

THE CREATIVE CAPABILITY OF MICROSOFT WORD AS A FORDABLE SUBSTITUTE IN TEACHING DIGITAL ART

الإمكانات الإبداعية لبرنامج مايكروسوفت وورد كبديل متوفر في تعليم الرسم الرقمي.

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ABSTRACT

Digital art is considered one of the modern arts whose learning has become no less important than other arts, as it has been introduced into the curricula of general education and university education. Moreover, university programs specialized in digital art have also been established. In the Kingdom of Saudi Arabia, the first computer-based university program was opened in 2004 at Dar Al-Hekma University under the name of Graphic Design and Digital Media, and then followed the opening of similar programs in different universities, even Fine Art education programs, which aim to prepare an fine art teacher, which introduced computer-based art courses, meaning that the skill of digital art became Essential for fine art teacher, but the difficulty of providing a computer lab equipped with the latest drawing software, whether in schools or Fine Art education programs in universities, is an obstacle for students to learn and practice this art, hence the goal of this research, as it seeks to verify the creative capability of Microsoft Word as an alternative to digital drawing software, as it is an alternative often available and suitable for the simplest computers, unlike drawing and design software that require certain specifications in the computer such as high speed and large memory and the latest processor. This study uses qualitative research as it relies on direct observation of students' performance and conducting interviews with them to collect qualitative data from students and with faculty members in the Fine Art Education Department. This research has shown results that indicate the creative capabilities of Microsoft Word, which recommends its use as an alternative creative tool in public education, especially when high specification computer is not available.

KEYWORDS

Digital drawing; available alternative; obstacles of teaching digital art

المخلص

يُعتبر الفن الرقمي أحد الفنون الحديثة والتي أصبح تعلمها لا يقل أهمية عن غيرها من الفنون ، حيث تم إدخالها على مناهج التعليم العام والتعليم الجامعي، كما نشأت برامج جامعية متخصصة في الفن الرقمي بحد ذاتها. في المملكة العربية السعودية، تم افتتاح أول برنامج جامعي يعتمد على الحاسب الآلي في الفنون عام ٢٠٠٤ في جامعة دار الحكمة تحت مسمى التصميم الجرافيكي والوسائط الرقمية، وبعدها توالى افتتاح برامج مشابهة له في جامعات مختلفة ، حتى برامج التربية الفنية والتي تهدف لإعداد معلم التربية الفنية أدخلت مقررات فنية تعتمد على الحاسب الآلي، أي أن مهارة الفن الرقمي أصبح أساسيا لدى معلم الفنون إلا أن صعوبة توفير معمل مجهز بأحدث برامج الرسم سواء في المدارس أو برامج التربية الفنية في الجامعات يعتبر عائق أمام الطلبة لتعلم وممارسة هذا الفن ، ومن هنا جاء هدف هذا البحث حيث يسعى إلى التحقق من الإمكانات الإبداعية في برنامج مايكروسوفت وورد كبديل لبرامج الرسم في الحاسب الآلي ، حيث أنه بديل متوفر غالبا وملئم لأبسط أجهزة الحاسب الآلي على عكس برامج الرسم والتصميم التي تتطلب مواصفات معينة في الحاسب الآلي مثل السرعة العالية والذاكرة الكبيرة والمعالج الاحدث. تستخدم هذه الدراسة البحث النوعي حيث تعتمد على الملاحظة المباشرة لاداء الطلبة وعمل مقابلات معهم لجمع البيانات النوعية من الطلاب ومع أعضاء هيئة التدريس بقسم التربية الفنية. وقد أظهر هذا البحث نتائج دلت على الإمكانات الفنية لدى برنامج مايكروسوفت وورد والتي توصي باستخدامه كأداة إبداعية بديلة في التعليم العام لاسيما عند عدم توفر أجهزة ذات مواصفات عالية .

الكلمات المفتاحية

الرسم الرقمي؛ البديل المتوفر؛ عوائق تعليم الفن الرقمي

1. INTRODUCTION

Digital art has been introduced into the curricula of general education and university education in Saudi Arabia currently. However, this type of art it faces different obstacle due to the absence of sufficient training of school fine art teacher as they have qualification of fine art education that mainly focus on fine art and applied art such as painting, wood work, metal work, craft work and ceramic. In spite that the Fine Art Education departments in Saudi Arabia has introduced some module that target digital art, their students still challenge obstacles in terms of have access to computer lab that equipped with cutting edge computer that suitable for professional digital art software such as Adobe and AutoCAD software. Therefore, this research attempt to investigate a new practice of digital art by using affordable software. To accomplish this aim, the study used a qualitative method, where the experiment was applied to the research sample and direct observations were taken from them in addition to direct personal interviews with them before and during the experiment.

2. LITRATURE REVIEW

Technological advances have increased recently (Eady & Lockyer, 2013). Studies showed that there is attamed of implementation of technology for educational purposes in different fields of teacher education worldwide (Salavat, 2016; Lin, 2011; Kotrlik & Redmann, 2009; UNESCO, 2002). The Internet access and digital technologies have changed pedagogy and student participation in Art and Design education. Moreover, there is a number of creative software that have been developed to be used as a creative tool in art classes such as Adobe Photoshop, Adobe Illustrator and Coral Draw. However, this software required to be installed in a computer that has special feature in terms of the memory and processor speed. Beside that, it quite costly and need special skills due to it complicated usage. In developing countries, there is a difficulty to access technology. Besides that, there is a low competence in using it. A study by Acilar (2011), showed that there is a differences in using technology between rural and urban, male and female, young and elder. Moreover, there is a number of studies argued that the application of technology in education presents a dilemma because of insufficient digital resources, scarcity of appropriate training (Gilakjani, Leong, & Ismail, 2013; Brinkerhoff, 2006; Wood, 2004; Delacruz, 2004). In terms of fine art education, the application of technology includes different practice such as using technology in preparing and delivering the lessons such as using Microsoft office software. In particular using Word and PowerPoint for non-creative aspects such as writing and presenting information and digital image for the students (Apau, 2004). Similar study by Tusiime, Johannesen and Gudmundsdottire (2019) showed that as a result of insufficient access to appropriate hardware, software and low digital skill among art teacher in Uganda, art teacher use non-professional soft- ware such as Microsoft Office in Art and Design subjects. These previous studies indicated that the practice of technology in art education in developing countries limited to using it as supporting tool for delivering lessons. Moreover, a study by Abdullhafiez (2011) demonstrates that in Saudi Arabia there is a lauck of computer usage among fine art teacher due to the absence of training in this field. Similar study by Alharbi (2017) shows that in Saudi Arabia, there is a shortage of technology equipped art classes that have appropriate hardware and software either in schools and universities. Although that there is a tend toward opening new courses involve using digital art in Fine Art Education, there is a low competence among teacher in using this form of art due to the absence of training and support.

3. THE STUDY AIM

In the light of the above, to summarise the challenge that rose by the interview within The Fine Art Education Department in teaching The Computer in Fine Art Education module, it is the difficulty to access creative software in art classes. Therefore, the aim of this study is to investigate a new practice of digital art by using affordable software. The affordable software that been used in this research is Microsoft Word. This particular software is a word processor developed by Microsoft in 1983. Its purpose is to allow users to type and save documents in multi files. There is many studies focus on the development of Microsoft word in terms of word processor. Moreover, many researchers investigated the application of Microsoft word in education. However, a small number study it in terms of using it in art classes (Lemon, 2015, Onwuagboke et al, 2015, Tusiime et al, 2019). Nevertheless, using it as a creative tool practice has not investigated yet.

4. RESEARCH METHODOLOGY

The study used a qualitative method, where the experiment was applied to the research sample and direct observations were taken from them in addition to direct personal interviews with them before and during the experiment. The sample for this study were six students from the Fine Art Education in Taibah university. In particular, students who enrolled in the module of Computer in the Fine Art Education. This module aims to develop digital art skills within the students department in order to prepare them as a Fine Art teacher in schools, where they supposed to have at least basic skills in digital art practice as well as an excellent skills in Fine Art practice. The study was conducted during the academic semester and for a period of five weeks at a rate of one session of two hours per week. At the beginning, the researcher discussed with the students the obstacles in using design digital programs that they face as students of the Department of Fine Art Education, and they were summarized in the following points: the lack of a computer lab equipped with drawing and design software, which necessitated their provision of their own laptop computers, the second point is the difficulty of accessing the drawing and design software for several reasons, including that these software are not free, which is a burden on some students or the inefficiency of their laptop computers, as most of the them have laptop that are suitable for office usage such as text and presentation software or surfing the Internet. Based on these criteria, Microsoft Word was chosen as an alternative software in the selected module to conduct the experiment, as based on the data obtained by the researcher from the study sample, everyone has this software, especially that Taibah University provides students and employees with a free access of Microsoft Office software. Moreover: because this software does not require high specifications in the computer compared to digital drawing and design software.

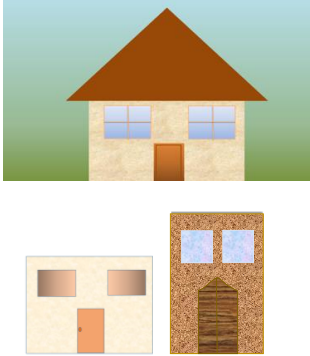
5. THE STUDY STAGES

In this study, the researcher has a qualification in graphic design and fine art, which means has a competence in both usage of technology and artistic. In the beginning of this study, the student introduced to the history of computer development and its general usage. Then, students knew about the application of computer technology in Fine Art Education and how it could be used by teacher in school for different level. Moreover, student learn about the different aid tools that can be used by artist and designer including computer mouse and digital pen and tablet. To accomplish the aim of this research, five sessions were set to conduct the study, as follows:

5.1 FIRST STAGE

The first session: The researcher discussed with the students the possibility of using Microsoft Word as an alternative to digital drawing and design software, but the students did not welcome the idea, as it is from their experience that this is a text-specific software and that the artistic aspect of it is only limited to inserting image files or inserting ready-made shapes that the software has. After that, the tools of different shapes from the shape panel in the software were reviewed and the students were introduced to them and the technical capabilities that they can use to create a very simple artistic painting based on geometric shapes such as a simple house that formed from square shape and has triangle roof with (table 1).


Table 1: first stage

Student works	Observations Comments
	<p>The first attempt showed very simple houses created using basic shapes and applied different effects such as paper textures to the house and gradient color to give a glass effect for the window.</p>

5.2 SECOND STAGE

In this session, the researcher introduced students to the creative possibilities that exist in both the scribble tool and the free-form tool, which are both from the shape panel and allowing them to make drawings of individual elements that were identified by the researcher, such as the shape of a heart, a leaf, or a flower. After the first and second sessions, the students still did not welcome the idea of using Microsoft Word software as an alternative to professional drawing and design software, as they justified this by saying that its creativity is limited and it is not possible to create an artwork that shows their creativity in artistic formation (table 2).

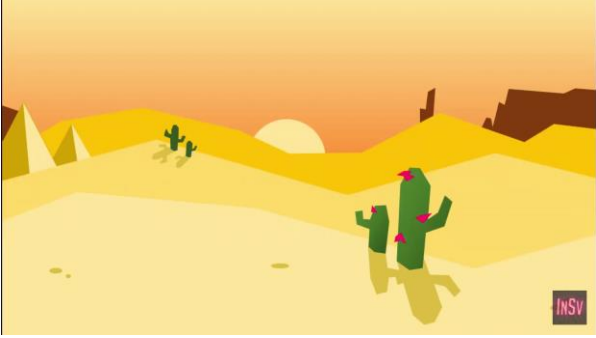







Table 2:second stage

Students Drawing	Observations Comment
	<p>The second attempt showed very simple elements drawn using free form and scribble tool that represent heart, flower and leaves</p>

5.3 THIRD STAGE

In this session, two perfect artworks of landscapes drawn in Microsoft Word were presented, in which each work contains an integrated artwork in terms of applying the design principles and the accurate of representation of the elements in a clear approach. The steps of creating these artworks were presented to the students so that they were requested to choose one artwork to copy it step by step to practice the creative application of the available tools in Microsoft word software. The result of the students' work was graded between identical copy and acceptable and satisfactory, and they also showed a change in their opinion of the software's creative capabilities and their excitement to make designs of their own (table 3).

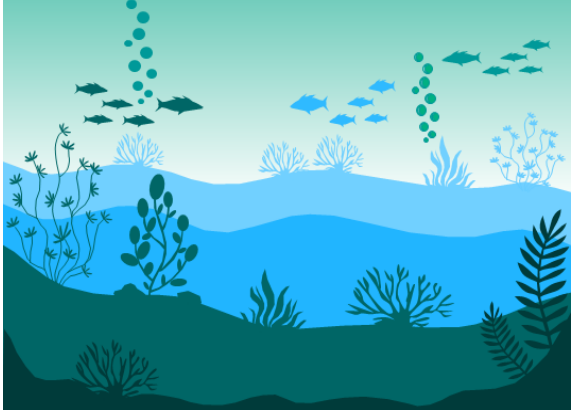
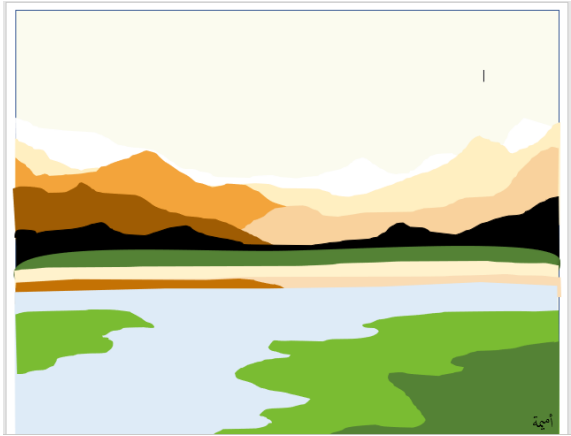

Table 3:third stage


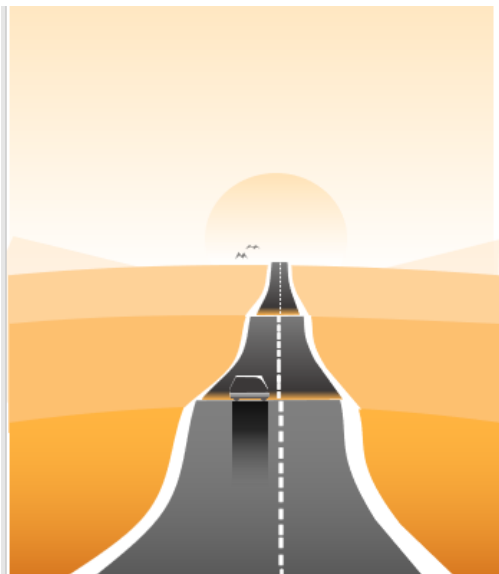

The Original Art Work	Students Representation Of The Artwork
 	     

5.4 FORTH STAGE

In this session, the students were requested to create their own artworks of a landscape view from their choice. Their artworks varied from a view of green hills, sea side and desert. The result of the students' work was graded between perfect, good and acceptable. The following schedule show the students works and the researcher observation comments on their works (table 4).

Table 4:forth stage



Student work	Observation comments
	In this artwork, the student created a view of a deep sea in silhouette style. She shows an accurate representation of all the elements such as fish, sea plants and corals. Moreover, she demonstrates different distance through applying diverse color tones. Furthermore, she managed to draw different shape of sea plants.
	In this artwork, the student created a view of with an oasis. Her representation shows a good representation of mountains, pond water and green plains. Moreover, in this artwork, the student demonstrates different distance through applying dark color to represent near mountains and light color for the far one. Also, a natural outline for the pond show that she managed to use the software tool smoothly.
	In this artwork, the student draws a view of lake under the moon light. The student shows a good level of representing a moon reflection through using the scribble tool smoothly. Moreover, adding glowing effect around the moon represent the moon aura. Besides that, student manage to draw stars and pine tree in different sizes.

	<p>In this artwork, the student drew a view of hill under the moon light. The student shows a good level of representing a palm tree silhouette. She managed to draw details of the palm tree leaves and trunk and a good drawing of grass. Besides that, adding glowing effect around the moon to represent moon aura. The student adds a few spots of light gray color to the moon to make it more realistic view. Moreover, using gradian color in the back ground represent the view of full moon night.</p>
	<p>In this artwork, the student drew a view of a high way crossing a desert. This student shows an acceptable level of drawing using Microsoft word software. The student demonstrates to show different distance level for the highway. Furthermore, using gradian color represent the sky and the sun.</p>
	<p>In this artwork, the student drew a view of full moon night above the sea. This student shows an acceptable level of drawing using Microsoft word software. The student expresses to show very simple wave by adding glowing and bevel effect to the sea. Besides that, she used the blur effect to the moon.</p>

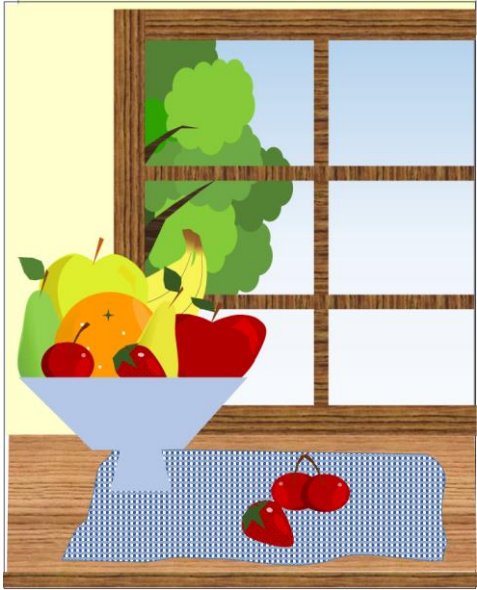

5.5 FIFTH STAGE

In this session, the students were requested to create their own artworks of a still life from their choice. Their artworks varied from a view of flowers vasa, fruit basket, view of different rooms. The result of the student's work was graded between perfect, good and acceptable (table 5).

Table 5: fifth stage

Student artworks	Observation comments
	In this artwork, the student created a still life that represent a perfect level. She shows an accurate drawing of the different elements in her work. using gradian color in the flower petals give a realistic look to it besides creating a different sizes and shape of flowers show her perfect demonstration. In addition, she draws a vas with a smooth outline using the edit shape tool. She applied inner shadow in white color to the vase to make it look like a shine ceramic vase. Moreover, applying texture of the background color to represent a pattern wallpaper. Besides that, the student shows an excellent drawing of detailed fish bowl that really has a realistic look of a water in a clear glass with an accurate gold fish. Furthermore, student managed to create a wood cabin with drawer using the wood texture effect and bevel effect to express different depth.
	In this artwork, the student created a still life that also represent a perfect level. She demonstrates to create a realistic daisy flower in different sizes. The details in the daisy flowers that includes shadow and nonidentical petals approves that the student benefit from the software creative capability. Moreover, she drew a tea pot and add to it bevel and shadow effects. Besides that, she draws a tea towel using the scribble tool and applied a gradian color to add s a natural look. In addition, she used the texture of different material such as the marble effect to the floor and wood effect to the table.

	<p>This artwork shows a good level. Because the student demonstrates using the software tool to create a still life picture with a good representation of the different elements. She used the gradient effect to the background to express that there is a light from the right side. Moreover, the student benefit from adding inner shadow to the shape that used to form the vase to represent different depth. Similarly, to most of the students, she applied texture effect in this case the marble effect to the table. The student attempt to create a natural look table cover but comparing to the previous student this case has nonacurate representation. Besides that, creating identical orange show less demonstration.</p>
	<p>This artwork also shows a good level. The student put too much details in her still life, which approve, that the Microsoft word software has allowed her to represent different objects the student managed to create a realistic curtain the express net light airy material. Moreover, a detailed daisy flower has been drawn. However, it looks stiff because they are identical; in term of the size. In addition, adding inner shadow to the two tins that has art tool make it more three dimensional. Wood texture that has been added to the floor, backwall and the table aqsest the student to bring life in its work. on the other hand, the student shows less demonstrate in her representation of the table lamp and the art canvs.</p>

	<p>This artwork shows an acceptable level. The student managed to draw different elements such as fruit stand with variety of fruits, table cover and a window. However, her representation has no realistic details comparing with the previous for students such as showing depth in the fruit stand by adding inner shadow and natural look to the table cover. Nevertheless, she benefits from the software capability in adding texture effect to the table and the window frame and adding shadow to the fruits.</p>
	<p>This artwork also shows an acceptable level. Student did not put efforts in her still life. She applies some of the software effects such as the bevel, shadow and texture but not in the right usage. However, her representation was clear as it easy to see that she draws a clear glass vasa with flowers, an orange juice in a glass cup and a single orange fruit.</p>

6. RESULT DISCISSION

The result of students' practice was surprising for the researcher and for them as well. According to the students' artworks that represented above, the results show a clear representation of the different topics that were chosen by them. Moreover, as it said previously the student's artwork was graded between perfect, good and acceptable. The perfect artwork shows an accurate representation of the different object and elements such as drawing different curve, shape and angle. In addition, the feature of adding different effect such as shadow, glow, reflection and bevel. This result approves that the creative tools in Microsoft Word software, in particular the scribble tool and the free-form, have a flexible ability. This feature assisted enhancing the creating of accurate artwork depending on student creativity. As student who showed a

perfect artwork are from the top student in the department. While the good artwork shows less aureate representation of the different objects and elements with benefit from adding the different effect to them for more realistic express. On the other hand, the acceptable artworks show a very simple representation of the different object and elements but without natural or realistic express. In the light of the above, this study demonstrate that Microsoft word software has feature that can be used in creating creative artworks. This result approves that this software can be used as an alternative for practicing digital art for non-professional in using software that specialise in digital designing and drawing. This is because Microsoft word has a simple interface comparing with professional software. Moreover, Microsoft word can be installed in a basic computer that has small memory and basic processor comparing with professional software that required high speed and large memory computer.

7. CONCLUSION AND RECOMMENDATION

The finding of this study managed to accomplished the research aim, which is verifying the creative capability of Microsoft Word as an alternative to digital drawing software. According the outcome of the experiment, students produce an artwork that show a clear representation of the different topics that graded between perfect, good and acceptable. Moreover, the result of the research showed that Microsoft Word software can be used as an affordable alternative software in teaching digital art because it has basic features that can be used in producing artworks. So, it would be appropriate in developing countries that facing difficulty in accessing to creative software due to its expensive coast and its specific hardware requirement. Therefore, this study provided a number of recommendations:

1. Enhancing fine art students' creativity through encouraging them to practice digital art by different software.
2. Adding lessons that target taring students in the Fine Art Education Department in using an alternative software such as Microsoft word so they can apply it when they graduate as a fine art teacher.
3. More improvement to Microsoft word to add more creative feature that allow artist to express through it.
4. More study needed to be conduct to investigate how school student could use Microsoft word as creative tool.

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