The Effectiveness of a Training Program for the Digital Transformation of Clothing Pattern in the View of Egypt's Vision 2030

Prof. Mogeda Mamoon Mohamed Raslan Sleem

Professor of Apparel Manufacturing, Department of Clothing and Textiles, Faculty of Home Economics, Helwan University, dr.mogedaraslan@gmail.com

Dr. Sara Ibrahim Mohamed Mahran

Assistant Prof., Clothing and Textiles Department, Faculty of Home Economics, Helwan University, safashion2000@yahoo.com

Dr. Emad Zayed Bakhit Mosaad

Assistant Prof., Clothing and Textiles Department, Faculty of Home Economics, Helwan University, dr.emadzayed@gmail.com

Yasmine Fathy Salim Mohamed

Assistant Lecturer, Department of Clothing and Textile, Faculty of Home Economics, Helwan University, Yasminnino995211@yahoo.com

Abstract:

Digital technology in the current era is witnessing a tremendous development and it has become difficult to keep up with it due to the large number of inventions, innovations and creations that this rich field of knowledge is famous for, and which have been reflected in the daily life of individuals and societies, and at the present time digital transformation has become of great importance, so the Supreme Council of Universities has started training on Fundamentals of digital transformation and developing a comprehensive plan to train and qualify the university community in all its categories on digital transformation programs.

Despite the emergence of modern methods of digital technological applications in the field of education and training in general, the field of clothing and textiles, and patterns in particular, need to introduce more digital technological developments and bring about a change in order to bring the educational and training process to a better digital level.

The pattern preparation process is one of the basic pillars on which the production process in the field of clothing depends, as the success of design and production as a whole depends on it. Therefore, the person designing and preparing patterns must have a high degree of competence and skill in preparation and the ability to develop and adapt pattern in all ways according to the requirements Design and its understanding of different human body patterns. (Sleem, Mogeda Mamoon ‹Al-Sakhawy, Shaima Abdel Moneim: 2021 AD)

In line with Egypt's Vision 2030 and Egypt's strategy to achieve digital transformation, the research works to improve digital services related to the field of clothing and textiles in general and the specialization of patterns in particular by improving the work environment and providing support for specialists by preparing a digital training program for specialists aimed at training on building a two-dimensional digital pattern and simulating it to Three-dimensional.

References:

1- Abd al-Karim, Muhammad al-Badri, Hassouna, Amr Gamal El-Din, Ali, Sarah Muhammad Saeed (2021), The effectiveness of using augmented reality technology to develop the skill of digital fashion design, Scientific Journal of the Faculty of Specific Education - Menoufia University, Volume 8, Number 27, July.

2- Abdel Aziz, Heba Reda (2018), "Designing a proposed training site for quality control and measuring its effectiveness," PhD thesis, Faculty of Home Economics, Helwan University.

3- Abdel Moneim, Hazem Abdel Fattah (2017), "The effectiveness of a learning environment using the (MOODLE) pattern for training on finishing skills in the ready-made garment industry." Published research, the Seventh and Second International Scientific Conference (Qualitative Education and Development Prospects in Light of the Requirements of the Twenty-First Century), Faculty of Specific Education, Port Said University, November 18-19.

4- Abdou Al-Sheikh, Ahmed Mahmoud, Ali, Shereen Salah El-Din, Mohamed, Hadeel Adel (2022), A proposed system for designing and implementing applied projects in the Department of Apparel and Fashion Technology, Journal of Architecture, Arts and Humanities, Volume 7, Issue 34, July.

5- Abdullah, Ola Youssef, Heikal, Rania Hosni Youssef, Ahmed, Rehab Ahmed Hussein (2020), The

effectiveness of a proposed program for students of the Faculty of Home Economics to teach the "Gerber Accumark" program to draw the pattern, Journal of Home Economics, Volume 30, January issue, 2020 .

6- Abu Hatab, Fouad, Sadiq, Amal (2000), Educational Psychology, 6th Edition, Cairo, Anglo Egyptian Bookshop.

7- Ahmed, Faraj Ahmed (2009), Digitization within or outside information institutions? A Study in Problems and Selection Criteria, Journal of Information Studies, published by the Saudi Libraries and Information Association in cooperation with the King Salman Institute for Studies and Consulting Services, fourth issue, January.

8- Ahmed, Lamia Ibrahim, Mahmoud, Iman Hamed, Al-Abasiri, Maymana Muhammad (2012), "A training program for students of the Department of Home Economics at the Faculty of Specific Education on grading children's clothing pattern using computers," published research, the Seventh Arab Annual Conference - Fourth International, Department Knowledge Intellectual Capital Management in Higher Education Institutions in Egypt and the Arab World, Faculty of Specific Education, Mansoura University, April 11-12.

9- Al-Dalan, Haifa Muhammad (2020), "The Role of Digital Transformation in Education to Develop Virtual Entrepreneurship Skills for General Education Students," Virtual International Conference on the Future of Digital Education in the Arab World, Vol. 2, November.

10- Aldrich, Winifred (2008):"Metric pattern cutting for women's wear", 5th EdWilly Blackwell, London.

11- Al-Saudi, Faten Abdel-Meguid, Ibrahim, Omnia Mahmoud (2017), The effectiveness of a proposed digital mediator in developing some banking skills among commercial technical education students, published research, Zagazig University, Faculty of Education, No. 96.

12- Anwar, Safaa Fathi, Abdel-Moamen, Mohamed Abdel-Khaleq, Ibrahim, Samiha Ali (2017), The effectiveness of electronic training in developing the skills of grading children's clothing patterns for home economics students, Journal of Research in Specific Education, Issue 5, Faculty of Specific Education, Minia University.

13- Ashmawi, Basma A. Hassouna, Amr G. and Nasr Eldine, Nesreen H. El-Newashy, Rania F. (2022) "The Relationship Between FAST Mechanical Properties, Fabric Drape Coefficient and 3D Simulated Flared Skirt", Journal of Textiles, Coloration and Polymer Science, Vol. 19, No.2.

14- Bakhit, Emad Zayed (2021), The effect of a proposed operating method for the Gerber system to reduce the processing time in the garment industry, Journal of Home Economics, Vol. 37, Issue 2, Faculty of Home Economics, Helwan University.

15- Bakhit, Emad Zayed (2021), The effectiveness of a training program for planning in the cutting stage using the computer, Journal of Home Economics, Vol. 37, Issue 1, Faculty of Home Economics, Helwan University.

16- Bin Ahmed, Sabah Bint Muhammad (2016), employing e-learning in developing design and coloring skills for fashion design, published research, Specific Education Research Journal, Issue 42, Faculty of Specific Education, Mansoura University.

17- Bin Ramadan, Ibtisam Bint Daghsan (2020), the transformation of digital education in the educational sectors in the Kingdom of Saudi Arabia, the virtual international conference on the future of digital education in the Arab world, volume 2, November.

18- Hajjaj, Mohamed Abdel Hamid (2013), "The effectiveness of a proposed educational program for three-dimensional fashion design using computers," PhD thesis, Faculty of Home Economics, Menoufia University.

19- Hassanein, Abeer Abdullah (2020), The effect of using the Gerber program on acquiring the skills of drawing and grading a pattern of skirting and the attitude of students towards it, Journal of Applied Arts and Sciences, Issue 4, Faculty of Applied Arts, Damietta University.

20- Hussein, Rehab Ahmed (2021): "The effectiveness of a proposed program for students of the Faculty of Home Economics to teach the AccuMark Gerber program to draw a pattern," Master Thesis, Faculty of Home Economics, Menoufia University.

21- Kamal, Suzan, Abdel Aziz, Enas, Raafat, Amani, Ali, Mona (2021), The effectiveness of the Gerber program in building a men's jacket pattern, Egyptian Journal of Home Economics, Volume 37, Number 2, Faculty of Specific Education, Ain Shams University.

22- Mohamed, Somaya Mostafa, Bakhit, Emad Zayed (2013), E-learning effectiveness for grading the women's jacket pattern by computer, Home Economics Journal, Vol. 29, Faculty of Home Economics, Helwan University.

23- Mostafa, Fatima Al-Saeed (2018), A proposed program for teaching the basics of patterns for the implementation of printed women's clothing using digital technologies, International Design Magazine,

Issue 2.

24- Muhairaq, Mabrouka (2013AD), "The Basics of Human Resources Training", first edition, Cairo, Dar Al-Sahab Publishing.

25- Park, J., Kim, D., & Sohn, M. (2011). 3D simulation technology as an effective instructional tool for enhancing spatial visualization skills in apparel design. International Journal of Technology and Design Education, 21, 505-517.

26- Saleh, Nujud Omar, Suleiman, Omaima Ahmed (2021), designing an educational unit using multimedia to teach drawing various patterns of women's shirts using the (Gerber) program, Scientific Society for Designers, International Design Journal, vol. 11, p. 3.

27- Salim, Yasmin Fathy (2020 AD), "The effectiveness of an electronic training program for methods of building and adjusting the pattern of women's trousers," Master's thesis, Faculty of Home Economics, Helwan University.

28- Shaheen, Sanaa Muhammad Abdel-Wahhab, Al-Naqeeb, Nisreen Awad, Al-Hassoun, Naila Muhammad Hammoud (2021), The effectiveness of a training program in fashion design using 3D design programs to develop the skills of graduates, Scientific Journal of the Faculty of Specific Education, Menoufia University, Volume 8, Number 27, July.

29- Shehata, Hassan, Al-Najjar, Zainab (2003): "Dictionary of Educational and Psychological Terms", The Egyptian Lebanese House, Cairo.

30- Sleem, Majda Mamoun Raslan (2018 AD), "Designing an electronic program using animation to simulate the skill of building a pattern of the "casual" men's shirt and measuring its effectiveness on cognitive achievement", The First International Conference of the Faculty of Specific Education, entitled "Quality Education - Innovation and the Labor Market", University of Minya, 16-17 June.

31- Sleem, Majda Mamoun Raslan, Ahmed, Nafisa Ahmed (2018 AD), The effectiveness of the inverted learning strategy in learning to build and grade basic patterns for women's clothing using the Gemini system, published research, International Design Magazine, Volume 8, Issue 2, April.

32- Sleem, Mogeda Mamoon Mohamed Raslan (2017), designing a training program on the ironing stage in ready-made garment factories, Scientific Journal of Specific Education Sciences, Sixth Issue, Faculty of Specific Education, Tanta.

33- Sleem, Mogeda Mamoon Mohamed Raslan (2018), a comparative study to build three advanced methods for women patterns to benefit from in the ready-made garment industry, published research, Scientific Journal of the College of Specific Education, April 14th Issue, Part 1.

34- Sleem, Mogeda Mamoon Mohamed Raslan, Al-Ashqar, Hanan Saeed (2018 AD), the effectiveness of a program in developing the skills of drawing the "men's dress" pattern using multimedia, published research, the Thirteenth Arab Scientific Conference, the Tenth International, entitled "Qualitative Higher Education in Egypt and the Arab World In light of sustainable development strategies", Faculty of Specific Education, Mansoura University, April 11-12.

35- Sleem, Mogeda Mamoon Mohamed Raslan, Al-Sakhawy, Shaima (2021), "Building Basic Patterns for Women's Clothing," The Egyptian Book and Documentation House, 1st Edition, Cairo.

36- Sleem, Mogeda Mamoon Mohamed Raslan, Diab, Walaa Ali, Alwan, Nafisa Ahmed, Al-Ashry, Kariman Muhammad (2021 AD), The effectiveness of an electronic training program for the stages of measuring and preparing the sample pattern in the garment industry using the Gemini system, published research, Research Journal in the fields of Specific Education, Volume 7, Issue 37, November.

37- Sleem, Mogeda Mamoon Mohamed Raslan, Taher, Kawthar, Ali, Walaa, Abdel Qader, Doaa (2023 AD), the effectiveness of an electronic training program for developing the skills of implementing women's clothing using hypermedia, Journal of Research in the Fields of Specific Education, Vol. 9, P. 45, March.

38- Sleem, Mogeda Mamoon Mohamed Raslan, Walaa Ali Diab, Nafisa Ahmed Alwan, Kariman Muhammad Al-Ashry (2021 AD), the effectiveness of an electronic training program for the stages of measuring and preparing the sample pattern in the garment industry using the Gemini system, published research, Research Journal in the Fields of Specific Education, Volume 7, Issue 37, November.

39- Yusr, e-Government Transactions Program (2019): "Government Digital Transformation Measurement Pattern (eighth measurement)".

40- https://ae.linkedin.com/pulse/ % (25/5/2023)

41- http://www.eksc.edu.eg/index.php (29/5/2023)

42- https://ae.linkedin.com/pulse/ % (25/5/2023)

43- https://mped.gov.eg/EgyptVision (12/12/2022)

44- https://www.sis.gov.eg (3/1/2023)