

# The Effectiveness of a Remedial Program in Developing the Skills of Producing Digital Video among Students of Instructional Technology According to their Learning Style

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## **The Effectiveness of a Remedial Program in Developing the Skills of Producing Digital Video among Students of Instructional Technology According to their Learning Style**

### **Abstract**

The Research aims to identify : " The Effectiveness of a Remedial Program in Developing Skills of Producing Digital Video among Students of Instructional Technology According to their Learning Style, and the type of correlational between them among students of instructional technology.

this was achieved through preparation Remedial Program and follow the quasi- experimental method with one group of (40) students, the measurement tools represented in product evaluation sheet of producing digital Video, and Kolb scale modified learning styles and experimental treatment material represented in Remedial Program, the result showed the overall effectiveness of Remedial Program in Developing Skills of Producing Digital Video among Students of Instructional Technology According to their Learning Style research sample, The research also recommended the necessity of making use of the current research tools, whether related to A product evaluation sheet, or the proposed program, and to apply it to other groups of students of educational technology, thus providing support for the results reached and generalizing the benefit from it.

To reach of search results has been the use of statistical methods:( t-test, Standard deviation, arithmetic mean , The square equation ETA and Blake modified gain ratio).

## Introduction

The technical progress has affected the learning system and this has led to a diversity of learning forms and methods, the most important of which is the formulation of learning techniques using modern technology, which plays a major role in reforming the learning process, as the development of learning programs and environments are the important axis in strategies for developing the learning process, where the field of education was one of the most important of them that affected by technological development and progress, which is considered a consequent of science and knowledge, Therefore, it was essential that we keep pace with that transformation by developing curricula and educational work as a whole, especially as appropriate with knowledge growth and the global technological and informational revolution, especially in line with knowledge growth and the global technological and informational revolution, in order to benefit from the essence of modern thought and look at our educational reality and the role that educational technology can play in developing curricula.

The Remedial process has appeared to overcome the problems until the return to the state of compatibility, by identifying the causes that led to it, diagnosing them and determining their treatment methods (Saleh Al-Dahry, 2008: 26). Remedial education is an integrated set of educational efforts and procedures that aim to improve the achievement level of ordinary students in their low level skills (Ahmed Metwally, 2008: 5), and remedial learning can happen by following up students to ensure their understanding of what has been previously learned, and if students do not understand well, then it is not possible to explain other objects before deficiency identification and helping them overcome them. (Rather, A, 2006: 39-40).

Then the teaching technology became a necessity for students in all stages of education, and to raise the level of efficiency and effectiveness of the educational learning process, and from here new systems, methods and approaches began to appear in the individual

learning system, effective text, video or (hyper-video) and last but not least hyper-graphic, and accordingly This has also led to the emergence of advanced computer generations in their mechanisms, technologies and capabilities that are constantly progressing. This growing development has produced the term "hypermedia" which expresses the presenting experiences through the association between any of the written texts, graphics and images, and choose from among which the elements that interact With it (Amna Abdel Hafeez, 2009: 1-8).

Muhammad Al-Hadi (2011: 67) affirms that adaptation of the learning environment is one of the main axes that have received great attention in recent times, and to reach adaptation, learning styles must be taken into account, through which teaching is according to the learner, so the learning environment must be able to adapt according to the different learning styles of learners, both Abdul Karim Al-Ashqar and Majdi Saeed (2009) recommended in their study that the learners have different needs, and the differences between them must be taken into consideration, and an educational approach must be designed that matches those needs of the learners, and their desires as much as possible, and adapts during an

The content of the curriculum is a fundamental axis in the process of preparing and producing educational videos, so that these programs become the focus of work, and thus the production elements are used to convey the scientific content of the curriculum content, using all effective methods of high-quality presentation. In order for the TV material to succeed, a team must be formed in a new framework in which the machine and the human play specific roles, to carry out the production process, the educational video is one of the media that combines the elements of sound, image and movement. Thus, it gives the program dimensions of actuality that bring it closer to the reality, that makes it easy for the viewer to understand reality. (Alsayed Shaalan, 2012: 122-126).

In the Zixun (2016) study, which aimed to design and implement a digital educational TV program for students based on the ADDIE model for designing learning systems that includes the stages: (analysis, design, development, implementation, evaluation), applied to the curriculum. The results of the study indicated that the interactive educational television program that includes learning methods consistent with the characteristics of the learners achieved effectiveness in three aspects: (learning, interaction, and technology) for students of higher education, and in the study of Evgenia (2012) It aimed to identify the latest technology trends used in television production, study production steps, and control the role of the producer in the various stages of production.

instructional approach workflow.

Self-esteem is considered a general personality trait that affects the life of the learner as a whole, and is not a temporary trend, not specific to the situations he is going through. Learners with high self-esteem are more successful, whether in daily or academic life, compared to learners with low self-esteem, and they are more assertive. Independence, innovation, flexibility, and are able to produce more original solutions to problems, Tokinan & Bilen (2010: 366). the results of Abdel Nasser Anees (2007) study came to shed light on the fact that the learning environment that students perceive as meeting their cognitive, psychological, and social needs, such as a sense of integration, cohesion, social and academic growth, participation, educational renewal, care, and uplifting morals, It increases their expectations for their self-efficacy, and that they have sufficient and appropriate opportunity to reach their capabilities to the maximum possible extent, this affects learning outcomes, especially their academic achievement.

This is why Gourgey (2010: 50) confirms that there is a relationship between the followed the method of learning and self-

esteem, where self-esteem is the main motivation in developing the personality and capabilities of the student, and an attempt to properly employ his abilities and skills, and reach a level of healthy psychological development, and it is related to their abilities And their preparations and practical achievements, and in this regard, the study of Jaber Abdel Hamid and others (2014), Tunisian Yonsei (2012), and Hana Ali (2006) came to reveal the importance of the link between learning style and self-esteem, and its benefits for the learner.

### **Research problem:**

The research problem was identified by the results of previous researches and studies such as the study: Tigira Ibrahim (2018), Ali Hamid (2017), Samar Al Ghoula (2017), Muhammad Taashadin and Fadila Hizum (2017), Nabi Nabi (2017), Lee LEA (2017), Nermin Kishik (2015), and Twitter Muhammad (2015). Karibasppa et al (2015), and the results of the exploratory study by observing the students performance of the skills of producing a digital educational video clip through the observation sheet of these skills which reported that the number of responses who were unable to practice the skills of producing a digital educational video clip was (13) with a percentage of 86.6%, and the number of responses of students who reported that they practiced these skills (2) was a percentage of 13.3. By looking at the college's list and curriculum content of the skills of producing an educational video clip for students of the third year, department of educational technology. the researcher felt that the teaching process was often limited to the usual and familiar methods, without using modern methods of learning, keeping modernization and diversification in them, and employing renewed educational technologies and learning media (technology) according to comprehensive quality requirements, which social institutions of all kinds have followed its approach, appealing to distinguished work that guarantees its outputs a high quality, especially as we live in the era of the information, communication and technical.

**Accordingly, the present research tried to answer the following main question:**

What is the effectiveness of a remedial program in developing the skills of producing digital educational videos among educational technology students according to their learning style?

**Research objective:**

**present research aims at identifying the following:**

The present research aims to raise the level of skill performance of educational technology students in the skills of producing digital educational videos.

**Research importance:**

**The research importance appears in the following:**

- 1- Providing an advanced educational remedial program that helps educational technology students to improve their skills performance.
- 2- Keeping pace with the recent trends in the field of educational technology of the use of remedial programs in the learning process.
- 3- It is expected that the results of the research will benefit the educators and those in charge of developing the curricula in taking into account the individual differences between the learners by using different and varied learning strategies and methods that suit their abilities, aptitudes, and preferences, in order to help the learner learn more effectively.
- 4- Responding to what educators call for the necessity of getting by modern trends in dealing with learners according to their learning styles
- 5- Contributing to the development of courses for producing digital video educational programs according to the latest programs and trends.

## Research limitations:

The present research is limited to the following:

- 1- **content limits:** These are the skills of producing digital educational video and skills include:
  - Script design.
  - Preparing the camera for photography.
  - Design a virtual background model on 3d Studio Max 2018.
  - Design an intro for a video introduction and its end on After Effect.
  - Implementation of montage on Adobe Premiere.
  - Shots Separation (chroma) on the program. Adobe Premiere.
- 2- **Time limitations:** The program was implemented in the first semester of the 2020/ 2021 academic year.
- 3- **Place limitations:** Faculty of Specific Education at Minia University.
- 4- **Human limitations:** A group of educational technology students reached (40) male and female students.

## Search terms

### Remedial program

Known procedurally in this research as a program based on the presenting depth materials and activities. Prepared by using (Adobe Premiere Pro 2017, Adobe photo shop cs5, Adobe Flash cs6, Gold wave 5.67, Adobe After Effect 2017, Adobe Animate cc 2019, Screen cast v.2, Microsoft word 2007), to produce Text, still images, animations, video clips, audio and music, then comes the programming and compositing stage, by bringing together all the aforementioned elements together for the interaction between them and the user; To develop the skills of producing a digital video clip among students of educational technology, using the Adobe Animate cc 2019 Adobe, Dreamweaver cs6 program, and the Moodle system was used; To create a learning management system and to add students to interact with the content and the researcher, and the contents have been uploaded to it.

### Skills of producing an educational video clip

defined Procedurally in this research as the ability of students to deal with the skills of digital video production, which are keeping up with the times, the development in modern digital technologies, and performance them in a more effective and independent manner, and accomplish them on time. The skills include:

- Script design.
- Preparing the camera for photography.
- Design a virtual background model on 3d Studio Max 2018.
- Design an intro for a video introduction and its end on After Effect.
- Implementation of montage on Adobe Premiere.
- Shots Separation (chroma) on the program. Adobe Premiere.

### **Learning style:**

defined Procedurally in this research: as how students perceive, adapt and assimilate the learning environment, and is determined in view of the more frequent to their predominant responses to paragraphs of the Kolb scale, belonging to the style in which students were classified.

### **Research hypothesis**

**The research tried to test the validity of the following hypotheses:**

- There is a statistically significant difference between the mean scores of the experimental group students in the pre and post applications of the product evaluation sheet in favor of the post application.

### **Research methodology:**

The present research used the quasi experimental method with the one group to ensure the effectiveness of a remedial program in developing the skills of producing a digital educational video clip among educational technology students according to their learning style.

## Research tools:

### The research tools consist of:

- 1- **A list of the necessary skills** to develop the skills of producing an educational digital video from the point of view of experts and specialists in this field.
- 2- **Learning materials:**
  - A - Experimental treatment material: which is represented in a remedial program prepared with a high-media technology; Due to the capabilities of this type of programs that help programming (researcher preparation).
  - B- Student worksheets that include a set of tasks that students perform during the program (researcher preparation).

### 3-Tools of measurement:

- product evaluation sheet (researcher preparation).
- Kolb & Mc Carthy Learning Styles Scale, 2005.

## Research procedures:

- 1- Reading about previous studies and theoretical frameworks in the field of remedial programs, and the skills of producing digital educational video.
- 2- Determining the standards for producing digital educational video to be in line with the recent trends of those programs.
- 3- Preparing the curriculum map for the production of digital educational video in view of the standards of those programs.
- 4- Applying the learning styles scale of Kolb & Mc Carthy, 2005 to the research group to determine the prevailing learning style among students.
- 5- Preparing the proposed educational program, according to the following principles:
  - Defining the general and procedural goals that the proposed program seeks to achieve.

- Determine the content of the program, activities, methods, ways which are used in its presentation and present it to jury to demonstrate its validity for application and to reach the final form.
- 6 -Preparing the measurement tools represented in the observation sheet product evaluation sheet, presenting them to jury, and the suitable corrections for reaching the final form.
- 7- Selecting the research group from the third year students at the Faculty of Specific Education “Division of Educational Technology” at Minia University.
- 8- Conducting an exploratory experiment related to research tools.
- 9- Applying pre-measurement tools to the research group.
- 10- Implementation of the proposed program on the research group.
- 11- Conducting the post application of the search tools on the research group.
- 12-Conducting the statistical treatment for the observation sheet, product evaluation sheet.
- 13- Analyzing information to reach the conclusions, explaining and discussing them
- 14- Providing the recommendations and the suggested research according to the results of research.

## **Theoretical framework**

### **The first part: remedial programs in the learning process**

#### **The concept of the remedial program**

Lovett.J (2010: 408) procedurally defines the: remedial program as an educational program for teaching curricular subjects and various skills using the computer and employing it as learning source based on

simulation as a remedy for educational deficiency and skills development.

Remedial learning programs are specific educational interventions aimed to meet the learning needs of a targeted group of academically lagging learners, who have not had the ability to master the necessary skills or not master specific competencies, can be an important component of the effort to improve learning outcomes for underperforming students of all ages and in very diverse environments, (Analice. C, 2012: 20).

**Importance of remedial learning programs:  
Determined in the following points:**

- 1- Remedial teaching is directed with goals by diagnosing learning errors in which learners fall into their information while learning about study topics, and then helping them to correct those errors with appropriate remedial methods, bringing them to the level of mastery (Muhammad Awad, 2018: 153).
- 2- It helps in raising the competencies of low-achieving students according to their abilities; To enable them to participate efficiently in learning, it also helps them integrate basic knowledge, master learning strategies, enhance self-confidence, increase the effectiveness of their learning and acquire skills, the ability to solve problems, and develop concepts that will be useful to them throughout their lives, Ching-Mei, C, 2014: 862).
- 5- Designed to attract lagging students to the level of achievement of their peers, and to meet their needs by providing educational aids to them (Neelu, J & Umed, S, 2016: 99).
- 6- Courses aimed at improving students 'academic performance for those unprepared or those with low achievement, are offered at the post-secondary level, by helping students enhance their basic academic skills, such as the ability to analyze, interpret and communicate, and work to expand students' opportunities to achieve Success in the labor market tremendously,( Oduro, E, 2014: 74).

### **Types of remedial learning programs:**

There are types of treatment programs are:

- 1- Special programs for treating Learning problems for ordinary students.
- 2- Merging programs to deal with cases of mental disability
- 3- Care and training programs for the blind (Salem bin Nasser, 2011: 85).

### **Remedial learning strategies:**

- 1- Remedial learning strategy based on the cognitive processes of the learner.

This method is based on a diagnosis of the type of cognitive disorders and the Information preparation operations used by the learner, the stages in which information development is going through is a good determinant to direct the remedial program, when the manifestations of inaccuracy are increasing, the focus is on resistance to distraction and training on focusing attention, so that the information is presented in gradual quantities , And with a lower capacity, by re-display, self-evaluation, and then feedback.

- 2- Remedial learning strategy based on task and performance analysis.

The learner may suffer from a specific difficulty that greatly affects the basic skills of learning, so it is hoped that the remedial program will focus on treating this specific difficulty, and the goal of the program is limited to that, and to train the learner and the treating team to use important techniques in this context, namely:

- The use of self-learning methods, and cooperative learning, with the activation of the mechanism of self-evaluation and feedback.
- Concern to the skilled gradation until mastery.
- Determining the location of the error and training the learner to discover it (Munir Hussain, 2010: 147-152).

Due to the importance of computer programs in education and their role in achieving many educational goals, a set of previous local and international studies were conducted, which came as a result of the nature of changes in the quality of experiences provided to learners, keeping pace with progress in teaching methods, methods of

providing experiences and learning resources to simplify their presentation, among these studies:

Ahmed Ali's study (2013) aimed to design a remedial program based on analyzing errors in developing aspects of linguistic competence for foreign learners at the advanced level, and the study found the effectiveness of the remedial program in some aspects of linguistic competence in speech and writing, where it found statistically significant differences between the average degrees Study group in the pre and post evaluation in favor of the post evaluation.

The study of Chuan-Ta Chao and Chi-Jung Tseng (2013) aimed at discovering the academic performance of students in the English language through a remedial course at the University of Science and Technology in Northern Taiwan; To meet the students' needs, the results showed improvement in their post-test performance and their awareness of learning motivations was also enhanced through a remedial educational course.

### **The second part: digital video production skills**

Hashem Saeed (2012: 655) defines the skills of digital video design and production as the use of contemporary computer programs and their applications in implementing design and production processes to reach the final product of digital video files, according to the quality standards, and making this product available on information networks As the web, or storing it on one of the modern digital storage media.

### **The importance of developing the skills of producing digital educational videos:**

The study of Hani, M (2013: 52) confirms that the videos created by students can lead to many academic benefits, including: enhancing motivation, literacy, dealing with multimedia, developing problem-solving skills and critical thinking, mastery of cognitive content, Often students learn about a topic while creating their own video and can use the video to demonstrate what they have learned, such as in multimedia projects.

O'Neille, T (2010) also concluded that students take greater ownership as learners when participating in informal science video projects, and ownership in this study is a complex, multifaceted process that brings together the relationships between them as youth and as learners with the topic they aspire to participate in its context.

The study of Hessa bint Muhammad (2018) also confirms the effectiveness of employing participatory video clips via YouTube in developing the skills of producing educational videos. The results of the study found that there is a statistically significant difference at the significance level of "05, 0" between the average grades of Princess Noura University students. In the list of educational video standards before and after the employment of participatory videos via YouTube in developing the skills of producing educational videos in the favor of the post application.

It is evident from the above that the student must be distinguished by the ability to apply, deduce, and employ what has been learned in various fields of work, in order for him to engage in the labor market and that by providing him with expertise, by pushing him towards the use of modern methods and techniques that help in developing some skills For the production of educational digital video.

### **Video production stages**

David H (2012: 2-4) divided it into six stages:

- 1- Preparation and discovery stage: In this stage, students define video production stages, video production roles, video techniques, used hardware, and software, and provide functional descriptions of different production roles such as: (director, scriptwriter, designer group, camera operator, program presenter, And the editor), a categorized inventory of the equipment they will be using, and a guide to using the camera.
- 2- Development phase: Students choose an idea for their videos, research the topic, prepare a script, a webpage in which ideas about the video are exchanged, a summary of the video, and a research report that summarizes and collects relevant information.

- 3- Pre-production stage: Students create pictorial events for each scene, and work on providing planning services for photography, for example: budget, site selection, creation of any required groups, props, and costumes, and prepare production schedule, sequence of shots, mutual dialogue between Two or more people.
- 4- Production stage: Students prepare audio records for the video, index the video clips, daily review what was filmed, and prepare the task list for the next day.
- 5- Post-production: Students sequence and edit captured footage, adding scene transitions, sound effects, subtitles, and examining text.
- 6- Marketing and Distribution Stage: Students prepare an advertising campaign for the final video and arrange for its distribution for example: (on DVD / or online publication)), and they prepare a poster advertising the video.

### **Digital video editing and montage programs:**

#### **First - Editing:**

Abdullah knows the montage as a group of shots taken with a video camera in addition to a group of audio and computer-generated files such as the Introduction to programs or the so-called channel presentations, and sometimes the pictures and other files that are added to the video that the Editor “combines with each other and takes the clips That which he needs, deleting the passages that do not benefit the topic and putting them together in a specific narrative way according to the topic or the story that he wants to communicate to the viewer (Abdullah Ibrahim, 2013: 16).

#### **Features of digital video montage:**

- 1- The clarity and quality of the image and sound, and the stability of this quality even with multiple copying operations. This is not available in the traditional linear montage by videotapes, in which the sound and image quality is affected by the multiplicity of copying and recording operations.
- 2- Ease of controlling elements and data, moving them and placing them in the appropriate place through their appearance in the program interface on the computer screen.

- 3-Speed and shortening of time, as electronic montage, by relying on moving the different elements and installing them in the specified place, does not take long compared to traditional montage.
- 4-Ease of adding visual and audio elements, and determining their duration with extreme accuracy.
- 5-The large and multiple capabilities of transition effects between shots and scenes.
- 6- The possibility of making adjustments in the image itself through the available effects in degree of clarity, color, lighting, and adding shadows, visual and kinetic effects.
- 7- The small number of devices and equipment for electronic montage units compared to linear or traditional montage units. The area that accommodates a linear montage unit can accommodate six or seven units for electronic montage, and multiple devices for recording and controlling sound and image have become combined in one device in the computer memory. Show through its display (Nahla Metwally, 2015: 155).

## **Second - Video Editing and Editing Software:**

### **1- After Effects**

A program specializing in the manufacture of video and two-dimensional and three-dimensional visual effects, and also the editing and correction on the video, and through this program can do many tasks, including:

- Animating the drawn characters and shapes inside the after effects or drawn using other programs such as Illustrator.
- Change the background of a character, whose name is "Croma", which is simply based on photographing a character in front of a blue or green background, and then placing the scene we want behind this character.
- Moving texts and controlling their properties with accuracy and ease. In this program, many effects are prepared to be added to the written texts.
- Open Photoshop files with the "Psd" extension and deal with them as layers and move them in more than one way.

## 2-Adope premiere" program

It is a program specialized in editing video and compiling snapshots, cropping parts of the video, deleting parts of it, and most importantly doing the video recording process from the camera or "Vtr recorder" to the computer, through a process called "Capture" and after finishing work on it, we can Also, adding video clips that have been worked on, or made within the after effects program, and the Premiere program can make some effects and transitions between clips called "Transition", and the program contains a large number of effects to move between the clip and the other, and we can also download other effects And download them to the program, and for this we can simply make a presentation in video format for several pictures, and when showing these files we can play an audio file at the same time, and we will also be able to use several video files and take certain parts of them and explain the entire events in a short period of time, as happens in the cinematic films that we see ( Abdullah Ibrahim, 2013: 12-15).

### The third part: learning styles

Kolp (1984: 259) defines it as "individual differences in learning based on the learner's preference using different stages of the learning cycle."

#### The importance of learning styles, there are vital reasons, which are:

- First:** people have different learning styles. Because everyone is different from each other naturally.
- Second:** It provides the opportunity to teach using a variety of methods in an effective way. Adhering to only one form without thinking will provide an ineffective learning environment, so not everyone will enjoy the lesson.
- Third:** Many things can be managed in teaching, learning and communication through awareness of students' learning styles and psychological traits. Motivational differences will help organize lessons appropriately, support students' imagination and creativity, and explore new possibilities, Ibrahim Ibrahim, K, 2009: 89-90) .

### **Stages of the learning cycle with the Kolb model:**

Kolb developed a model for the interpretation of the learning process that is based on the experimental learning theory. This is done in successive stages or distinct learning styles or preferences, based on a "learning cycle. The following is an explanation:

o **Concrete Experience:** means the method of perceiving and processing information based on sensory experience, understanding:

- 1-They learn best through their integration with examples.
- 2- They tend to discuss with their colleagues rather than the authority represented by their teachers during the learning process.
- 3- They benefit from their discussions with their colleagues, as well as the external feedback.
- 4-Have a positive social orientation towards others.
- 5- They see theoretical methods of learning as ineffective.

o **Reflective Observation**

- 1-They depend in the perception and processing of information on reflection, objectivity, and careful observation in analyzing the learning situation.
- 2- They prefer educational situations that give them the opportunity to play the role of an objective and impartial observer.
- 3- They are introverted.

o **Abstract Conceptualization**

- 1- They depend on the analysis of the learning situation, abstract thinking and logical evaluation.
- 2- They focus on theories, structured analysis, learning through authority and orientation towards things.
- 3-Their orientation is weak towards other people.

o **Active experimentation**

- 1-They depend on the effective experimentation of the learning situation through the practical application of ideas.
- 2- They participate in school work and small groups to accomplish a specific task.
- 3- They do not tend to theoretical lectures.
- 4- They are characterized by an active attitude towards work.

\*Therefore, the Kolb model operates on two levels - one of the following stages:

**First:** the sensory experience

**Second:** Reflective observation

**Third:** the abstract Conceptualization

**Fourth:** Active Experimentation

Cognitive Learning Styles (each of them represents a combination of two preferred styles, that is, we have a  $2 \times 2$  matrix Of the four-stage cycle Styles, in which Kolb uses the following terms:

**1- Diverging**

Practical experience and reflective observation are the abilities exploited in this style of learning.

**2-Converging**

Abstract concepts and active experimentation are the abilities exploited in this style of learning.

**3- Assimilating**

Concept abstraction and reflective observation are the abilities exploited in this style of learning.

**4- Accommodating**

Practical experience and active experimentation are the abilities exploited in this style of learning.

Among the studies is the study of Ilham Jabbar (2016), which aimed to build an instructional -learning design according to the modified Kolb model and to know its effect on the effectiveness of the mathematical self and achievement in mathematics among students of the scientific fourth, and the results of the research were: There is an effect of instructional-learning design according to the modified Kolb model on the effectiveness of the mathematical self And increase student achievement more than the usual method.

The study of Muhammad Bashir (2011) aimed at uncovering the common learning patterns of Mu'ta University students according to the Kolb classification, and knowing their impact on both emotional intelligence and their achievement motivation. The results indicated that the divergent learning pattern was the dominant pattern among the educational styles of Mu'tah University students, and that The assimilation style was the least common to them.

## research results

Presentation of results related to hypothesis:

The hypothesis stated that:

-There is a statistically significant difference between the mean scores of the experimental group students in the pre and post applications of the product evaluation sheet in favor of the post application.

To test the validity of this hypothesis, the scores of the research group were extracted in the pre and post application of the product evaluation sheet of an educational video clip, and Table (1) shows the arithmetic mean, standard deviations and the value of t for the differences between the scores of the students of the research group in this tool in the pre and post application, which were obtained:

**Table (1)**

**The significance of the differences between the means of the two applications, pre and post, of the experimental group under study  
On the product evaluation sheet (n = 40)**

significant at level	(T) value	post application		pre application		sheet
		standard deviations	arithmetic mean	standard deviations	arithmetic mean	
0,01	**11.26	2.19	8.70	2.11	2.75	Educational standards
0,01	**38.16	2.06	17.65	1.63	3.40	Technical standards
0,01	**32.14	2.29	20.80	2.26	4.18	Technical standards
0,01	**29.46	5.35	47.15	5.28	10.33	<b>Total marks</b>

Tabular (T) value at significance level (0.05) = 2.04 (0.01) = 2.75

\*Statistically significant at level (0.05) \*\* Statistically significant at level (0.01).

It is clear from Table (1) that:

- There is a statistically significant differences between the means scores of the experimental group students in the pre and post

applications of the product evaluation sheet in favor of the post application.

**Table (2)**  
**ETA coefficient and blackjack gain ratio for the experimental group under study On the product evaluation sheet (n = 40)**

coefficient and blackjack gain ratio	ETA value	post applications mean	pre applications mean	Sheet
3.04	0.76	8.70	2.75	Educational standards
4.26	0.97	17.65	3.40	Technical standards
4.21	0.96	20.80	4.18	Technical standards
3.95	0.96	47.15	10.33	<b>Total marks</b>

It is clear from Table (2) that:

The ETA values of the group under consideration in the product evaluation sheet ranged between (0.76: 0.97), and the values of the gain rate for Black for the effect of the remedial program in improving the performance of the skills of producing the digital educational video clip ranged between (3.04: 4.26), which is more than the value of (1.2) This indicates the ability of the remedial program to develop the skills of producing the digital educational video clip among the students of the experimental group under study.

## Analyze research results:

### 1- Product evaluation sheet:

The results of the analysis on testing showed the significance of the difference between the mean scores of the two pre and post applications for the research group in the product evaluation sheet in favor of the post application, which confirms the positive effect and effectiveness of the remedial program in developing the skills of producing an educational digital video, and this may be attributed to the following:

- Learning with the help of a remedial program that made the students of the research group the focus of the learning

process, as the student used to navigate the program according to his own ability, and reach the knowledge on his own instead of being given ready-made.

- That the use of multimedia, such as sound, still images, written texts, colors, animations, graphics and music in presenting scientific content in an interesting, structured and elaborate manner through the remedial program, stir up the learner's motivation to learn and makes him feel the realism of the educational position, while giving him feedback on what he learns and the percentage of his mastery of learning. And promote it at the right time.
- The program adopted multiple teaching strategies, including self-learning, problem-solving learning, decision-making, critical thinking, reflection, visualization, connection, simulation, personal vision, building supporting evidence, analogy, practice, project-based learning, and the use of teaching styles.
- The diversity of the used remedial methods, so determining the treatment plan for the student does not mean the use of one type or style of methods to treat a particular difficulty continuously and repeatedly. This causes the student to become bored and distracts him from learning, and then affects the treatment plan, so these methods may vary between the Indirect method, which gives students greater freedom to interact and debate, and the individual style that distinguishes between students' characteristics and traits.
- The program was distinguished by giving the student sufficient opportunity to understand and practice any skill and master it before moving on to another skill.
- The humanist perspective is a philosophy and a general trend that defines the content of the remedial program, influences its other components, including goals, methods, styles, activities, and evaluation, and is concerned with the positive relationships between the learner and the person in charge of teaching to help him believe in himself and his self.

- Matching teaching methods with learning styles has greatly enhanced academic achievement, as they have profound effects on material processing, exercise design, performance evaluations, and an emphasis on intuition, feeling, sensing, and imagination, to communicate with learning styles, using different sets of thinking, Visualization, experimentation, and employment of a variety of evaluation techniques.
- Diversity of activities and learning resources to ensure positivity of the student and achieve the desired goals, serve the program content, and lead to better learning outcomes.
- Adapting the curriculum to meet the student's main distinctive learning style, making learning easier, more effective and less burdensome.
- The software also provides continuous evaluation, according to the nature of the desired goal, as it included a self-evaluation to measure the extent of students' understanding of information.
- It increases the confidence of the learners by notifying them of progress in their level and developing their skills.
- It makes the weak learners correct their mistakes without feeling ashamed of their colleagues.
- Learners deal with the program without anxiety or fear, as it is the one who corrects their mistakes.
- Availability of enriching methods for the educational process, thus raising its efficiency and success.
- Treating academic weaknesses in a scientific and educational way.
- Creating a new and successful learning environment, with renewed thinking that contributed to providing learners with skills.
- Providing various methods in the program that achieved the learner's growth in all its cognitive, skill and emotional aspects.

### **Research recommendations:**

In view of the results of the current research, the researcher makes the following recommendations:

- 1- Reviewing standards for formulating curricula, and enriching the Arabic library, which lacks this type of program.
- 2- Increased interest by decision-makers in practical applications. Because of its great impact on raising the level of students' performance.
- 3- Working on developing the usual methods of teaching skills in general and the skills of producing digital educational videos in particular, and using modern methods in education.
- 4- The necessity of preparing remedial programs, which have proven effective in developing the skills of producing digital educational videos among students.
- 5- The necessity of diversity and merging between the use of remedial programs and the different teaching methods, and their conformity with the learning methods.
- 6- keeping the learner's preferred learning style when producing educational or training programs for university students.
- 7- Using various evaluation methods that measure all aspects of learning. Cognitive, skill, and emotional.

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