

Effectiveness of a Training Program in Developing Graduates Skills for Pattern Design Using the Gerber System

Mogeda Mamoon Mohamed Raslan Sleem

Professor; Of Apparel Manufacturing Department of Clothing and Textiles Faculty of Home Economics Helwan University

Assist. Prof. Dr/ Sara Ibrahim Mahran

Assistant Prof; Clothing and Textiles Department Faculty of Home Economics Helwan University

Rehab Qutb Kamel Alasar

Studying in the Department of Clothing and Textiles - Faculty of Home Economics - Helwan University

Assist. Prof. Dr/ Emad Zayed Bekhit

Assistant Prof; Clothing and Textiles Department Faculty of Home Economics Helwan University

Abstract:

The current research aims to measure the effectiveness of a training program for graduates of the Department of Clothing and Textiles in developing patterns design skills using the Gerber system. To achieve this goal, training needs in terms of knowledge and skills were identified to qualify graduates for work. Accordingly, a training program was prepared and applied to a sample of graduates of the Department of Clothing and Textiles amounting to (40) trainees. The research followed the quasi-experimental approach to suit it to achieve the research objectives and verify its hypotheses. By processing the results statistically, the results were extracted that showed that the proposed training program is effective in raising the level of trainees in developing patterns design skills using the Gerber system. The results also showed a statistically significant difference for both the cognitive achievement tests and the skill performance in favor of the post-application, which confirms the effectiveness of the training program in achieving the objectives, and the trainees' opinions are positive towards the training program. Among the research recommendations is the expansion of programs to improve the skills of graduates of the Department of Clothing and Textiles in the field of clothing manufacturing, which is based on monitoring their actual needs and those of state institutions.

Keywords:

Training Program - Patterns Design - Gerber System

References:

- 1- Amal Gerges William (2023): "The effect of applying augmented reality technology on developing the skills of using the Gerber AccuMark program among students of the Department of Clothing and Textiles", unpublished PhD thesis, Faculty of Home Economics, Helwan University.
- 2- Amira Ismail Ibrahim (2021): "The effectiveness of a training program for the economic empowerment of rural women in the ready-made clothing industry", unpublished master's thesis, Faculty of Home Economics, Helwan University, Department of Clothing and Textiles.
- 3- Omaima Kamal Muhammad (2021): "The effectiveness of a training program based on rotary blended learning in developing some clothing implementation techniques and product innovation for female student teachers at the Faculty of Home Economics", Al-Azhar University, unpublished doctoral thesis, Faculty of Home Economics, Al-Azhar University.
- 4- Al-Mu'jam Al-Wajeez (2003): Arabic Language Academy.
- 5- Al-Masdar, Ayman (2010): "The reality of evaluating training programs in local authorities in the southern governorates", unpublished master's thesis, Department of Business Administration, Faculty of Commerce, Islamic University, Gaza.
- 6- Enas Hamdy Rizk, Rasha Abdel Moaty (2019): "A comparative study between the methods of Natalia Bray and Nefert Aldrich to draw the basic model of the women's jacket and its impact on the level of students' achievement and their attitudes", a research published in March, Issue 4, Architecture and Arts Magazine, Arab Society for Islamic Civilization and Arts.
- 7- Hassan Hussein Zeitoun (2003): "Teaching Strategies: A Contemporary Vision for Teaching and Learning Methods", 1st ed., Alam Al-Kuttab.
- 8- Hazem Abdel Fattah Abdel Moneim (2017): "The Effectiveness of a Learning Environment Using the (MOODLE) Model for Training in Finishing Skills in the Ready-Made Garments Industry", published research, the Seventh and Second International Scientific Conference (for 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.
- 9- Duaa Nabil Ali Salama (2017): "A proposed virtual environment to develop students' knowledge and skills in drawing the Aldrich model", International Design Journal, Volume 7, Issue 4.

- 10- Duaa Nabil Ali (2017): "A training program to raise women's efficiency in adjusting the skirt", master's thesis, unpublished, Faculty of Home Economics, Helwan University, Department of Clothing and Textiles.
- 11- Rehab Ahmed Hussein (2021): "The effectiveness of a proposed program for students of the Faculty of Home Economics to teach the "AccuMark Gerber" program for drawing patterns", master's thesis, Faculty of Home Economics, Menoufia University, 2021.
- 12- Rehab Mohamed Ali (2019): "The effectiveness of a training program in providing non-specialized graduates with the knowledge and skills necessary to design a model and implement a child's dress", published research, *Egyptian Journal of Home Economics*, Issue Thirty-Five.
- 13- Reham Zakaria Kamal (2019): "The effectiveness of a training program for students applying to the Department of Clothing and Textiles on the industrial knitting machine", master's thesis, unpublished, Faculty of Home Economics, Helwan University.
- 14- Rehan El-Sayed Abdel Hadi (2019): "The role of an effective website in developing the skills of drawing and implementing models of women's clothing", master's thesis, unpublished, Faculty of Specific Education, Benha University.
- 15- Zainab Ahmed Abdel Aziz, Asem Bahri Youssef, Nabila Farouk Abdel Karim (2017): "The effectiveness of a proposed training program to develop work skills in the ready-made clothing industry for female students of the Department of Home Economics", master's thesis, Faculty of Specific Education, unpublished, *Journal of Specific Education Research*, Mansoura University, Issue 48.
- 16- Sarah Ibrahim Mohamed (2014): "A program for developing women's flat model design skills using multimedia", unpublished PhD thesis, Faculty of Home Economics, Helwan University, Department of Clothing and Textiles.
- 17- Sarah Ibrahim Mohamed (2020): "Measuring the impact of a training program for graduates of the Clothing and Textiles Department to qualify them to work in the Integrated Technology Education Complex", published research, October 2020, *International Design Journal*, Volume 10, Issue 4.
- 18- Sarah Ibrahim Mohamed (2021): "A proposed method for building a men's galabiya model for the Egyptian body", *Journal of Research for Specific Education Fields*, Minya University, Volume 7, Issue 33, March 2021.
- 19- Samar Mahmoud Abdel Ghani (2019): "A training program for the steps of taking body measurements for female students using an innovative device", *Journal of Arts, Literature, Humanities and Social Sciences*, Emirates College of Educational Sciences, Kingdom of Saudi Arabia, Issue 49, September 2019.
- 20- Samia Mustafa Mohamed, Imad Zayed Bakhit (2013): "The effectiveness of an e-learning program to grade the women's jacket model by computer", *Egyptian Journal of Home Economics*, Issue 29.
- 21- Samia Mustafa Mohamed (2014): "Innovating a new method to build the basic model for women by comparing three methods", *Journal of Home Economics*, Helwan University, Issue 30.
- 22- Suzan Kamal Andraws, Enas Abdel Aziz, Amani Raafat Bushra, Mona Ali Abbas (2021): "The effectiveness of the Gerber program in building the men's jacket pattern", *Egyptian Journal of Home Economics*, Volume 37, Issue (2) December.
- 23- Shaimaa Abdel Moneim El-Sakhawy (2019): "A study of the techniques of the basic model of the corsage without pennies for women", *Egyptian International Journal*, Volume 9, Issue 1.
- 24- Shaimaa Mustafa Mubarak (2019): "The effectiveness of the flipped learning strategy to acquire computer skills in the ready-made garment industry (Gerber Accumark program)", published research, *Journal of Specific Education*, Benha University, Volume 2, Issue 10.
- 25- Safaa Fathy Anwar, Mohamed Abdel Khaleq Abdel Momen, Samiha Ali Ibrahim (2017): "Measuring the effectiveness of e-training for home economics students in developing the skill of grading children's clothing models", unpublished master's thesis, Faculty of Home Economics, Helwan University, Department of Clothing and Textiles.
- 26- Emad Zayed Bakhit (2021): "The effect of a proposed operating method for the JRB system to reduce the operating time in the ready-made garment industry", *Egyptian Journal of Home Economics*, Volume 37, Issue 2, December.
- 27- Emad Zayed Bakhit (2019): "The effect of applying a mathematical equation to address the change in fabric dimensions in adjusting the pattern using the computer", *Egyptian Journal of Home Economics*, Issue 35.
- 28- Imad Zayed Bakhit (2018): "A comparative applied study between two automatic interlocking systems in the clothing industry", *Egyptian Journal of Home Economics*, Volume 34.
- 29- Abeer Abdullah Hassanein (2020): "The effect of using the Gerber program in acquiring the skills of

- drawing and grading the skirt pattern and the attitude of female students towards it", Damietta University, Journal of Arts and Applied Sciences, Volume 7, Issue 4, October.(2020)
- 30- Ala Youssef Abdel-Latif, Rania Hosni Youssef, Rehab Ahmed Hassan (2020): "The effectiveness of a proposed program for students of the Faculty of Home Economics to teach the (Gerber Accumark) program for drawing patterns", Journal of Home Economics, Menoufia University, Volume 30, January 2020 issue.
 - 31- Fatima Abdullah Fath El-Din (2018): "The importance of discipline in the field of work, the International Journal of Performance and Humanities and Social Sciences", PhD thesis, Training needs, their concept, importance, and methods of determining them, Arab studies in education and psychology, Arab Educators Association, published by the Arab Foundation for Scientific Research and Human Development.
 - 32- Fatima Wasal Suwaidi, Rania Mustafa Kamel (2018), "Designing ready-made models for the production of traditional clothes in the Makkah Al-Mukarramah region", International Design Journal, Volume 8, Issue 2.
 - 33- Farida Mustafa (2023): "Measuring the effectiveness of the proposed program in providing students with industrial safety and occupational safety skills in the stages of ready-made clothing production", master's thesis, unpublished, Faculty of Home Economics, Helwan University.
 - 34- Fouad Abu Hatab, Amal Sadek (2000): "Educational Psychology", 6th edition, Cairo, Anglo-Egyptian Library.
 - 35- Kariman Muhammad Mustafa (2021): "The effectiveness of an electronic training program for the stages of raising the measurement and preparing the sample model in the ready-made clothing industry using the Gemini system", unpublished doctoral thesis, Faculty of Home Economics, Al-Azhar University
 - 36- Lamia Ibrahim Ahmed, Iman Hamed Mohamed, Maimana Mohamed Al-Abasiri (2012): "A training program for female students of the Home Economics Department at the Faculty of Specific Education on grading the children's clothing model using the computer", published research, the Seventh Annual Arab Conference - the Fourth International Conference, Knowledge Management and Intellectual Capital Management in Higher Education Institutions in Egypt and the Arab World, Faculty of Specific Education, Mansoura University, April 11-12.
 - 37- Magda Abdel-Jalil Ashmawy (2014): "Evaluation of a method for drawing the basic model of the women's corsage", Egyptian Journal of Home Economics, Issue Thirty.
 - 38- Mohamed Abdel-Hamid (2013): "Studying the effectiveness of a proposed educational program for designing three-dimensional fashion using a computer", unpublished PhD thesis, Faculty of Home Economics, Menoufia University.
 - 39- Magda Mamoun Mohamed Raslan (2006), "The effectiveness of a program for learning how to build men's clothing models using hypermedia", published research, the ninth scientific conference of the Faculty of Home Economics, entitled "The Arab Conference on Home Economics and Modern Technology", Helwan University, April, Cairo.
 - 40- Magda Mamoun Mohamed Raslan (2007): "The effectiveness of a program using multimedia in learning women's models", published research, Journal of the Egyptian Society for Home Economics, Helwan University, Cairo.
 - 41- Magda Mamoun Mohamed Raslan (2018): "Designing an electronic program using animation to simulate the skill of building a men's shirt model "casual" and measuring its effectiveness on cognitive achievement", the first international conference of the Faculty of Specific Education, entitled "Specific Education - Innovation and the Labor Market", Minya University, June 16-17.
 - 42- Magda Mamoun Mohamed Raslan (2018): "A comparative study for building three advanced methods for women's models to benefit from them in the ready-made clothing industry", published research, Scientific Journal of the Faculty of Specific Education, Issue 14, April, Vol. 1.
 - 43- Magda Mamoun Mohamed, Amani El-Sayed Abdel-Basset, Shaimaa Abdel-Moneim El-Sakhawy (2023): "The effectiveness of a multimedia program for training on building and designing women's clothing models using the Gemini system", Journal of Research in the Fields of Specific Education, Volume 9, Issue 47, Faculty of Specific Education, Minya University.
 - 44- Magda Mamoun Mohamed Raslan Selim, Mohamed El-Sayed Mohamed, Enas Hamdy (2007): "A comparative study of the elements of controlling women's clothing sleeve models", published research, the Eighth Scientific Conference of the Faculty of Specific Education in Damietta, Mansoura University.
 - 45- Magda Mamoun Mohamed Raslan Selim, Medhat Hussein Abu Hashima (2018): "Developing students' skills in building a model of men's pants "jeans" using the blended learning strategy and measuring its effectiveness", published research, the Sixth International Scientific Conference, Faculty of Specific Education, Minoufiya University, Scientific Journal of the Faculty of Specific Education, Issue 14, Vol. 1,

April.

- 46- 102- Magda Mamoun Mohamed Raslan, Ayat Ahmed, Walaa Ali, Shaimaa Abdel Moneim (2022): "A comparative study of methods for building basic models for children's clothing and using them in industry", Journal of Research in the Fields of Specific Education, Volume 8, Issue 41, July.
- 47- Magda Mamoun Mohamed Raslan, Rasha Abdel Moati Mahmoud (2017): "A comparative study of methods for grading basic models for women and their impact on the level of students' achievement and attitudes", Journal of Specific Education Research in Mansoura, Issue 45, January.
- 48- Magda Mamoun Mohamed Raslan, Shaimaa Al-Sakhawi (2021): "Building basic models (patterns) for women's clothing", Egyptian Books and Documents House, 1st ed., Cairo.
- 49- Magda Mamoun Mohamed Raslan, Shaimaa Al-Sakhawi, Ayat Ahmed Youssef (2023): "Children's Clothing Models", Egyptian Books and Documents House, 1st edition.
- 50- Magda Mamoun Mohamed Raslan, Nafisa Ahmed Ahmed (2018): "The effectiveness of the flipped learning strategy in learning to build and grade basic models of women's clothing using the Gemini system", published research, International Designs Journal, Volume 8, Issue 2, April.
- 51- Magda Mamoun Mohamed, Walaa Ali Fahmy, Nafisa Ahmed, Kariman Mohamed Mustafa (2021): "The effectiveness of an electronic training program for the stages of raising the measurement and preparing the sample model in the ready-made clothing industry using the Gemini system", Journal of Research in the Fields of Specific Education, Volume 7, Issue 37, November 2.
- 52- Magda Mamoun Mohamed, Sarah Ibrahim Mohamed, Yasmine Fathy Salem (2019): "A comparative study of methods of building and adjusting the women's pants model to benefit from it in the ready-made clothing industry", Egyptian Journal of Home Economics, Issue 35.
- 53- Mona Mufleh Saleh, Amani Mustafa Abed Hassanein (2022): "Designing an electronic website for training on the skills of preparing women's outerwear models", International Design Journal, Volume 12, Issue 3.
- 54- Najoud Omar Saleh, Omaima Ahmed Suleiman (2021): "Designing an educational unit using multimedia to teach drawing various models of women's shirts using the "(Gerber)" program, Scientific Society of Designers, International Design Journal, Volume 11, Issue 3.
- 55- Heba Reda Abdel Aziz (2018): "Designing a proposed training site for quality control and measuring its effectiveness", PhD thesis, Faculty of Home Economics, Helwan University.
- 56- Heba Reda Abdel Aziz (2020): "A training program to develop the skills of preparing a head covering model (khimar) and implementing it for the breadwinner woman", published research, Egyptian Journal of Home Economics, Volume Thirty-Six, Issue 2.
- 57- Yasmine Fathy Salem (2020): "The effectiveness of an electronic training program for methods of building and adjusting a women's pants model", Master's thesis, unpublished, Faculty of Home Economics, Helwan University, Department of Clothing and Textiles.
- 58- Yasmine Fathy Salem (2024): "The effectiveness of the digital transformation of clothing models in light of Egypt's vision 2030 AD, unpublished PhD thesis, Faculty of Home Economics, Helwan University.
- 59- Hazem, Abdelfattah& Thanaa, Alsarhan (2014): "The Use of Multi- Media in The Teaching of Educational Unit for The Methods of Altering Some Patterns of Women s Clothing to Overcome The Problems of Fitting", The 16th International Conference on Geometry and Graphics, August 4-8 , Innsbruck , Austria
- 60- <https://hbrarabic.com>
- 61- <https://www.almaany.com/ar/dict/ar-ar/>
- 62- <https://www.e7kky.com/article/31763>

Paper History:

Paper received June 27, 2024, Accepted August 24, 2024, Published on line November 1, 2024