The development of creative methodological thinking for students of the Department of Interior Design and Furniture through the use of Therese theory

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Abstract:

Thinking is one of the most important forms of human behavior, as it is considered the highest levels of mental activity, especially creative thinking, which is one of the most important features of creative students. From here it was necessary to study and research the process of creative thinking and its stages of design. Most of them focused on aspects related to thinking in general, and did not address the creative methodological aspect of thinking and developing the creative abilities of the student through the use of Therese theory to solve problems. Creative solution to design and technical problems of students of the Department of Interior Design and Furniture and how to take advantage of the positive aspects to develop the content of the university study and scientific qualification through experiments of Therese theory to solve problems.

The problem with this research: Weakness in the skills of creative solution to design and technical problems of students of the Department of Interior Design and Furniture and how to take advantage of the positive aspects to develop the content of university studies and scientific qualification through experiments of Therese theory to solve problems

The research aims: Shed light on Therese's theory and its applications to solve problems. And addressing the cognitive deficiency of the students of the Interior Design and Furniture Department with the Therese theory of creative solution to problems in terms of their concept and assumptions and developing the skills of creative solution to design and intellectual problems for students of the Interior Design and Furniture Department by using the theory of Therese.

It is assumed that. Therese theory supports innovative aspects and develops the skills of creative solution to design problems among students of interior design and furniture

.The research followed: Inductive approach.

The importance of the research: The theoretical rooting of the theory in terms of its principles and the concepts of contradiction and the ultimate ideal solution, which is useful in interior design and furniture, preparing a list of creative problem solving skills in design for students of the Interior Design and Furniture Department, and training and practicing students on the skills of creative solution to design problems based on the philosophy of the theory.

An introduction :-

Thinking is what leads us to the right path of life, especially creative thinking, which is one of the most important features of creative students from designers, so the designer who carries the characteristic of creativity must use the creative thinking behavior. The creative process is one of the most important means to reach ideas and solutions to problems and issues, whether Aesthetic or marketing, and creative thinking has importance and necessity because it enters a partner with the professional and skillful aspects that the student (the designer) must master and master, as all these aspects enter between them to produce a design work that performs its real

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action at the level of innovation, perception, understanding and aesthetic discourse. Therefore, the design process is not able to create a design work that is characterized by creation, creativity, innovation, influence and persuasion, if it is not based on the methodological stages of the design process, starting from the definition process and ending with the learning and feedback process, from here it was necessary to study and research the creative thinking process and its stages of design.

Keywords:

Thinking - creative thinking - TRIZ theory

Innovative thinking:

It is the type of thinking that is characterized by a great sensitivity to the perception of problems and a great ability to analyze and evaluate them and perceive the deficiencies and shortcomings in them, and the owner of this type of thinking has a great ability to produce ideas that are distinguished, and the owner of this type of thinking is distinguished by the ability Great on imagining, visualizing, creating, creating new relationships and distinct explanations to understand, express and change reality for the better, and its results are new and not routine The researcher believes that creative thinking is a "mental process by which the mind organizes a person's experiences and information in a creative way that enables him to access everything new.

Creativity:

It is the ability to imagine or invent new things by synthesizing ideas, modifying them or changing them, that is, it is a type of thinking that aims to discover new and unfamiliar relationships and methods to solve an existing problem. It is a complex and multifaceted human phenomenon, and some consider it the distinguishing feature of man from All other living creatures - Creativity is the renewal of life and it is a social act that has its conditions and is not just an individual gift, it is part of the creation of existence.

What is TRIZ theory?

Swichkov points out that there are many questions regarding Therese's theory Is Therese theory a way to solve problems? Is it science? Is it a systematic method? Is it a toolbox? Are they some of the things that help us break down the barriers between us and creativity? Swichkov provides an answer to all these questions by explaining that Therese's theory has four characteristics:

- A theory in technology
- B Technique to get rid of mental deficiency
- C Technical help in analyzing the formulation of the problem and the creative solution of problems
- D An indicator of systems mapping between psychological functions and designing a specific solution in the field of technology and many sciences Other. In the same context, Nakagua points out that Therese's theory helps to avoid dialectical ways of thinking, and seeks to solve problems by imagining the ultimate ideal solution to be achieved, and resolving the contradictions contained in the problem. Safransky believes that Therese's theory is a systematic, humanistic approach, based on a knowledge base that aims to solve problems creatively. The systematic methodology in this definition refers to those general models that have been studied and analyzed in systems and processes, and the word regular refers to the

presence of a clear path-specific methodology used in solving problems, and the human approach refers to the main goal for which this theory was found, which is the human being. This theory is directed at the human mind with the aim of providing it with the mechanisms that enable it to exploit the maximum of its energies to solve the problems facing it, and this theory is also distinguished by its reliance on a knowledge base as the knowledge related to the tools used in this theory has been derived from a large number of patents in engineering and technical fields Different. It is clear from the previous presentation that Therese's theory is one of the creativity theories that help individuals in reaching creative solutions to various types of problems. However, this theory has a special philosophy that differs from other methods as it relies on launching the creative imagination of individuals, but through principles and concepts Specifics can be drawn from the analysis of human innovations.

Applying some of the creative principles reached by Therese theory on interior and furniture design to solve design problems:

Principle No. (1) division and division:



Principle No. (5) Merging / Linking / Combining:





Principle No. (7) spatial containment and overlap:



During the research, these results were achieved:

- Therese theory is considered one of the relatively modern theories in developing creative thinking skills in creative problem solving. This theory has reached forty creative principles and these principles are used to support students to solve various design problems.
- Increasing students' motivation towards creativity and actively dealing with problems.
- Enabling students to use various techniques to solve problems
- Developing students' skill in generating ideas and providing original alternatives in solving problems
- Developing students' skills in formulating problems, identifying aspects of contradiction, and forming a long-term vision for the desired solutions. Enabling students to develop and implement plans, and increase their awareness of the importance of creativity in various fields

References:

Bent salem,hanan al omran : nazaryt el hal el ebda3y lel moshkelat triz – debono lel tebaa- el ordon – tabaola -2009

Bakr,
m.nofal-saleh abo gado : taleem el tafker el nazarya wel tat
byk-oman-dar el maysara- $2007\,$

Gyban,omar : estratygyat hadysa fy taleem w talom el tafker – oman – ethraa lel nashr - 2008 Foad,ead khasona : amalytel tafkeer el ebday fy el tasmeem –el olom el ensanya w el egtmaya –mogaled 43 – molhaq 1- 2015

Abd el elah,n erahim:lamahat ama fy el tafkeer el ebdaay – maktabet el malek fahd el watanya – tabaa ola - 2002

Abd elrahman tawfyk:kolna mobdoon w laken – markez el khebrat el mahnya lel edara-2006 Mohamed,abdallah:tanmya el tafkeer el ebtkary lda el mosamem – megalet olom w fnon w drasat w bhoos – gamet helwan - 1999

Shawqy ,galal:el edaa hal hoa moheba fardya – magelt el araby – adad 529 – wezaretel ealam el kwytya 2002

1- Bowyer, D.(2008): Evaluation Of The Effectiveness Of Triz Concepts In Non-Technical Problem Solving Utilizing A Problem Solving Guide. Doctoral Dissertation, Pepperdine University.

- 2- Fey , Victor And Rivin , Eugene (2010) : innovation on demand : new product development using triz . New York : Cambridge University Press
- 3- www.personal.engin,umich.edu 2020/12/12 : تاريخ دخول الموقع
- 4- Nakagawa, j (2001): introduction to triz theory of inventive problem solving: a technological philosophy for creative problem solving. Available at: // www.osaka-gu.ac
- 5- Savransky , D(2000) Engineering Of Creativity : Introduction To TRIZ Methodology Of Inventive Problem Solving . New York : CRC Press
- 6- www.trizexperts.nrt/souchkovipaper.htm . 2020/12/2 : تاريخ دخول الموقع