Developing Design Methodology Practices for industrial design ' Students

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Abstract:
This paper describes a new design methodology that depends on merging between method mind mapping for solving the design problem, and an alternative table (morphological table) as a method to develop ideas and to help students in forming and composing different design factors to achieve design creativity. The researcher tends to use Analytical descriptive to reach the suggested method of developing ideas through a deep study of various design methods to reach an effective and easy method, and then ascertain the extent of its effectiveness by experimenting with it practically. The researcher tried this model on about two hundred students for consecutive three studying years by working in a faculty of Applied Arts Beni-Suef University - Egypt. The researcher depends on constant distance between points to measure variables easily. This trial shows up Great results in the ability of students to reaching creative and innovative solutions and designs easily and simply that proved the success and effectiveness of the proposed methodology. The design process that has been used by students consists of three main stages as which is called “hierarchical design” which starts after the problem identification stage. When the researcher Measuring student results over three years through the main assessment criteria which represented in innovation; Shape Balance; Creativity and Aesthetic aspects, he ascertains the effectiveness of the proposed method and achievement of the main objective of the research which represented reaching an easy and simple way that helps students to achieve designs creativity with less time and effort.

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Mind Mapping, Morphological Analysis, Product Design, Design Process