form the desired person in his thinking, behavior, and conscience, and it has several functions. It focuses on learning and teaching and the human characteristics of the learner, represented in mental and cognitive powers, emotional and moral powers, psychological, spiritual, and physical powers, as well as knowledge and culture. Arts education seeks to prepare the individual to be a positive element capable of thinking and creativity and contributing to the development of society in a way that achieves individuals to rise and develop to better levels (Al-Hilah, 1999, p. 19). Learning the arts is not limited to simply conveying information but is a process that enables the development of the ability to think and acquire information continuously.

From this point of view, the teaching of arts occupies an important and high place in the student's study program in universities and colleges that study arts subjects within their curricula. These university majors aim to provide the student with scientific knowledge, develop scientific thinking, acquire scientific methods and processes, and develop scientific trends and tendencies. Universities also seek to form and develop appropriate scientific skills for students through scientific activities and skill experiments (Zayton, 2005, p. 445).

The technological revolution has created an unprecedented need for individuals and brought about a tremendous change like many traditional and non-traditional matters, including the change in education. 2008. The types of teaching aids differ according to educators' different points of view about the importance of the different senses in learning processes and according to the different functions and contributions that these means make in education.

The teaching aids went through different stages, and each stage was named with a name commensurate with that stage until the concept of teaching aids became associated with the systems method, the systems approach. It was also called educational technology, defined as the preparation of educational materials and programs and the application of educational principles in which behavior is formed

directly and intentionally. In this systemic concept, the educational means are one of the elements of a comprehensive system to achieve the lesson's objectives and solve problems, and this is what the concept of educational technology achieves. This means that educational technology does not merely mean using modern machines and devices but is more comprehensive than that, as it considers all human capabilities, educational materials, the level of learners, their needs, and educational goals (Udah, 1988, p. 16).

Educators use visual education based on the sense of sight, as it conveys information and knowledge and communicates them to the recipient through sensory experiences. Accordingly, the educational means are not an educational goal but rather tools for learning in obtaining various experiences to achieve the goals. From a practical point of view, it is an integrated part of the curricula included in the curriculum, and therefore it is not separated from the senses but overlaps with each other (Khairy, 2011, pp. 6-7). Most specialists who try to relate the types of experience to the types of teaching aids do so in the light of the cone of experience that Dale put and called by this name, see Figure 1.

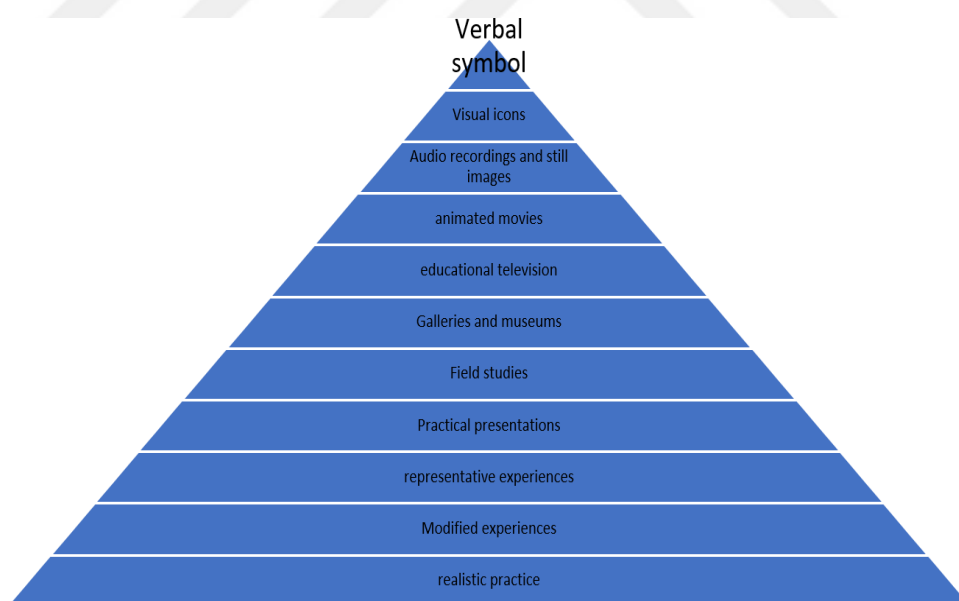


Figure 1. Cone of experience or pyramid of experience by Edgar Dale (Khalaf, 2015, p. 501).

The cone of experience has been a visual perception in educational aids since 1946. Dale organized experiences in this cone so that the direct, purposeful experiences or realistic experiences are at its broad base, then modified or alternative experiences

until abstract verbal experiences are placed at its top. This is because the cone is a dimensional image that helps to understand the relationship between the patterns of audiovisual teaching aids and the pattern of learning experiences.

Furthermore, as Dale states that the beholder of the cone notices that each section in it represents a phase of two ends: direct experiences at its base and pure abstract experiences at its top. The ascendant from its base to its peak moves from the direct to the abstract, i.e., in the direction of abstraction, just as the descender from its summit moves away from abstraction gradually until it reaches direct experiences at the base. Pronunciations are also considered more abstract than their predecessors. Therefore, the use of the medium in teaching contemporary arts revolves around the elements and relationships of form and the formation and organization of its elements to be a tool for the visual expression of the meanings that the student wishes to express and convey their meaning to the recipient just as the spoken word expresses the meaning (Khalaf, 2015, p. 500).

These elements must be organized, like the organization of words to form a sentence that expresses a certain meaning. These elements constitute the building blocks and their parts in artistic production, as their impact depends on the acceptance that achieves a response to their impact and strong impact, and therefore these elements lead to the relationships according to which the artistic work takes place.

2.3. CONTEMPORARY ART EDUCATION

Art has witnessed rapid and simultaneous changes, especially in recent times, due to intellectual and cultural changes and the emergence of technology, which led to the emergence of new schools and trends, and methods that are not known in ancient or classical arts. As a result, art has become a human characteristic that is not confined to the elite only but is a human activity authorized for all people. This change with the inclusion of technology reflected the emergence of works of art that cannot be divided in isolation from multimedia, performance, and technology. Thus, there is an impact of technology on contemporary art (Bouzar, 2019, p. 121).

Contemporary art is an umbrella term that includes art produced since World War II or art created within 20 years of history. The types of media used, or artwork created

by contemporary artists can vary widely. These artists can include those who work with virtual reality, video, digital media, graffiti, sound art, installation, etching, performance, and interactive art, as well as traditional media such as art, sculpture, and painting. Contemporary art is characterized by a dynamic nature that interacts with its surroundings. Contemporary art is affected by globalization, expresses multiculturalism, and benefits from what technology can offer in the field of art. It is only through these elements that contemporary art has acquired a renewed spirit and styles that are produced in multiple ways and different concepts day after day, starting from abstract art, plastic art, and conceptual art to the art of forming colors, inks, using printer, light, video, and music (Bouzar, 2019, p. 121).

Contemporary artists used all these tools to produce new works of art that express the spirit and approach of contemporary art. The artist is one of the basic criteria in the formation of art, and he is the one who paved the way for aesthetic discovery and aesthetic taste, and he is the one who drew for us landscapes, creative paintings, decorations, and all kinds of plastic art. Contemporary artists are those who create works of contemporary art.

Since the 1950s, there have been more than 50 movements in the art world that fall under the overall umbrella of contemporary art. Each art movement involves a different set of rules and aesthetics, with art movements varying from abstract expressionism to minimalism and from pop art to electronic art. Both world events and technological advances have influenced the types of works these artists create. The term modern art is often used synonymously with contemporary art. However, modern art is artwork created from the 1880s to the mid-20th century, including impressionism, cubism, and surrealism movements. While contemporary art may overlap slightly with modern art, it usually searches for new techniques and forms of expression. In general, no single set of rules defines the type of artwork that contemporary artists create, see Figure 2.



Figure 2. A painting by the late Iraqi artist Blasim Mohammed (Blasim, 2022).

Contemporary artists, including art students in the faculties of fine arts, have proven through their works that they are aware and aware of showing works of art and including them within the context of a new technological environment. For example, the artist On Kawara, in his work in 2001, used computer technologies and software as a medium in his artwork that documents historical events. This method is considered the conceptual artist's way of expression with paintings bearing simple dates and numbers (Hamza, 2013, p. 200).

The question raised in this field is how to adapt the technological media to potentials through which the self-imprint and creative vision can be imposed on the artwork without prejudice to the content of the idea. For example, it can be noted that the Italian artist Joanna Smalcerz is one of the artists who excelled in the use of technical media, photography, drawing, and the introduction of computer effects. Her paintings bore a strange but very beautiful character, and her creative work was displayed in Italy for the first time, which leaped creative work, see Figure 3. Openness to technology has provided a wide scope and a huge boom in the artistic movement (Bouzar, 2019, p. 125).



Figure 3. Digital work by Italian artist Joanna (Haifa, 2011).

Contemporary art is characterized by a dynamic nature that interacts with its surroundings. Contemporary art is affected by globalization, expresses multiculturalism, and takes advantage of what technology can offer in art. This has given contemporary art a renewed spirit and patterns that are produced in multiple ways and different concepts daily, from abstract, plastic, and conceptual art to the art of forming colors and inks using printers, light, video, and music. Contemporary artists used all these tools to produce new works of art that express the spirit and approach of contemporary art, see Figure 4.



Figure 4. Painting representing conceptual art titled ‘At Two Colors’ by Daniel Boren (Kazem & Al-Akkam, 2017, p. 380).

The computer in education generally offers a range of benefits and possibilities, as it is an aid in the educational process, as the use of educational computer software is one of the basic means to assist in the teaching and learning process instead of the traditional method such as lectures and textbooks. These programs are characterized by interaction with the learner, displaying information and questions, receiving, and evaluating the learner's answer, and immediate review, and through these benefits, the computer is distinguished in learning from other technological means.

The computer is an information communication tool through which simple and complex operations can be performed, and results are useful in clarifying the meanings of concepts and facts. The computer consists of several complex systems, each performing a special function. These systems are the input system, operations, storage, and product, see Figure 5.

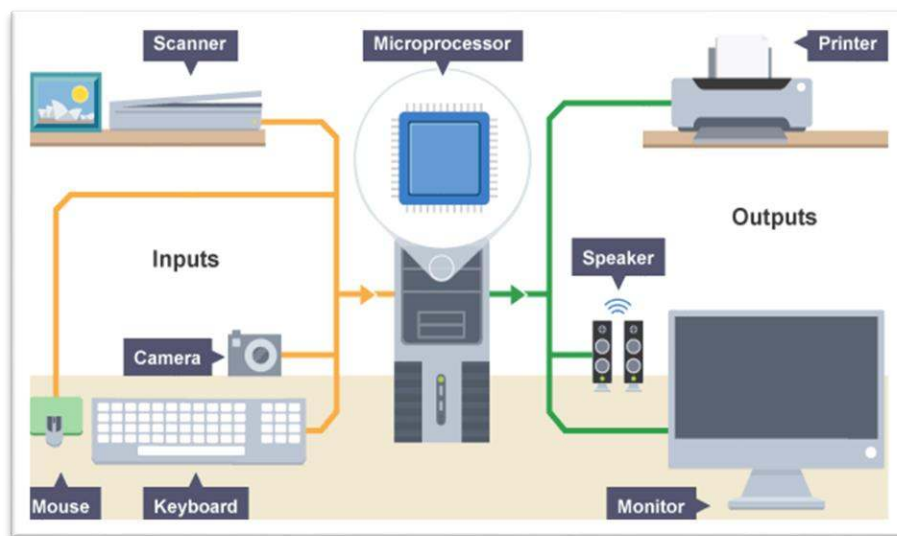


Figure 5. Computer Components (Mahmood, 2023).

The computer has been introduced as a modern educational tool in many countries to improve and develop the educational process, as communication occurs between this device and the person who uses it. The learner can present his problems to the computer in the form of a variety of questions presented step by step, and according to the program, the computer can pose the learner's problems and wait for his response to them. Education using the computer is done through programs in the fields of learning through which information can be presented and stored, then the student works to read and understand it and answers the questions himself, which are of several types, the most important of which mentioned the most important:

- 1- **Practice and practice:** It provides the student with a series of examples of application, if the student has previously read the lesson and understood its base and reinforces every answer that the student ends with either right or wrong, and it is learning that helps the student to gain experience.
- 2- **Educational programs:** By providing information in small units, each unit is followed by a special question, then the computer analyzes the learner's response and compares it with the correct answer. It is an education that contains new information and knowledge presented to the student (Rahi & Rashid, 2011, p. 1196).

3- Educational programs: This means presenting information in small units. A special question follows each unit, then the computer analyzes the learner's response and compares it with the correct answer. It is education that contains new information and knowledge presented to the student.

4- Simulation programs: They provide the learner with a situation like what he faces in public life and real training without exposure to risks or financial burdens.

5- Problem-solving programs: They are two types: a problem that the student writes, after which he solves the problem on the computer, then the computer provides feedback, whether the solution is correct or incorrect. Concerning the other type is for the computer to present the problem, and the student's job is to address it by proposing a solution or a set of solutions (Hanson, 2002, p. 73).

The computer in education has many advantages, including the ability to present information sequentially and without boredom and to deliver information from the main center of information over long distances if the machines for receiving these programs are available. The computer also stores a large amount of information in memory, displays it in a logical sequence as the user desires, and performs complex operations with the least effort and the shortest time.

In addition, the computer presents some lessons and performs routine tasks that provide the teacher with the appropriate time to provide personal attention to each learner, direct the learning process, and address individual problems that the teacher's circumstances do not allow him to solve (Abu Jalala, 1999, p. 381). Concerning learning methods, several types of different learning methods would lead the student to acquire a specific method of understanding and thinking because the type of understanding and the student's thinking style depends to a large extent on the type and method of learning that he followed in university studies and at home as well as other factors.

Also, these methods differ according to the different individuals and the diversity of their characteristics. The scientist Gilford divided the learning styles into three types: the center, the divergent, and the evaluative. In the first method, the learner finds himself bound by the material or study experience, while in the second, he unleashes

his thinking to imagine, realize, and learn from various data that are manifold in their identity and nature.

In the third method, the learner learns the study material by reviewing it and verifying its value (Hampton, 1972, p. 12). With the widespread use of the computer, the experimental studies conducted to present its results in the educational field have become active. The generality of these studies has proven the effectiveness of the computer through the superiority of its educational results compared to traditional methods. The computer has many characteristics, including image space, sound and colors, educational materials, and local production, where various educational programs are prepared (Ghadban, 2013, p. 533).

Methods of using computers in education have evolved, and attention is now focused on developing methods used in teaching, including teaching arts using computers or developing new methods through which it can contribute to achieving and supporting some of the objectives of the school curricula. The use of computers in teaching all technical subjects, especially in some practical subjects, could have lived up to the desired ambition due to the large material cost of providing educational hardware and software.

In addition, some of the Arabic educational software currently available commercially needs more scientific and educational characteristics in its design. It is not perfect to suit our students, teachers, and curricula in Arab countries, and this may be because some of those in charge of its production may not have sufficient educational and specialized experience (Khasawnah, 1992, p. 34). The use of computers in arts education as a means or an educational tool in the curricula is of great interest to decision-makers in the field of education. It is used in explanation and recitation, exercises and practice, educational dialogue, and solving problems. The computer takes on the role of the student's partner and teacher, see Figure 6.



Figure 6. One of the education programs ‘Microsoft Teams’ through which the curriculum is taught via the Internet (Mohammed, 2023).

The computer is used in the educational process to help the learner move from the role of the recipient of information, knowledge, and concepts by the teacher to a conclusion of these concepts and hypotheses through the information and data provided to him by the program designed on the selected topics. (Al-Mashhadani, 2006, p. 134).

There are many advantages of using computer technology in the educational process in the arts, such as creating an active and interactive learning environment between the machine and the human being, developing students' skills to achieve educational goals, and developing students' positive attitudes towards subjects that they find difficult and complex. There are also other features such as presentation using multimedia devices, providing opportunities for individual learning among students, helping to transfer the teaching and learning process to the home to continue acquiring skills, and providing many different activities and various programs that help to acquire information outside the subject matter.

Blended learning is a modern style of education that appeared with the development of the digital revolution and the spread of the Internet. As it affected various sectors, education had a large share of this development, which can be described as the most recent revolution in education methods. The most important thing about blended learning is that it is available anywhere and anytime globally.

Because of the current health situation, blended learning has become the ideal solution for students to complete their studies through it, as universities have worked to create electronic educational platforms for teaching and creating virtual classes to communicate directly with students and complete the curricula. Therefore, experts in teaching methodologies and methods emphasized the need to diversify teaching strategies and models to interact with students and teachers while they are on educational platforms and to make lessons more effective and interesting. Blended learning can be available on the computer and radio, satellite channels, hard disks, and e-mail.

Hassan Salameh believes that blended learning is an education that the learner benefits from through electronic technological media such as online education, computer-based education, digital learning, satellite learning, mixed discs, and interactive video (Salamah, 2006, p. 54). Among the uses of the computer is its use in blended learning in universities through electronic platforms. Among the most famous platforms adopted for university education in Iraqi universities, including the University of Diyala in general and the college of fine arts in particular, is the Google Classroom educational platform, which has many advantages for students and teachers.

The advantages of these platforms can be summarized as ease of communication via the Internet, easy storage of files by Drive, clear and available to everyone even in the absence of attendance, no need to use papers, saving time, providing new ways of cooperation between students and teachers, difference and differentiation, data analysis, see Figure 7 (Ibrahim, 2012, p. 75).



Figure 7. Zoom program used in online learning (Zoom, 2022).

Many programs are used in blended learning, including Zoom, Google Hangouts, Dial pad meeting, Slack, Skype, and Zoho Meeting. In general, several justifications made blended learning necessary, including:

- The huge knowledge explosion, the entry of knowledge into various fields of life, and the need to access that knowledge quickly.
- Increasing the number of learners and difficulty providing the buildings and supplies necessary for education according to the traditional method.
- Using this type of learning as a support for regular education, which provides a variety of sources and information.
- Blended-learning made learning compensatory for those who missed traditional education, as they could learn without attendance and direct enrollment in the educational institution (Salama, 2015, p. 139).

2.4. COMPUTER PROGRAMS USED IN CONTEMPORARY ARTS

The blended learning programs are intermediate programs between the teacher and the student, but the art student uses other software means to implement the artwork required, whether through face to face or online education. Sometimes the student is directed through electronic educational platforms, but he must implement plans or artworks using computer programs in arts majors. Among the programs are Photoshop and CorelDraw, which are commonly used programs follows:

1- Photoshop:

Photoshop is the most powerful image processing program using computers based on Windows and Macintosh systems. Despite the fierce competition among image processing programs, Photoshop is at the forefront and has reached the top, and no other program competes with it in this field. It is like any image processing program that falls under the category of coloring programs as it converts the image into small square points called pixels and is called the entire drawing or bitmap.

A pixel is the smallest component of an image, and the resolution of an image is measured in pixels per square inch. For example, if the image's resolution is 28 pixels per inch, every inch in the image contains 28 rows of pixels, equivalent to 784 pixels. In this way, the user can know the degree of image clarity. Photoshop provides high flexibility to the user in several aspects, including:

- Typography used in the pages is processed regarding the number of fonts used and their sizes. As well as the treatments of formal confirmation and alignment of the text of paragraphs, the length of the text line, the arrangement of the title with it, and the use of illustrated text or text converted to a bitmap, see Figure 8.
- Layouts 'Graphics', which are placed flexibly in the structure of the page, and the use of images in the pages has varied between aesthetic and functional use, as the proportions of images conforming to fixed standards vary (Al-Sheikhly, 2012, p. 320).
- Use of space white by a small percentage. The overall percentage was that this important element was not employed in the page design structure due to the multiplicity of formal components and visual elements that require separation areas and the creation of resting areas for the eye of the recipient through them.
- The use of color processing in typography and formal elements in a studied manner according to color schemes and optical gradients. In addition, Photoshop is characterized by achieving visual balance, contrast, alignment, proportion, unity, diversity, and simplicity.

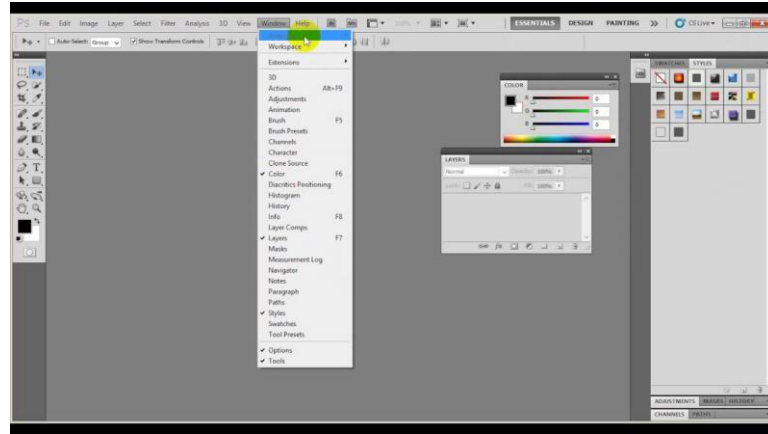


Figure 8. Photoshop application (Kalah, 2020).

The Photoshop program is one of the graphic programs that deal with high flexibility in several arts, including the art of digital photography, which is the use of the latest existing digital cameras and photography in capturing creative images that are used as raw materials for publications after processing them according to the specified goal. Photoshop also deals with pixel art, which was explained earlier. Also, pixel art, squares, or circles draw to give it a certain shape in its final form. It is possible to design in Photoshop, which is one of the conditions for the design to be squares or circles. Photoshop also deals with three-dimensional art, a drawing resembling reality.

In addition, Photoshop deals with vector art, usually used in drawing logos, icons, and two-dimensional images. Regarding hand drawing and Arabic calligraphy, Photoshop deals with this art by processing hand-drawn paintings with a computer, either by drawing them with a scanner or drawing them directly by hand on additional devices designated for that. There is also the art of merging and simulation, where an attempt is made to simulate realistic images through Photoshop to combine realistic images in different ways to produce a new image or make different effects, effects, and filters on the images to come out better.

Concerning the art of publishing and press production that Photoshop deals with, it is the design and production of press publications in an artistic way, such as newspapers, books, pamphlets, and posters. Finally, there is the art of web design or artistic directing of websites before they are programmed and processed through Photoshop (Al-Sheikhly, 2012, p. 321).

2. CorelDraw:

CorelDraw is one of the best vector graphics editors for designing logos and posters. Corel released its first version in 1989, designed by engineers Michel Bouillon and Pat Beirne, as each new version adds more features, making it the application of choice for designing posters and logos, see Figure 9.



Figure 9. CorelDraw application (Falah, 2019).

Users of the application can edit graphics in various ways using the program's powerful graphics toolkit. In addition, the application can handle multiple layers and pages, color balancing, frame effects, and contrast adjustment. With new features and tools constantly being added to CorelDraw, experienced users have gotten a lot done with it, see Figure 10 (Najmuddin & Fathy, 2014, p. 530).

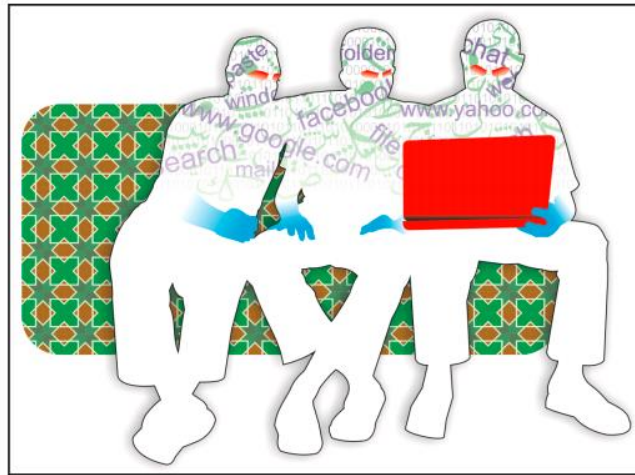


Figure 10. Drawing by CorelDraw application (Al-Bayati, 2018, p. 892).

CHAPTER THREE

3. BLENDED LEARNING

The beginnings of the emergence of this education go back to the middle of the nineteenth century, which was contemporary with the establishment of the postal corporation. Some people re-emergence of this learning to correspondence shorthand lessons, which were organized by Isaac Bateman in 1840 when the first organized post offices were established in Britain (Amer, 2013, pp. 11-12).

The Institute and Blanche De Academy established in Berlin in 1856 focused on the instruction of languages. Became the pioneering institution, for correspondence education. This approach paved the way for distance learning in countries, including the UK, where the University of London has been employing this system since 1858 initially known as the external student system. Despite their presence these services have faced criticism, for being deemed inferior according to standards.

This form of education was implemented in universities, across the globe. For instance Queens University in Canada adopted it in 1889 followed by the University of Chicago in the United States of America in 1891 the University of Wisconsin in 1906 and the University of Queensland in Australia in 1911. This educational approach gained momentum when the first British university dedicated to this field was established back in 1969. Following that milestone distance learning gradually expanded beyond Britain throughout the '90s. Became integrated into traditional British universities curriculum, alongside conventional teaching methods (Al-Khafaji, 2015, pp. 16-17).

At present, approximately thirty-nine regular universities in the United States of America apply this type of education, including the universities of Michigan, Stanford, and Delaware, as well as other universities, such as Maryland, that specialize in distance education and open education called televised education. Many universities in different countries use blended learning systems, including Spain, Iran, Pakistan, Japan, Nigeria, Palestine, Sudan, and Egypt. This type of education exists in the University of Alexandria and the Arab Open University, which was based in Kuwait in 2000 (Al-Khafaji, 2015, pp. 16-17).

In the decades of the 20th century the world experienced a significant technological revolution marking the beginning of a new era. This revolution brought about extensive changes, in aspects of life impacting societies worldwide. The intrusive nature of these technologies became evident as they rapidly developed and influenced every sphere. As a result numerous challenges emerged alongside advancements and novel learning approaches such as blended learning. With the end of the nineties of the last century, the first wave of so-called blended learning began.

This wave focused on introducing advanced technology in the teaching work and converting traditional classes into virtual classes by using local or international networks and information technology (Taha & Omran, 2008, pp. 57-58). The emergence of computers the information age and advanced communication technology have brought about changes, in aspects with one of the most notable being the transformation of our understanding of time and space through electronic publishing and distance education methods. The technological advancements stemming from the technological revolution have become a valuable asset, in supporting the teaching and learning of different disciplines including contemporary arts. (Shafiq, 2009, pp. 7-8).

The challenges and problems that traditional education faced, such as the existence of the material cost and the length of learning time, in addition to the emergence of the Corona pandemic, all these factors directly affected and led to the need to resort to blended education, which in turn is considered the natural and logical development of blended learning. It is considered one of the main reasons for the interest in blended learning.

3.1. ELEMENTS OF BLENDING-LEARNING

In today's paced world education institutions are increasingly adopting methods and approaches to create an engaging and interactive learning environment that meets the needs of the current era. Many institutions are turning to learning, which offers opportunities, for learner interaction. Research by Jihan Karawia (2012) emphasizes the importance of considering the experiences provided in learning courses. It also highlights the need to choose tools that align with available resources and promote

effective collaboration, between teachers and all of this is done through a clear time plan (Jamie et al., 2014, p. 169).

Blended learning is one of the most rapidly growing areas due to modern scientific and technical developments, as there is an increasing demand for integrating technology into education to build a generation capable of dealing with the vocabulary of the current era. All of this led to increased burdens on educational institutions, which led to the use of information technology and modern technological communication with the help of computers in the educational process. Today, the world is going through a scientific and knowledge revolution because of the tremendous information and knowledge progress in the field of blended learning in all its synchronous and asynchronous types in support of the educational process to suit all the varying capabilities, abilities, and skills of learners (Abdullah & Hassan, 2022, pp. 170-171). Many studies and literature agree on the importance of blended learning in the educational process, including Garrison & Vaughan, who considers blended learning as:

- It enhances the connection between the different places during learning, allowing the student to learn at school or university, in work environments, or even at home.
- It provides flexibility in the learning time and the time of enrollment in its programs and reduces or eliminates the restrictions that stem from trying to achieve a balance between work and overnight concurrent during the study (Garrison & Vaughan, 2008). Blended education is a modern concept that has emerged in educational technologies, as it combines traditional and electronic education. Blended education is defined as a learning environment that combines education with the presence of students in classrooms and learning using modern technology (Shaaban, 2018, p. 33).

Blended learning is also defined as the virtual classes through which the educational process is created and managed so that the student is in contact with these classes via the Internet (Al-Muhaisen, 2002, p. 14).

Mixed education is a method that combines obtaining information directly from the teacher and education based on the use of computers and the Internet using electronic

classes and modern technologies in the field of interactive communication. It allows the learner to obtain information at any time and place, see Figure 11.

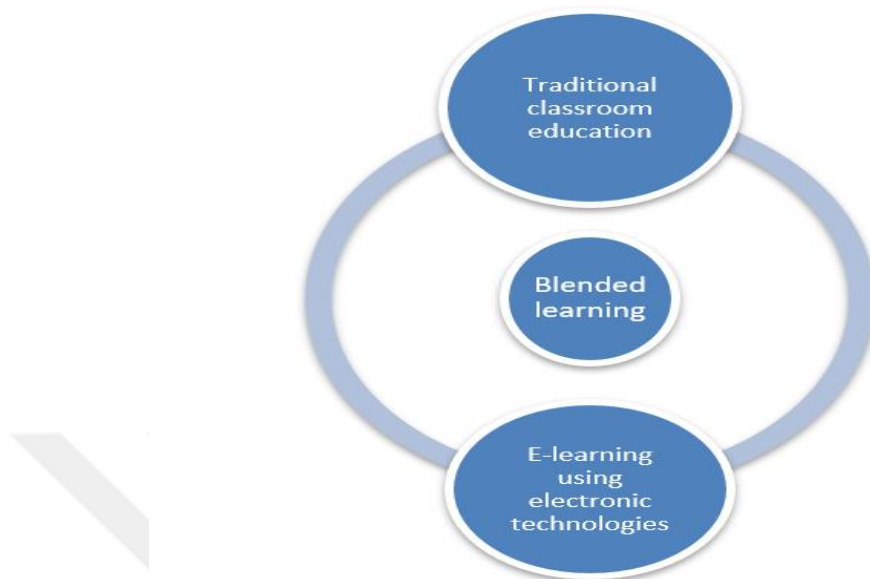


Figure 11. A chart showing the elements of blended learning (Youssef et al., 2021, p. 222).

3.2. TYPES OF BLENDED LEARNING

The most important types of blended learning can be explained as follows:

- Face-to-face education: In this type, the teacher communicates most of the curriculum to students through direct teaching or a lecture.
- Alternation: The student moves between blended learning and traditional education in this pattern.
- Flexible teaching: Live learning platforms in this mode deliver most of the curriculum to students, and teachers teach on-site and provide support as needed through small group sessions.
- Internet Lab: In this mode, direct lab platforms deliver the entire curriculum to students inside the university. This system is usually provided with direct teachers and professional administrators, but it offers little experience in the content, and students usually resort to traditional education.
- Self-Integration: Students in this style take the direct curricula instead of the traditional university curricula.

- Online drivers: Direct platforms and teachers in this mode deliver the curricula to students, and students work remotely and directly, and interaction is optional as needed, see Figure 12 (Youssef et al., 2021, p. 223).

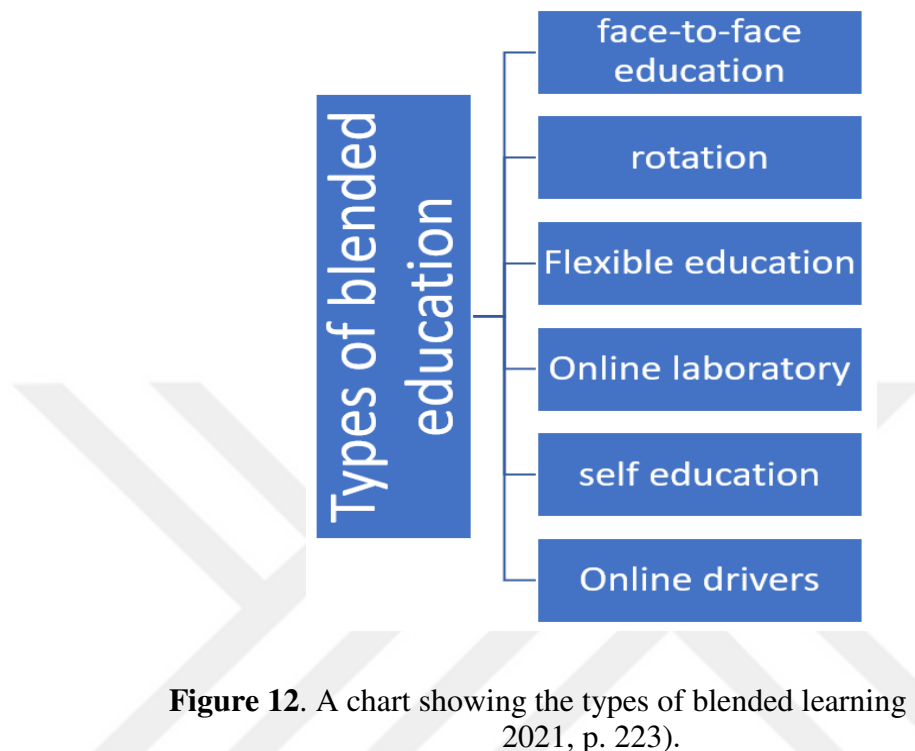


Figure 12. A chart showing the types of blended learning (Youssef et al., 2021, p. 223).

3.3. FEATURES OF BLENDED LEARNING

The most important characteristics and benefits of blended learning can be summarized in the following points:

- **Interactivity:** Blended learning is interactive learning, and interactivity means that the learner actively participates in the learning process in the form of responses toward the source of learning, which leads to the continuation of education. It puts the learner in an interactive learning environment and encourages him to participate and interact positively, and allows him to deal with some real-world experiences, skills, and events, whether this interaction is in the classroom or via the Internet, synchronously or asynchronously (Salamah, 2015, p. 36).
- **Flexibility:** Blended learning is flexible learning, as it provides many options and entrances for learning and then allows the learner to learn perfect what he prefers and chooses in the manner that suits him by his learning speed. Some

learners prefer to review their study material at times that suit them whenever they want, whether in the morning or evening (Abdullah & Hassan, 2022, p. 173).

- **Individuality and diversity:** Through blended learning, it is possible to consider the individual differences between the learners and to reach them to the capabilities and preparations of each of them, the level of intelligence, and previous experiences, as it depends on the level of proficiency. Here, the learner must find the appropriate means for him to learn and communicate with his peers, whether directly in the classroom or through the Internet and electronic media, such as conversation and research within websites that benefit and enrich the subject of learning as one of the sources of learning.
- **Availability:** Provides educational content that allows the participation of many learners in interaction in the learning process. He can also send his inquiries to the teacher using interaction and communication tools, and this feature is suitable for those who need more time to communicate with the teacher directly.
- **Universality:** Blended learning has become the most demanded model globally, and it has been applied in many countries of the world, and it is a model that everyone can benefit from.
- **Mixed content:** Its educational content can be presented in electronic, digital, and traditional print methods. Blended learning tools and means provide many tasks and services related to planning and managing educational content during the learning process, which benefits both the teacher and the learner.
- **Focusing on the learner:** The learner remains the biggest beneficiary of the diversity in using blended learning tools that contribute to an in-depth study of learners' needs and learning styles; also, to design and develop educational courses and present them in a way to stimulate their thinking and encourage them to learn.
- **Motivation:** Blended learning increases the learner's self-motivation, which develops the need for learning, knowledge, and communicating the idea clearly and easily (Salamah, 2015, p. 37).
- **Evaluation:** Many traditional and electronic evaluation methods blended

learning provides to those in charge of the learning process, as it allows the classification and measurement of the extent to which learners acquire information and concepts presented to them quickly and easily. And then assess the extent of their development and progress, achieve the desired goals, and provide continuous feedback to each learner, see Figure 13 (Al-Saiyed, 2016, p. 464).

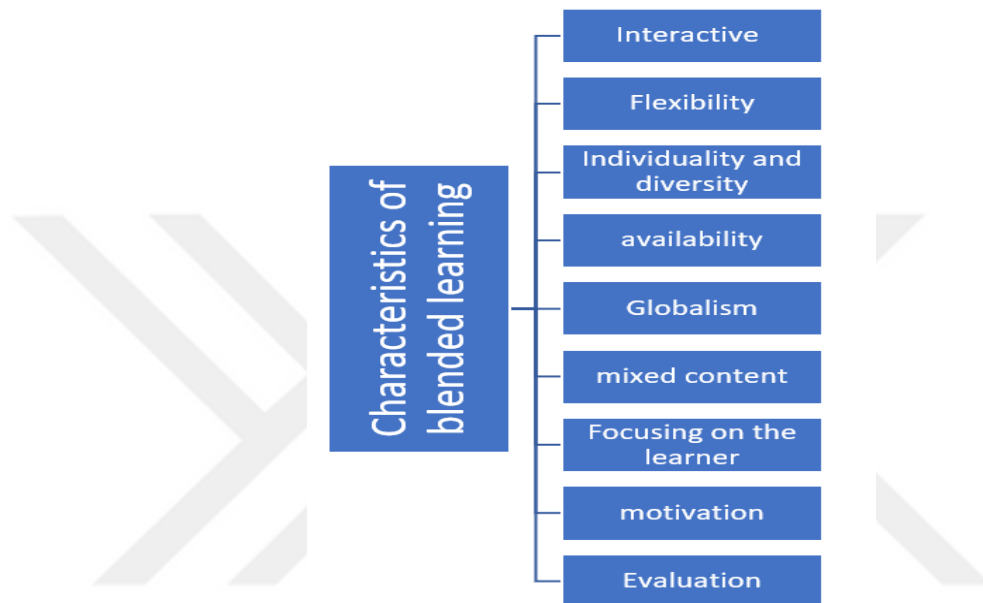


Figure 13. Characteristics of blended learning (The researcher).

3.4. BLENDED LEARNING REQUIREMENTS

Blended learning requires many changes in the traditional classes, and for the success of blended learning, the following requirements must be met:

- **Technical requirements:** which include the necessity of providing an appropriate environment and meeting the learner's needs from various learning sources, as well as the availability of virtual classes alongside traditional classes, as well as the availability of software for blended learning management, and finally, the availability of tools and means that are used in human training.
- **Human requirements:** Two basic elements must be available for the success of blended learning, namely the teacher and the student. The teacher provides

the student with all information through written lectures and video films. The student must have the skills to use a computer and the availability of e-mail and social media (Youssef et al., 2021, p. 244). For more clarification, a table has been drawn up for a set of differences between the mixed and traditional styles see Table 2.

TRADITIONAL LEARNING		BLENDED-LEARNING	
1	Depends on the teacher	1	The learner is the focus of the educational process
2	It does not require the same cost of blended learning	2	Unspecified time and place to receive the learning process
3	The presence of students in one hall at the same time and place	3	The learner is active because he relies on self-education
4	The student does not make any effort to search for information as he depends on the teacher	4	The educational content shall be in the form of video, text, and still and animated images
5	Student educational content includes printed books	5	Take into account the individual differences among the learners

Table 2. The difference between traditional education and blended learning (The researcher).

CHAPTER FOUR

4. RESEARCH SAMPLES

A group of samples of six artworks published by the students on the Google Classroom electronic platform for murals and executed by them was selected. Also, a questionnaire was designed to analyze the content of sample forms, as its components were organized based on the elements and foundations of art, as the questionnaire consisted of 4 paragraphs see Table 3.

The Paragraphs	
1	business idea
2	Employed technical elements
3	Technical relations and methods of distribution
4	Method of carrying out work

Table 3. Axes of analysis of research samples (The researcher).

To ensure the suitability and comprehensiveness of the research or analysis tool a team of supervisors, from the University of Diyala with expertise in art, graphic design, technology and educational techniques were provided with samples of paragraphs related to the research subject. Their valuable feedback was taken into consideration. Necessary adjustments were made until the research models were deemed ready, for analysis following an agreement.

Since the research tool that gains the trust of experts is considered to be a simple tool we ensured its stability by analyzing models of artworks. analysts, who were trained in forms and methods examined and evaluated the clarity of its paragraphs. To measure reliability, we calculated the agreement coefficient, between the analysts using the Holsti equation. The coefficient was determined to be 0.92 indicating a level of agreement and a reliable analysis tool that can be trusted.

The research methodology adopts a descriptive approach, which is the most appropriate and suitable research method for drawing research conclusions, as it offers better possibilities for analytical procedures and conclusions about the effectiveness of the use of computers in blended education in Iraqi Contemporary Art. This work is implemented step by step by applying the following:

- **Google Classroom platform:** explaining the idea of the work required by the mural's teacher and requirements in terms of material, measurement, and implementation.
- **Using computer programs:** designing and planning ideas and distributing shapes and colors through Photoshop and CorelDraw the student, see Figure 14.

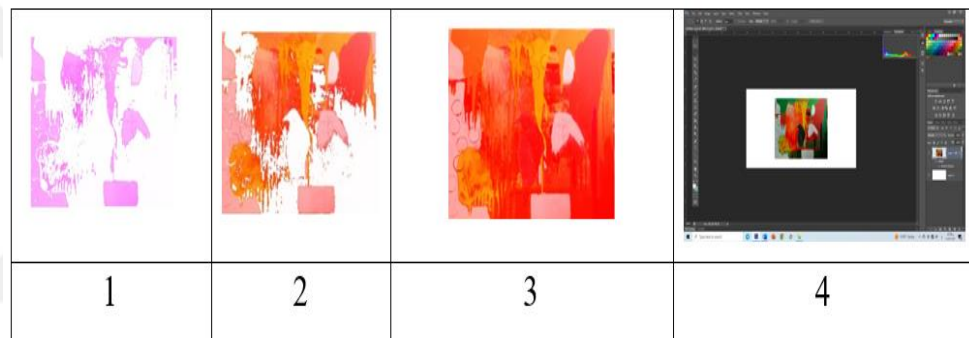


Figure 14. Implementation of the work by the student using the computer (The researcher).

- **Executing the work in person:** Oil colors, acrylics, and various materials were used in person in the classroom at the university, noting that all research samples were executed with a size of 60X80 cm on canvas, using abstract and cubist contemporary art schools.
- **Displaying the work electronically:** Upload the artwork's image in its final form through the electronic platform to evaluate it to the professor and give the necessary notes, see Figure 15.

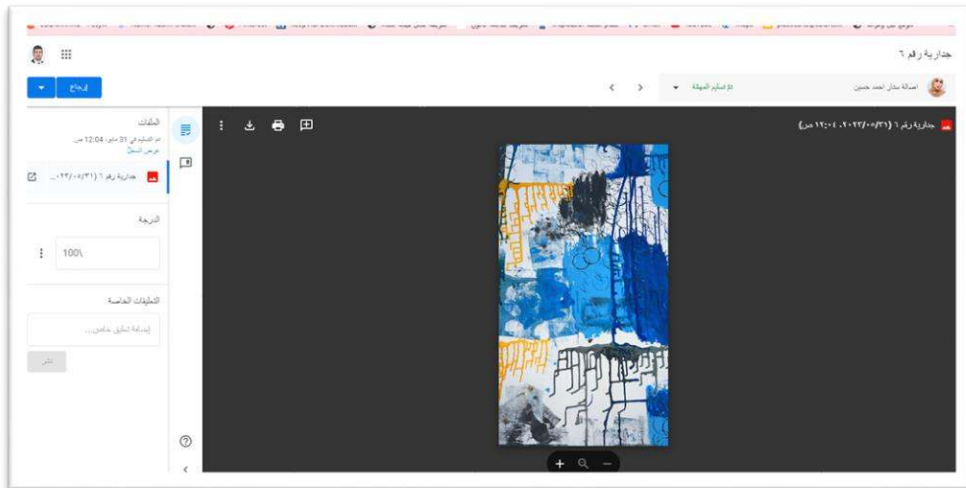


Figure 15. Uploading the artwork by the student on the electronic platform (The researcher).

4.1. SAMPLE ANALYSIS

As mentioned previously, a group of samples was selected for some female students at the University of Diyala, where these samples will be analyzed according to a special technical tool that will be presented in detail in the coming paragraphs, which are as follows:

4.1.1. Sample (1): Contemporary Color Formations

The idea was implemented by the student Asala Sattar implemented the idea at Diyala University, which the idea of the work implemented by the student in the sample includes the production of a contemporary artwork using different technical means and according to the requirements of the lesson set by the professor of murals, and this can be indicated in the following points:

1- Employed artistic elements: The student adopted color distribution as an essential element in the production of the artwork by using cold colors, and gradations of blue with warm color lines, in addition to employing the neutral colors black, gray, and white.

2- Artistic relations and methods of their distribution: Color spaces, lines, and some circles were balanced to produce one artistic unit that adopts color balance in dividing spaces. It is noticeable that the student has given a rhythm through the color

contrast with the presence of formal repetitions, especially in the shape of the circle and the presence of black and yellow linear symmetry. The student also tried to employ a flowing color movement from top to bottom.

3- The method of implementing the work: The method of implementation was adopted in several stages, the first according to blended learning through the directives of the subject teacher. The broad lines represented in measuring the artwork, the material used, the quality of the required colors, and the main idea of the science were drawn up. Furthermore, the student, according to blended education, using computer programs, designs the form of the artwork in its initial form and moves to the next stage, which is the stage of attendance implementation within the classroom at the university. What was designed was also implemented by computer programs, which are Photoshop or CorelDraw, after which the work is presented to the professor via the electronic platform Classroom for evaluation by the course professor, see Figure 16.



Figure 16. Contemporary color compositions Mural, by Asala Star, Diyala University (The researcher).

4.1.2. Sample (2): Formative Relationships

The idea was implemented by the student Hiyam Karim Ismail, where the idea of the work includes the production of a contemporary artwork using different technical means and according to the requirements of the lesson set by the professor of murals, and this can be indicated in the following points:

1- **Employed artistic elements:** The student adopted color distribution as an essential element in the production of the artwork, using mainly warm colors and some cold colors, which are green, red, and yellow gradations with geometric shapes while employing the point, line, area, shape and filling the color spaces.

2- **Artistic relations and methods of their distribution:** Color spaces, lines, and some circles and geometric shapes were balanced to produce one artistic unit based on the division of spaces. The student has given a rhythm through color contrast with the presence of formal repetitions, especially in irregular shapes, and the student has tried to give larger color spaces.

3- **The method of implementing the work:** The method of implementation was based on several stages, which are the same in the first sample because the instructions and directives are the same for all students regarding the implementation of the work according to the blended electronic and traditional education, see Figure 17.



Figure 17. Formative Relationships Mural, by Hiyam Karim Ismail, University of Diyala (The researcher).

4.1.3. Sample (3): Chromatography Using Different Techniques

The idea was implemented by the student Noor Qasim Mohammed, which includes producing contemporary artwork using different technical means and according to the requirements of the lesson set by the professor of murals. This can be explained in the following points:

- 1- **Employed artistic elements:** The student adopted the color distribution and techniques using acrylic and glass colors according to the school while employing line, space, shape, and filling the color spaces.
- 2- **Artistic relations and methods of their distribution:** Color spaces, lines, many lines, and hot and cold colors were used that created different color contrasts and antonyms according to the contemporary abstract school in a balanced manner to produce a single artistic unit based on the division of spaces.
- 3- **Method of implementing the work:** The implementation method was based on several stages, which are the same in the first sample because the instructions and directives are the same for all students about carrying out the work according to blended electronic and traditional education see Figure 18.



Figure 18. Color formation with different techniques, by Noor Qasim, University of Diyala (The researcher).

4.1.4. Sample (4): Faces

The idea was implemented by Elaf Amer Adnan, which includes producing contemporary artwork using different technical means and according to the requirements of the lesson set by the professor of murals. This can be explained in the following points:

1- **The employed artistic elements:** The student adopted the color distribution and human shapes according to the cubist school, using triangular faces with a color distribution of cold colors with geometric shapes while employing line, area, shape, and filling the color spaces.

2- **Artistic relations and methods of their distribution:** Color spaces, lines, and some human forms were used according to the abstract and cubist school in a balanced way to produce one artistic unit that depends on the division of spaces, and it is noted that the student put formal repetitions, especially in the shape of the human face

3- **The method of executing the work:** The method of implementation was based on several stages, which are the same in the first sample because the instructions and directives are the same for all students about the implementation of the work according to the blended, electronic, and traditional education, see Figure 19.



Figure 19. Painting entitled Faces, by Elaf Amer Adnan, University of Diyala (The researcher).

4.1.5. Sample (5): Cubic Shapes

The idea was implemented by the student Hadeel Hamid Abd, which includes the production of a contemporary artwork using different technical means and according to the requirements of the lesson set by the professor of murals and according to the following points:

- 1- **The employed artistic elements:** The student adopted the color distribution, human and geometric shapes, and areas in a vertical longitudinal manner, with the division of spaces linearly according to the cubist and abstract school, using hints of the human form with a color distribution of cold colors, in addition to geometric shapes, and the employment of line, area, shape, and filling the color spaces.
- 2- **Artistic relations and ways of distributing:** Color spaces, lines, and some human shapes were used in a balanced manner according to the abstract and cubist school to produce one artistic unit that depends on the division of spaces.
- 3- **The method of implementing the work:** The method of implementation was based on several stages, which are the same in the first sample because the instructions and directives are the same for all students about the implementation of the work according to blended electronic and traditional education, see Figure 20.



Figure 20. Cubic Shapes, by Hadeel Abed, University of Diyala (The researcher).

4.1.6. Sample (6): Abstraction

The idea was implemented by the student Dhafira Mukhaiber Mudhaffar, which includes the production of a contemporary artwork using different technical means and according to the requirements of the lesson set by the murals teacher, according to the following points:

1- The employed artistic elements: The student adopted the over color distribution and animal shapes, i.e. birds and geometric shapes, i.e. circles, streamlined division of space according to the school of abstraction, with color distribution of cool colors and geometric shapes, as well as lines, areas, shapes and and filling of color spaces were employed.

2- Artistic relationships and ways of distributing: Color spaces, lines, and some animal shapes were used according to the abstract school in a balanced way to produce one artistic unit that adopts the division of spaces, and it is noted that the student put a visual attraction point, especially in the form of the bird.

4- Method of implementing the work: The implementation method was adopted in several stages, which are the same in the first sample because the instructions and

directives are the same for all students concerning carrying out the work according to blended, electronic, and traditional education, see Figure 21.



Figure 21. Bird painting, which bears the characteristic of abstraction, by Dhafira Mukhaiber Mudhaffar, University of Diyala (The researcher).

After the analysis of the samples, the students of the Faculty of Fine Arts of the University of Diyala produced their contemporary artwork in a purely artistic way, implemented in several stages following the method of blended learning and using hybrid computers, as already mentioned. These stages lead to the realization of a contemporary work of art, characterized by simplicity of form and color, at the same time moral, organized and pure.

Also, it moved to the stage of implementation, which led to the production of works that moved away from representation to allow the viewer to interpret the work as he sees it with his view. It is worth noting that abstract art does not require high artistic skills because it sometimes depends on space and color formations; therefore, this art in the preparation stage is compatible with the blended education method. In conclusion, after describing and analyzing the samples according to the axes of the analysis form, a set of results, conclusions, recommendations, and proposals were drawn, which will be mentioned in the next chapter.

CHAPTER FIVE

5. RESULTS

The Faculty of fine arts at the University of Diyala students in the fourth stage in murals have employed the skills they acquired through blended learning and using the computer. Accordingly, the subject teacher directs the students through electronic classes to employ the elements of art represented by lines, shapes, directions, color, and measurement. To produce contemporary artwork, they were also instructed to adhere to the technical rules they were trained on through computer programs, Photoshop, and CorelDraw. This is in the distribution of units within the boundaries of the space of the artwork, which is the mural, including the balance and harmony of the elements, the proportionality of spaces, colors, sizes, and the distribution of the details of the shapes in a balanced manner, in order to give unity to the artistic mural and an aesthetic and formal dimension added to the implementation of the contemporary artwork.

Through the descriptive analysis of samples and models of artworks that students executed through blended learning, it was noticed that there is a development in how the works are executed using the computer, which was certainly reflected in the production of the artwork, in form and content, especially in samples 3, 5, and 6. The intellectual content of contemporary artworks, including research samples, is based on employing contemporary artistic elements and symbols and using contemporary implementation techniques, including the method of distributing colors, geometric shapes and lines, textures, and the use of painting space well.

The impact of contemporary artworks created by students through blended education has been nothing short of remarkable. It has significantly shaped our understanding of the effectiveness of this educational approach. What's truly fascinating is that it underscores a seamless connection between different teaching and learning methods, whether it's the hybrid approach of blended learning or the traditional face-to-face setup.

This continuity becomes especially evident when we examine the work of students in samples 1, 2, 3, 4, and 5. These examples showcase how students are successfully merging the benefits of both online and in-person learning to produce impressive, modern artworks.

Furthermore, there's a growing recognition of the need to further hone students' skills in this realm. This can be achieved by diversifying the range of specialized computer programs available for drawing. Today's technology offers a plethora of tools that facilitate the implementation and development of creative ideas, particularly in the realm of color theory. is also a need to develop students' skills technology is empowering students to express their artistic visions in innovative ways.

5.1. CONCLUSIONS

The study findings shed light on the evolving landscape of computer usage in education among a cohort of both students and educators. Interestingly, these findings have highlighted an overwhelmingly positive trend in their perceptions and experiences with blended learning through computer technology.

What's particularly intriguing is that these outcomes align with existing research both from the Arab and international contexts, all of which advocate for the integration of computers into the educational sphere. This endorsement extends to areas like fine arts education, where the incorporation of computer technology is proving to be a valuable and enriching tool. The results underscore the promising role that computers play in shaping the future of education.

In addition, the results showed the significant effect of using the computer in blended learning methods applied by art students to produce contemporary Iraqi artwork. Moreover, blended learning develops students' skills, improves their abilities, and raises their awareness to produce works of art characterized by their contemporary style students of fine arts faculties in Iraqi universities. The use of specialized computer programs and blended learning platforms had a great role in knowing the extent of the student's development and understanding and the link between blended learning and traditional learning.

The concept of blended learning, combining both online and face-to-face education, empowers students to learn across various settings and schedules, enhancing their grasp of essential knowledge and technical proficiencies. Through blended learning, students achieve a robust level of education and cultivate their adeptness with cutting-edge teaching technologies, ushering in novel prospects in the realm of modern technology. Moreover, the infusion of modern technology into the realm of contemporary Iraqi arts yields favorable outcomes, particularly in the domains of artistic self-expression, art application, and the creation of innovative artworks aligned with modern artistic techniques. This symbiotic relationship between education and technology propels human progress and creativity to new heights .

5.2. SUGGESTIONS

SOME RECOMMENDATIONS WERE MADE IN THIS STUDY, AND THEY ARE AS FOLLOWS:

- 1- As e-learning and blended education experiences in Iraqi institutions and universities are still relatively new, the researcher suggests that, in addition to the skills to apply specialized technologies, there is a need for training sessions for teachers and students, especially specialized graphic programs.
- 2- Compare the effectiveness of blended learning and traditional methods in education by analyzing the artwork produced by university students throughout Iraq.
- 3- Conducting an investigation, into the approaches that align with the fields of arts and cater, to specific study areas particularly in the realm of drawing.
- 4- The researcher suggests that Iraqi universities should meet all the requirements to enhance the experience, for both students and professors. This can be accomplished by utilizing information technology, computers and modern internet related technologies.

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