The effectiveness of mobile learning and alternative evaluation in developing some skills of decorative painting design "urban design" and some skills of alternative evaluation for students of art education

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### 1-an introduction:

Modern and successive technological developments in this era that have a lot of positive effects in various aspects of life and the educational system in particular and in light of the changes that the world is going through due to the new Corona virus and the major problems that resulted from it, especially in the educational process, therefore saw those in charge of managing the educational system activating Educational strategies based on this technology such as: Distance Learning, E-learning, Virtual Reality, and Mobile Learning, which the research deals with by identifying its effectiveness using it in the field of art education in general and in the field of decorative designs in particular and the education and learning of students for some Decorative painting design skills "the art of urban design" and how to evaluate student performance by employing some alternative evaluation strategies.

### 2-Research problematic

Educational technology has contributed to the modernization of the means of communication such as the Internet, computers and smart phones, thus it has contributed to the development of traditional educational methods, and technological learning is the main pillar for the development of the educational process, as technology has a tangible role in education, so electronic and digital schools, classes and virtual universities appeared (Muhammad Al-Zahrani, 2005: p. 25). The great development in information technologies and the increase in the development of electronic devices have led to the emergence of a term called mobile learning (Munir Baalbaki, 2012: p.16). Muhammad Al-Hamami defines it, 2006 as "learning anywhere and anytime without the need for a permanent connection to wireless networks with the integration of technologies of all types of wired and wireless networks.

Whiteside, 2018 mentions that mobile learning environments are a form of machine learning that uses and employs artificial intelligence to learn students through interaction and conversation. It is considered a new type of dialogue-based research as it searches for the meaning or intent behind the conversation, then information is called, the appropriate contexts are identified, and the response is sent. Own. Mobile learning has been employed in many branches of science in general and in the field of art education, as far as the researchers know, it has only been used sparingly, and the field of art is one of the fields that need to employ this technology.

Art is a tripartite relationship between the work and the creative designer, the recipient and the conscious connoisseur, the artistic work is the fruit of the designer's creativity through his

experiences and culture that reflects his era, his environment and his society, and it is a crystallized summary of all that through the designer's self-vision. The artistic work, then, is a mirror of the era from the point of view of a creative artist, and the total artworks of an era represent the reading of the excellent elite of this era for its features, philosophy and trends of the era in which they lived and the environmental, cultural and social conditions that excited them and formed their directions, when you contemplate any artwork we find that includes many Values, and these values are rooted in the choice of shapes, colors and the idea that the artistic framework includes, and the designer's job in this case is to organize these values together in an integrated manner and the types of values are: - the intellectual value - the formal value - the color value (Ayman Abdel-Azim, 2005: 116).

There are organic relations closely related between the artists and the civilizations in which they lived, and those arts in their various types, forms and styles were the result of all the activities circulating in those civilizations, and the forms of art became a reaction and a reflection of the ideological contents presented in those civilizations, arts and eras, and among those various forms and patterns Metabolism is one of the fields of arts such as (urban art) which is of importance in the field of decorative painting. The research deals with identifying the effectiveness of using mobile learning in the field of decorative designs, especially the teaching and learning of students of some decorative painting design skills "The Art of Virtual Urban Design" and how to evaluate students' performance by employing some alternative evaluation strategies.

Hence the research problem arose, which is summarized in the following main question: What is the effectiveness of mobile learning and alternate calendar in developing some decorative painting design skills "virtual urban design" and some alternative calendar skills for art education students?

### This question is divided into the following questions:

• What is the possibility of applying mobile learning in developing some of the skills of designing the decorative painting "Virtual Urban Design" among the fifth year students of the Faculty of Art Education, Minia University?

• What is the effectiveness of mobile learning in developing some of the skills of designing the decorative painting "Virtual Urban Design" for the fifth year students at the Faculty of Art Education, Minia University?

What is the effectiveness of mobile learning in developing some alternative evaluation skills for fifth year students at the Faculty of Art Education, Minia University?

### 3-Research objective: The research aims to:

• Determine the requirements for the application of mobile learning in developing some of the skills of decorative painting design "urban design" and some alternative evaluation skills among students of the fifth year, Faculty of Art Education, Minia University.

• Measuring the effectiveness of mobile learning in developing some of the skills of designing a decorative painting "Urban Design" for students of the fifth year, Faculty of Art Education, Minia University.

• Measuring the effectiveness of mobile learning in developing some alternative assessment skills for fifth year students at the Faculty of Art Education, Minia University.

# **4-Research importance:**

• Maximizing the use of mobile learning systems in bringing about a qualitative leap in the field of education by employing it in educational situations in the various fields of art education and theoretical process.

• The current research may contribute to developing the skills of decorative painting and opening new horizons for researchers to conduct more research in virtual urban art.

• The current research, together with previous studies and research, may contribute to developing a new and conscious vision for the process of evaluating art education using alternative evaluation strategies and tools.

# **5-Research Methodology:**

• <u>Descriptive and analytical method</u>: used in the theoretical framework and the preparation of research tools through the study of literature, studies and previous research related to mobile learning and strategies for alternative evaluation and design of the decorative painting "urban design".

• <u>The semi-experimental approach</u>: is the selection of the research group, and the application of its tools, where the one group system was chosen, by comparing the pre and post application of the group scores in the technical performance test, the evaluation card, and the note card.

### **6-Research hypotheses:**

# Based on the information reached in previous studies, the research hypotheses were formulated as follows:

• Mobile learning contributes to the development of some skills of decorative painting and virtual urban art effectively.

• There are statistically significant differences between the mean scores of the experimental group in the pre / post application in the observation card for developing some decorative painting skills and virtual urban art in favor of the post application.

• There are statistically significant differences between the mean scores of the experimental group in the pre / post application in the observation card for developing some alternative evaluation skills in favor of the post application.

### **7-Search procedures:**

# The research procedures are as follows: search limits:

• Thematic boundaries: Implementing virtual designs for the decorative panel "Urban Design" on the wall and various buildings through pop art and abstract engineering by employing mobile learning through Messenger WhatsApp, Facebook (Telegram Messenger) programs, and using Adobe Illustrator CS6, Adobe Photoshop programs CS6, PicsArt and using Microsoft Office One Note 2010 alternate calendar software.

• Human Limits: The research sample was represented by (25) male and female students from the Fifth Division in the Division of Art Education and Art Education at the Faculty of Art Education, Minia University, who were randomly selected as an experimental sample for research.

• **Spatial and temporal boundaries:** a virtual reality that was created for the group on both (Messenger, WhatsApp, Facebook (Telegram Messenger), and the application was carried out in the second semester of the academic year 2019/2020 AD from the first of March to the end of June with a weekly interview with the possibility of consultations throughout the week .

### Study tools: The research tools are:

• Experimental treatment tool: represented in the proposed program for employing mobile learning and alternative calendaring in developing some skills of decorative painting and urban design and developing some alternative evaluation skills among students of art education in the fifth division of the divisions of art education and art education at the university level. It was prepared, downloaded and implemented using social media programs (Messenger WhatsApp, Facebook (Telegram Messenger), and used in implementing the application side of the program, Adobe Illustrator CS6, Adobe Photoshop CS6, and PicsArt and using the Microsoft Office One Note 2010 alternative calendar program, using smart devices for easy presence with students, and it was taken into account when preparing the program that it contained many Multimedia and interaction, as shown in Figure (21), which shows the stages of preparing the experimental treatment tool and the steps for implementing the research (prepared by the researcher Prof. Dr. Amal Abu Zeid).

The initial picture of the program, after preparing it, was presented to a group of arbitrators to identify the validity of the educational program using the mobile learning strategy and the alternative evaluation of the application, in the form of an opinion poll to express their opinion on the following points: Clarity of the linguistic wording of the program evaluation card, and the suitability of the criteria contained in the evaluation card The program, and the extent of the program's suitability for the fifth year students at the Faculty of Art Education, Minia University. The results of the referees 'responses ranged from 80% to 100% to indicate the program's suitability for implementation.

### **Research tools: The study tools were:**

- Experimental Processing Tool: The tutorial that is loaded is virtual environments (prepared by the two researchers).
- Assessment tools: represented in the technical performance test, the note card, the student performance assessment card in the implementation of technical works (preparation of the two researchers).

### 8-Search results: The search found:

- The effectiveness of mobile learning in developing some of the skills of designing the decorative painting "Urban Design" for students of the fifth year, Faculty of Art Education, Minia University.
- The effectiveness of mobile learning in developing some alternative assessment skills for fifth year students at the Faculty of Art Education, Minia University.

### **9-Recommendations of the research:**

### The research came with several recommendations, the most important of which are:

• Developing school curricula to keep pace with the times and gradually shift to digital learning that helps to overcome the climatic and health conditions that countries may be exposed to and hinder the completion of the educational process as it currently exists.

• Training faculty and students on many skills for employing mobile learning in the educational process.

• Training faculty and students on alternative assessment strategies.

• Employing the urban design "designing the decorative painting to beautify the walls and develop the visual vision of the viewer."

### **References:**

.1a7san abw al7sn m96fy w eyman 9la7 aldyn 9al7 w 3bd alr2wf m7md asma3yl: 2018 · "m3ayyr t9mym wentag by2at alt3lm alelktrwny altfa3lyt al8a2mt 3la alt3lm aln8al" 'mglt alb7wth fy mgalat altrbyt alnw3yt 'klyt altrbyt alnw3yt 'gam3t almnya '3 19 'nwfmbr '9 9 86 - 110.

.2A7md m7md salm: 2006 «''astratygyt m8tr7t ltf3yl nmwzg alt3lm almtn8l fy t3lym/ t3lm all'3t alfrnsyt kl'3t agnbyt fy almdars alzkyt fy '9w2 dmg tknwlwgya alm3lwmat walat9alat wa8t9ad alm3rft" «drasat fy alt3lym algam3y «al3dd althany «a'3s6s «mrkz t6wyr alt3lym algam3y «gam3t 3yn 4ms.

.4Adward lwsy smyth: 1997 ‹al7rkat alfnyt ‹t8dym: m96fy alrzaz ‹wmrag3t : a7md f2ad slym ‹ lwts ll6ba3t waln4r ‹9 89.

.5Aymn farw8 3bd al3zym:2005 •fn alt9mym fy alfnwn alt4kylyt •dar al4r8 ll6ba3t.

6.Gmal 3ly aldh4an wmgdy m7md ywns: 2009 «"alt3lym balm7mwl 9y'3t gdydt llt3lym 3n b3d «alndwt al3lmyt l8sm altrbyt alm8arnt waledart alt3lymyt bklyt altrbyt «gam3t kfr al4y5.

7.7madt m7md ms3wd ebrahym w aymn m7md 3bd alhady 3bdh : 2016 ‹"athr ast5dam ald3m alelktrwny fy alt3lm aln8al 3la tnmyt mharat alb7th fy m9adr alm3lwat alelktrwnyt ldy 6lab aldrasat al3lya bklyt altrbyt" ‹almglt aldwlyt ll3lwm altrbwyt walnfsyt ‹alm2sst al3rbyt llb7th al3lmy waltnmyt alb4ryt ‹(1) ·9 9 12- 84.

8.5ald 7sn bkr al4ryf: 2019 ''fa3lyt b3'9 asalyb alt8wym albdyl fy 8yas alt79yl aldrasy bm8rr mharat alt3lm waltfkyr lda 3ynt mn 6lab klyty altrbyt waladab gam3t almlk fy9l "drast m8arnt m3 alt8wym alt8lydy" 'almglt aldwlyt lldrasat altrbwyt walnfsyt. almgld 5 . al3dd 2. 9 79 - 9 96.

9.5ald 7sn bkr al4ryf: 2019 «''fa3lyt b3'9 asalyb alt8wym albdyl fy 8yas alt79yl aldrasy bm8rr mharat alt3lm waltfkyr lda 3ynt mn 6lab klyty altrbyt waladab gam3t almlk fy9l "drast m8arnt m3 alt8wym alt8lydy" «almglt aldwlyt lldrasat altrbwyt walnfsyt «almgld 5 «al3dd 2 «9 9 79 -96.

10.5ald r4ad s3d bny 3wdt: 2015 «"athr ast5dam alt8wym albdyl 3la t79yl 6lbt al9f altas3 watgahathm n7w al3lwm fy mdars m7afzt nabls" «klyt aldrasat al3lya «gam3t alnga7 alw6nyt « nabls «fls6yn.

11.Rafdt al7ryry: 2008 (alt8wym altrbwy (3man : dar almnahg.

12.Ramy zky askndr w rna m7fwz 7mdy: 2016 «alt31m aln8al mobile learning thwrt tknwlwgya gdydt fy alt31ym alm9ry" «mglt alt31ym alelktrwny w7dt alt31ym alelktrwny «gam3t almn9wrt. 13.Ranya 3bd alm7sn 7syn '3anm: 2009 «alm3adl al4kly 1m5tarat mn aladb al43by wtwzyfha fy allw7t alz5rfyt " «rsalt dktwrat «gam3t 71wan «klyt altrbyt alfnyt.

14.zwawyd lzhary w 5wyldy slyman: 2018 «"alt3lym almtn8l byn alr'3bt walrhbt: nzrt t3lymyt mst8blyt " (mglt gyl al3lwm alensanyt walagtma3yt (mrkz gyl alb7th al3lmy (al3dd 40 (mars ( )p. p 121 - 135.

15.Zynb m7md amyn: 2015 (almst7dthat altknwlwgyt r2y wt6by8at (61 (al8ahrt: alm2sst al3rbyt ll3lwm walth8aft.

16.sart samy 3bas m7md al5wly: 2019 «"m3ayyr t9mym alm7adtht alzkyt bby2t alt3lm aln8al wmda t6by8ha fy t6wyr nmwzg llm7adtht alzkyt" «mglt alb7th al3lmy fy altrbyt<klyt albnat lladab wal3lwm waltrbyt <3 20 <br/> <g 14 < <br/> <br/> <br/>, p 572 - 597 .

17.sam7 gmyl al3grmy: 2019 ''wa83 ast5dam 6lbt gam3t ala89y b'3zt lt6by8at alaghzt alzkyt fy alt3lm'' almglt alfls6ynyt llt3lym almftw7 walt3lm 'almgld (7) 'al3dd 13 'kanwn thany.

18. swsn mgyd: 2011 't6wrat m3a9rt fy alt8wym altrbwy 'dar 9fa lln4r waltwzy3 'alardn: 3man. 19.4ady 3bd al7afz 3bd al7afz 7myd: 2013 '"athr twzyf alt8wym albdyl fy tnmyt altfkyr altamly wmharat rsm al5ra26 balg'3rafya lda 6albat al9f al3a4r alasasy" 'rsalt magstyr 'algam3t aleslamyt '3zt 'fls6yn.

20.9fa m7md m7md: 2017 '"t6wyr b6a8at lt8yym by2at alt3lm aln8al fy '9w2 alm3ayyr al3almyt ltknwlwgya alt3lm" 'mglt alb7th al3lmy fy altrbyt '3 18 'g 6 'klyt albnat lladab wal3lwm waltrbyt 'gam3t 3yn 4ms ' p. p 203 - 238.

21.9la7 aldyn m7mwd 31am: 2004 ‹alt8wym altrbwy albdyl ‹assh alnzryt walmnhgyt wt6by8ath almydanyt ·al8ahrt: dar alfkr al3rby.

22.9la7 aldyn m7mwd 3lam: 2010 (al8yas walt8wym altrbwy fy al3mlyt altdrysyt (al6b3t althaltht (dar almysrt ll6ba3t waln4r (alardn: 3man.

1. 3bd alna9r m7md 3bd alr7mn: 2014 ''fa3lyt alnmzgt alzatyt al8a2mt 3la alt3lm aln8al fy tnmyt mharat al7aswb lda tlamyz almr7lt ale3dadyt'' 'drasat 3rbyt fy altrbyt w3lm alnfs ' almmlkt al3rbyt als3wdyt '47 (3) ' p. p 175 - 198.

25. 3byr m7md r'9a al4a6r: 2013 '''fn w3lm bna2 39mart w3mran almda2n al7'9ryt alt9mym al7'9ry'' 'mglt alemarat llb7wth alhndsyt 'al3dd (18) 'mayw.

26. 3ly 3bd al3zym 3ly slam: 2015 «"alt8wym albdyl md5l llart8a2 bada2 alm3lm wt6wyr bramg e3dadh" «alm2tmr al3lmy alrab3 wal34ryn llgm3yt alm9ryt llmnahg w6r8 altdrys "bramg e3dad alm3lmyn fy algam3at mn agl altmyz" «algm3yt alm9ryt llmnahg w6r8 altdrys « p. p. 91 - 119.

27. 3mr 8asm 3ly: 2012 «"t8wym alganb al3mly fy drws altrbyt alfnyt fy almr7lt ale3dadyt mn wght nzr mdrsyha" (mglt alft7 (al3dd al7ady wal5mswn (aylwl.

28. Fyby s3yd fhmy andraws: 2020 «"drw alfn fy t6by8 nzryat alt9mym al7'9ry bast5dam anzmt alt9mym" «the role of art in applying urban design theories using design systems - international design journal, «ynayr.

29. Lyla alghny: 2013 «'fa3lyt alt3lm almtn8l 3br alrsa2l al89yrt fy tdrys b3'9 mfahym alt3lym alelktrwny wmw'9w3ath l6albat drasat al6fwlt" «m8dm llm2tmr aldwly althalth: alt3lym alelktrwny walt3lym 3n b3d «alrya'9 «p. p. 11-12.

30. M7sn al9ad8 m7md a7md (2018): "alt3lm aln8al" (mglt aldrasat al3lya (mg 11 (3 41 ( klyt aldrasat al3lya (gam3t alnylyn.

31. M7md al7mamy: 2006 «"alt3lym aln8al mr7lt gdydt mn alt3lym alelktrwny" «mglt alm3lwmatyt «(6)•ab «9 9 125 – 145

http://infomag.news.sy/index.php?inc=issues/showartle&issuenb=6&id=70

33. M7md alzhrany: 2005 «"wa83 ast5dam a3'9a2 hy2t altdrys fy gam3t almlk fhd llbtrwl walm3adn ltknwlwgya alm3lwmat walat9alat fy altdrys" «rsalt magstyr «algam3t alardnyt « 3man «alardn.

34. M7md 7afz al5wly w m7md a7md slamt: 2007 •alt9mym byn alfnwn alt4kylyt walz5rfyt • mktbt nansy •dmya6 •9 123.

35. M7md 7mwd al3amry: 2008 «"tf3yl dwr "bwtfwlw alfn" fy t8wym t8yym almgalat al3lmyt bklyat alfn waltrbyt alfnyt" (mglt b7wth fy altrbyt alfnyt walfnwn (klyt altrbyt alfnyt (gam3t 7lwan.

36. M7md 36yt 5mys: 2011: ala9wl alnzryt waltary5yt ltknwlwgya alt3lm alelktrwny. 61. al8ahrt. dar als7ab lln4r waltwzy3.

37. M7mwd a7md : 2013 '"athr al3la8t byn ttab3 almthyrat walaslwb alm3rfy 31a alt79yl alm3rfy fy bramg alt31ym aln8al" 'drasat 3rbyt fy altrbyt w31m alnfs 'almm1kt al3rbyt als3wdyt '2 (43) 'p. p. 95 - 124.

38. M3zwz 3lawnt: 2014 «"ala7tyagat altdrybyt fy astratygyat alt8wym albdyl wadwath 3nd m3lmy alrya'9yat fy mdyryt altrbyt walt3lym fy mdynt nabls" «mglt gam3t alnga7 llab7ath "al3lwm alensanyt" «almgld (28) «al3dd 11.

39. Mnzmt alamm almt7dt lltrbyt wal3lm walth8aft "alywnskw": 2013 ‹"almbad2 altwgyhyt lsyasat alywnskw fyma yt3l8 balt3lm balaghzt alm7wlt" ‹alywnskw ·frnsa.

40. Mny kaml albsywny 4ms aldyn (2016): "athr ast5dam b3'9 t6by8at alt3lym algwal 3la tnmyt altnwr alt8ny lda m3lmat ala8t9ad almnzly watgahathm n7wha" 'al3dd alrab3 'aktwbr 'b7wth 3rbyt fy mgalat altrbyt alnw3yt 'klyt altrbyt alnw3yt 'gam3t almnwfyt.

41. Mnyr b3lbky: 2010 •8amws almwrd 3rby - anglyzy •byrwt: dar al3lm llmlayyn.

42. Mnyr 3w'9: 2020 «alt3lm aln8al mobile learning alt3lym a'97a akthr shwlt" «tary5 alt9f7: 25/06/2020 «mta7 3la alrab6 alelktrwny :

http://altadreeb.net/articledetails.php?id=977&issueno=33

43. Halt 3adl d'3m4: 2014 «''fa3lyt brnamg tdryby fy tnmyt mharat t9mym wenag mlf alengaz alelktrwny walatgah n7wh lda 6albt klyt altrbyt balgam3t alaslamyt b'3zt" «rsalt magstyr mn4wrt «'3zt «algam3t alaslamyt.

44. Wlyd salm m7md al7lfawy: 2011 •alt3lym alelktrwny wt6by8at mst7dtht •61 •al8ahrt: dar alfkr al3rby.

45. Yasr kazm ans wm7md glwb gbr: 2018 «"almt7wl alt8ny fn albwb art drast fy t8nyat alazhar" «mglt alakadymy «al3dd 89 .p. 6.

2. Chen, Y. & Lever, K. :2004, Relationship among Mobile Phone, Social Networks & Academic Achievement: A Comparison of USA & Taiwanese College Students (Dissertation Abstract) School of Communication, Information & Library Studies.

3. Crescente, M.; Lee, D. 2011: Critical issues of M - Learning design models, adoption processes, and future trends, Journal of Chinese Institute of Industrial Engineers, 28 (2), p.p 111-123.

4. Gulz, A. & Haake, M. (2006): Design of animated pedagogical agents - A look at their look, International Journal of Human - Computer Studies, Vol. 64, Isse 4, pp. 322-339

5. Margulies, Barry , 2005: Alternative Assessment Strategy an Impact on Student Comprehension on an Undergraduate Microbiology Course, Microbiology Education, 6(1).

6. Motiwalla, Luvai, F. :2009, "Mobile Learning: A framework and Evaluation", Computers & Education, 49, (3). P. 58.

7. Mueller, J. : 2005, Authentic Assessment Toolbox. What is Authentic Assessment?, Retrieved : 25/6/2020, from website: http://jfmueller.faculty.noctrl.edu/toolbox/whatisit.htm

8. Schwab, G. & Goth, C. : 2009, Mobile Learning with Mobile Game: Dazing and Motivation Effect, Journal of Computer Assisted Learning, 21 (3). P. 204.

9. Trentin G. & Repetto M., :2013, Using Network and Mobile Technology to Bridge Formal and Informal Learning, Woodhead, Chandos Chandos Publishing Limited, Cambridge, UK. 10. Whiteside, E.,: 2018, Training with Chat bots: The Rebirth of Performance Support, E

10. Whiteside, E.,: 2018, Iraining with Chat bots: The Rebirth of Performance Supp learning Industry, French.

11. Wikstrom, N. 2007: Alternative Assessment in Primary Years of International Baccalaureate Education, The Stockholm Institute of Education, Thesis 15 ECTS.