

## “Provocation as a technique for achieving creativity in industrial design”

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### **Abstract:**

This research examines how creativity can be achieved when provocation - as a lateral thinking technique - is employed in the process of designing industrial design products. It presents the concept of creativity and its cultural reflections. It also illustrates the concept of lateral thinking and how the Provocation technique can be employed in the product design to optimize creativity. The research sheds light on the traits of a creative designer and demonstrates the meaning of the Provocation technique and how it can be employed in designing industrial design products. The research, then, examines the application of the Provocation technique to the product design process. It concludes with an evaluation of the application results which proved that creativity has been achieved in the designs to which the Provocation technique has been applied.

### **Key words:**

Lateral thinking – Provocation – creative thinking – industrial design.

### **Statement of the Problem**

The problem of the research is concerned with the typicality that characterizes most of the products and which is related to repetition and the lack of variations. Many products appear to be typical in form and function as a result of the lack of creativity and innovation. This is illustrated by defining “the creative product as the product that has a new form and a unique structure and which goes beyond the familiar in form and function”<sup>(1)</sup>.

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(1) Ahmed Said Mohamed– Studying Lateral Thinking techniques as input for Creativity in Industrial Design –faculty of Applied Arts- Helwan University - Master Thesis 2015 – p. 35

**Significance of the Research :**

- 1- The designer must be creative and use his ideas to reach innovative, unique and distinctive solutions to contribute to life by ideas and designs that make it easier.
- 2- Due to the relationship between creativity and the design process, the process made by the designer must express his thoughts and creativity. In addition, it should reflect the effort exerted and ability to manage it without any repetition or typicality in order to achieve success and continuity.
- 3- The research is important for the community since it contributes to develop positive attitudes towards solving the problems and the challenges facing the community members in their daily lives by a more creative method.
- 4- Creativity enriches the individuals' lives and gives them the power to produce more for themselves and for others.
- 5- The research contributes to creative self-realization and talents development to perceive the world in a better way.

**Objectives:**

- Studying Creativity
- Presenting the Provocation technique as a lateral thinking technique.
- Applying the Provocation technique to the designing process to produce new creative products.

**Hypothesis:**

If creativity is studied and the concepts of lateral thinking, as well as the Provocation technique and how it is employed in the design process of a product, are presented, this will, consequently, lead to significant development in the design process and creativity will be achieved in the products.

**Research Methodology:**

The research follows a descriptive analytical method.

### **The Research Plan :**

1- Studying creativity

(creativity definition and its cultural reflections, traits of a creative person, typical thinking definition, creative thinking definition, lateral thinking definition, and self-regulated models and other-regulated models)

2- Studying the Provocation technique

(Provocation technique definition, presentation of the Provocation technique concept, and how Provocation technique is employed).

3- The Provocation technique was applied at the stage of the development of ideas in the design program. The task was to design an 'egg boiler' product by a group of students of the Department of Industrial Design, following the Faculty of Applied Arts at Helwan University. The students were divided into two groups:

**The first group:** has designed the product by using the design methodology used in the department, without any intervention by the researcher.

**The second group:** has designed the product by using the Provocation technique, after the presentation of its concept and how it can be employed.

4- The evaluation was done by a group of professors following the Department of Industrial Design.

### **Research Results**

1- Studying the Provocation technique leads the student to convert from typical thinking to creative thinking. It enables them to generate new ideas, thus coming up with unique unusual creative designs. Creativity is, then, fully achieved in their designs

2- The Provocation technique increases the creativity of the designer which leads to designing a unique set of products that can strongly compete with similar products in the markets.

- 3- Presenting the definition of creativity, self-regulated models and other-regulated models paves the way for the students to take another path of thinking, away from the typical thinking path.
- 4- No one owns creativity. Any designer can be creative. Actually, any designer can study, practice and apply this technique when needed and that is how creative thinking skills are developed.

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