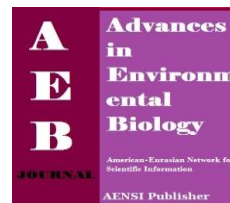




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Effect of The Architect's Thinking on Improving The Quality of Architectural Design Which Creates Semi-Pattern

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ABSTRACT

For long period of time; in many educational centers around the world, the subject of architectural design as a most significant architectural education is being-oriented education has been introduced. Note that because of the power of design thinking can play a direct role in improved form of architectural design is semi-pattern. This field is investigated and the formation of appropriate design is semi-pattern. With global developments in social, economic and cultural effects of rapid movement and opening up new horizons, changing concepts such as space, time, movement, space, speed, communication and critical needs of the growing population and changing housing and professional relationships, get connected! This relationship (with quality) does not provide a similar architectural education, science and technology, the remedy is sought, since architectures must inevitably be visible, and the product must be held accountable. In the design process, we were looking for ways and methods which, unlike conventional methods, can be used to help students Talents lie in the design and innovation of the imagination to be higher in. And intellectual thoughts areas design, thinking during the design process, including topics which could have a direct role in improved form of architectural design patterns. Questionnaire was used to collect data. The results of this study show that, due to a combination of education converge (teacher and student) and divergent (modern) more attention to the creation and application of innovative approaches to architectural design workshops vital factor in improving the process of design and design patterns can be formed.

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INTRODUCTION

Movements & stillness of teacher on students, gifted and talented students, and the professor held over the years and delicately secrets and principles into practical shape and was covered in real space.

With global developments in social, economic and cultural effects of rapid movement and opening up new horizons, changing concepts such as space, time, movement, space, speed, communication and critical needs of the growing population and changing housing and professional relationships, get connected! This relationship (with quality) does not provide a similar architectural education, science and technology, the remedy is sought, since architectures must inevitably be visible, and the product must be held accountable.

In the design process, we were looking for ways and methods which, unlike conventional methods, can be used to help students Talents lie in the design and innovation of the imagination to be higher in, & intellectual areas of design thinking during the design process, including topics which could have a direct role in improved form of architectural design patterns. Backgrounds of thoughts and power of designing thought during the design process, are samples of issues which could have a direct role in improved form of architectural design patterns intellectual thoughts areas design thinking, including topics which. Questionnaire was used to collect data.

2. Thinking in architecture:

Psychologists contemporary forms of thinking based on their goals and the features used in the three groups, "Oriented thinking ", " non-oriented thinking ", "creative thinking" are categories (Anderson, 1995; Gilhooly, 1996)

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2-1. Oriented thinking:

Thoughts having to solve most of the problems that "good" is defined as solving a puzzle comes. Having two thought of techniques commonly used to solve the problem. First answer various techniques and solutions are discussed, and the process of trial and error approach is used to solve the problem is addressed. The second technic is grinding whole issue, first attempt to resolve the issue, and a partial response combined with small problems, it is possible to access the ultimate answer.

2-2. Non-oriented thinking:

I think that the kind of thinking has been named to the second type of thinking can be introduced as an undirected thinking. This kind of thinking mind background with no initial activation and subsequent round supply purposes is not a feature of this type of thinking is floating free in nature.

2-3. Creative thinking:

The third type of thinking that uses the complex issues, such as the design, have been called the creative thinking. This kind of thinking has been the goal to achieve optimal response is required to be taken advantage of innovative ways.

3. Strategies in the way of thinking:

Designers often unconsciously use from strategies on the way to think about the design and how to make use of ideas. These strategies are helping to create concepts and design ideas during the course of these strategies, sometimes independently and sometimes in ink, to create a concept and design ideas to help them. Characteristics thinking strategies can be designed and presented in four categories:

3-1. Convergent thinking versus divergent thinking:

Divergent thinking actually makes some kind of pluralism. This type of thinking cannot be prioritized in relation to each component in the path of some of the things removed or merged.

In contrast to this type of thinking, convergent thinking is presented based on the logical steps forward and actually makes a thought-wing unity. This kind of thinking as a process that is structured and systematic approach is developed. On vertical convergent thinking, or thinking (de Bono, 2004) hierarchy of decisions and ideas based on trial and error process is close to the final response.

3-2. Annie thought versus the reaction thought:

Annie thoughts are based on feelings and inner wisdom. This kind of thinking, attention to detail and overall large-scale decisions usually are made. The approach proposed in accordance with the terms and features a proportionate response to a problem that reflects the content of thought is required, shall be established.

3-3. Independent thinking in the field of intellectual versus dependent thinking in the field of intellectual:

In independent thinking in the field of intellectual, designer famous on independent approach to design using existing bedding conditions, your mental activity greater capacity to understand the information and understand the physical world around us is a way to not pay attention to details like the location. In contrast to this idea, in dependent thinking in the field of intellectual attention, is focused on the circumstances of place and context. Thinking in context-dependent approach, the designer within a reasonable process, seeks to respond to the specific context, the problem is in the design activity deals. In independent thinking in the field of intellectual, designer will serve as subjects and issues and decisions are often made on a large scale. In contrast, in the contemplation stage, the process of thinking makes design according to dose and schedule for completing the activities, to reach a final decision.

3-4. Together thinking versus staging thinking:

In Together thinking, mental activities of designer, will serve entirely and simultaneously as subjects and issues and decisions are often made on a large scale. In contrast, in the staging thinking, the process of thinking makes design according to dose and schedule for completing the activities, to reach a final decision. Thinking strategies according to two modes of thinking, affect both left and right hemisphere of brain and they are presented in the table below:

Table 1: Thought of design thinking Strategies, influenced by features of both left & right hemisphere of brain (Mahmoudi, 2004).

the left hemisphere of the brain (تفکر) (Based on analysis and logical thinking)	Right hemisphere of the brain Based on the general attitude of thinking and feeling
divergent thought	Divergent thinking
reaction thought	Annie thought
dependent thinking in the field of intellectual	Independent thinking in the field of intellectual
Staging thinking	Together thinking

4. The method employed thinking power in designing:

The most convenient way to use the power of design thinking as a complex activity, is enjoying the kind of thinking interactively. This feature allows thinking the same attitude issues during the design stage and the possibility of enjoying the kind of thinking at the same time creates.

In Iowa University Research, suitable pattern of thinking in a complex process is using of interaction between the three types of content to think critically and be creative. In this model the interaction between the three types Recreation affected by three types of knowledge are discussed. Following this pattern is shown in Fig.

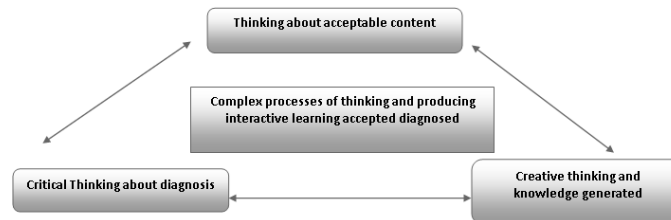


Fig. 1: Interactive thinking patterns Iowa University (Caldwell, 2004).

4-1. Introducing content-based thinking, pattern of interactive thinking of Iowa:

- ♣ mentality shaped & accepted awareness
- ♣ utilizes the information in the mind, which collected in duration & from the environment

4-2. Introducing critical thinking, pattern for interactive thinking of Iowa:

- ♣ Rose with type of logical thinking and analyzing information and using the accepted awareness.

4-3. To introduce creative thinking patterns for interactive thinking Iowa:

- ♣ Produced with the knowledge and creates innovative answers for problem solving
- ♣ Using the design process to develop ideas and concept designs to achieve

5. Learning design process:

Training in the design process, it is appropriate to begin by reviewing the concept of learning and how students think about during the course of the question to be answered.

Human memories are recorded and see them again when they are called exactly)...

In discussing the architectural design process, the students with a large number of factors influence the course of question and answer form and space in the face. Because of these factors influence each other, they cannot be separated visually and architecture has always been a problem to think about all aspects of the design simultaneously.

The training process should be designed and developed to analyze the impact of ideas to form a space is given.

In discussing the architectural design process, the students with a large number of factors influence the course of question and answer form and space in the face. Because of these factors influence each other, they cannot be separated visually and architecture has always been a problem to think about all aspects of the design simultaneously. For example, the selection of materials in an architectural project can be applied to economic conditions and investment in the project, the durability and strength, beauty and fitness, and many factors other than access to the materials.

The training process should be designed and developed to analyze the impact of ideas to form a space is given.

5-1. According to the convergence of education (teacher and student) diverges Education (Modern):

Convergence of education (teacher and student) content; associated with the individual person and the profound effect - coupled with practical training and on the job - theoretical and practical training simultaneously. Procedures: training and education of individuals who are recipients - Start early childhood education (the development of creativity and artistry) is done - Methods, techniques and trends and traditional work uniform and uniformly - according to teaching theoretical principles with principles scientifically. Divergent education (modern) content of the training is done and Facilities - academic education is largely theoretical - possibility profound effect on the mood of the student teacher is absent [1].

Requires methods or other methods that need many professional architectural circles, the comparison among these methods are discussed.

5-2. *More attention to the development of creativity and practice using innovative approaches to architectural design workshops:*

Only in the framework of the existing rules and is higher [5].

5-3. *the necessity of taking into account cultural, religious and national values in designing:*

Although in some lesson of instructing in contemporary art & architecting, introduce theosophy art & ideology, but there is no place to jaunty resulted to release from runty values and connecting to higher values and a general point of view for culturing of prestige of humanity in student. So we don't encounter with architecture which create deep beauty & idealism in us in contemporary season. [1].

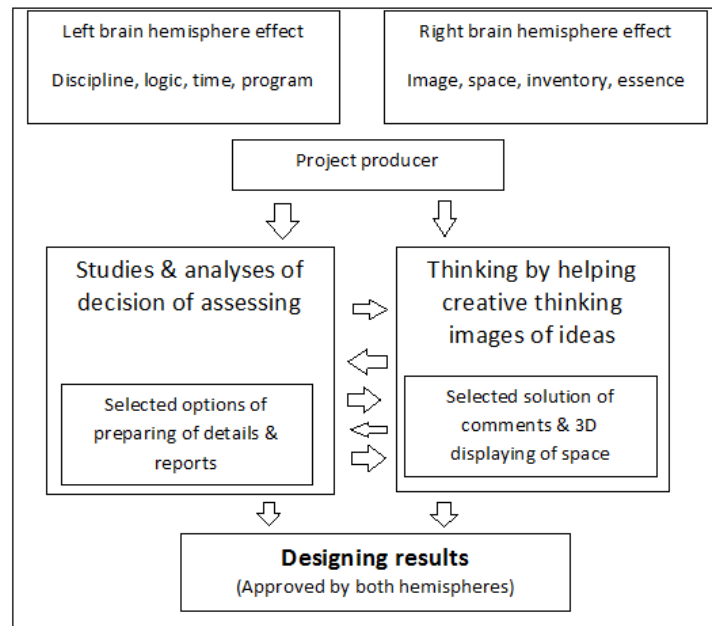


Fig. 2: Introduce an interactive model of the design process for students applying Talent [6].

Investigate a pattern for thinking in the designing process:

Talents lie through appropriate use of the two hemispheres of the brain can be achieved simultaneously. How to activate both hemispheres of the brain during stages of process of designing as information transmission diagram between same attentions to design issues is presented in the figure below.

When the mind is introduced in both hemispheres and began to respond. So writer believe that we should collect all students' activities about using of images & other tools which help them to use & introduce brain memory in a problem solving. In this interactive model, as noted, studies and analysis of the left brain hemisphere is generally to be synchronized with other studies using visual perception, the right brain hemisphere functions is proposed.

Study case:

Based on the purpose, with a case study and question from experts in the field to assess the impact of these factors on right thinking and improve the quality of

Architecture design is addressed. The study population included 50 masters' students.

7-1. *Validity and reliability of data collection tool:*

Cronbach's alpha test was used to assess the validity of the questionnaire. With the advent of Cronbach's Alpha 875/0 was specified validity collection.

7-2. *the results of the study:*

Analyzing & modifying have used to deduct sample statistics from modifying statistics in format of table & chart & for analyzing of presented answers due to descriptive questions of questionnaires, used from content analyzing method.

Table 2: Regard to the convergence of education (teacher and student) diverges Education (Modern).

	Divergent	Convergent	Hybrid
Responding patients (%)	31	22	47

Analyzed sample statistics indicate the fact that the advantage of both methods will have better performance.

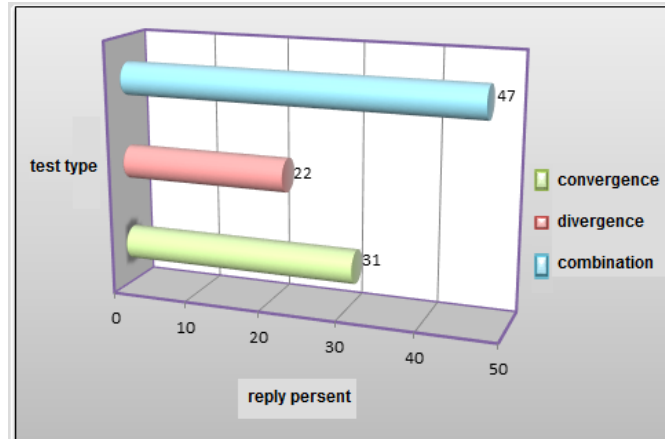


Fig. 3: Charts percentage of responses on education.

According to upon table & chart, %47 persons who response have approved hybrid (Divergent & convergent way), %22 convergent & %31 divergent have known more effective methods. These results show that using both methods are more effective than others.

Table 3: Impact more attention to the creation and application of innovative approaches to architectural design workshop.

no effect	negative affect	Positive affect	
4	0	96	Responding patients (%)

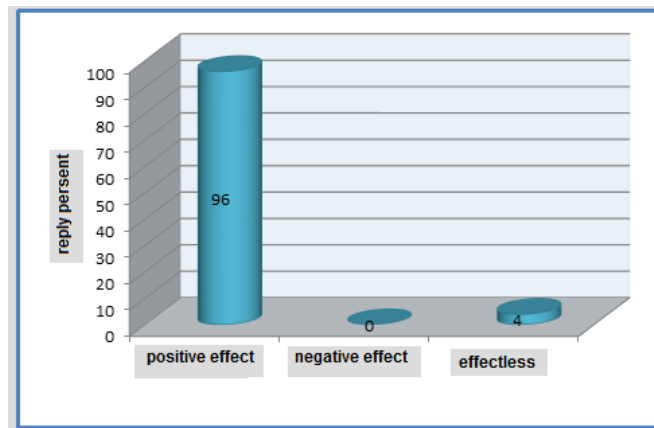


Fig. 4: Charts percentage of responses in regard to creative thinking.

Main subject in this assessment is how important thing is in home designing by using creative thinking method and how innovation is effective in improving design. All of persons who response know respecting to these matters are main aim to use in designing.

Table 4: Necessity of taking into account cultural values, religious and national involved in the design.

Low	Medium	High	
7	10	83	Responding patients (%)

Table 5: Impact semi-pattern attention to architectural design.

Low	Medium	High	
15	22	63	Responding patients (%)

Table and Chart 83 percent of respondents consider the necessity of cultural values in the design of very high level, 10% moderate, 7% have a low level of expression. In general we can say that the majority of respondents to the need to consider cultural values and convictions are in housing design.

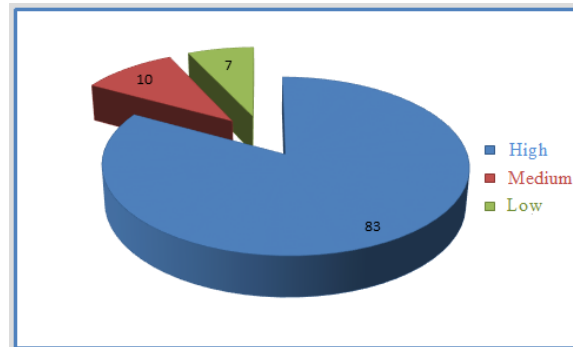


Fig. 5: Necessity of taking into account cultural values, religious and national involved in the design.

These results show that most of designers no use this effective method due to no knowing this matter. These semi-patterns are not introduced truly so we see no effect in their works but by effective instruction it will be changed depends on proper training is accessible.

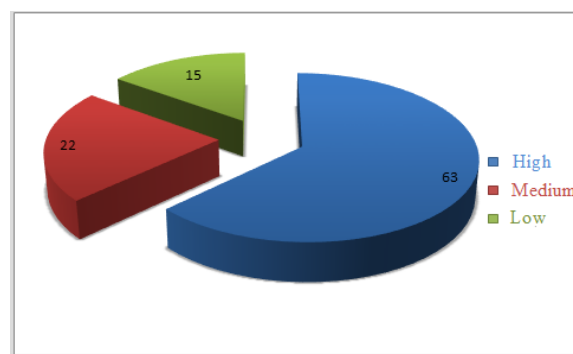


Fig. 6: % of the responses given to the impact of architectural design semi-pattern.

Conclusion:

The architectural profession, especially during the design process is essential to the proper understanding of how to think and see the potential began to be used.

This dynamic and interactive process need to be addressed at all stages of the design elements simultaneously. The research result can be expressed as the following:

Define the appropriate time for application aware and concerned teachers become familiar with the design approach.

Highlights and introducing innovative new design and the previous design professionals with innovative ideas in the workshop is designed to exploit the housing. Finally we can below notes as a result of this study:

The architectural profession, especially during the design process is essential to the proper understanding of how to think and see the potential began to be used.

These dynamic and interactive processes also need to be addressed at all stages of the design elements simultaneously. The research result can be expressed as the following:

- Define the appropriate time for application aware and concerned teachers become familiar with the design approach.
- So, creativity, growth and prosperity requires the professional design and architectural design creativity discuss all occur respondents have a positive opinion, therefore, suggested that the more excellent consistency between the theoretical foundations of art courses and workshops designed to highlight highlights and introducing innovative new design and the previous design professionals with innovative ideas in the workshop is designed to exploit the housing.
- Consider the necessity and importance of considering cultural beliefs, national or religious community, according to statistics, is proposed by assigning a specific time, the presence of teachers and students in public

and understanding of the design for which it is done students of regional and local cultural differences and stereotyped formation known residential areas and holism in housing designed to prevent.

- Students with a potential talent which have been recognized by themselves or their training tips and the operation is performed correctly. Obviously to realize this, it is necessary for students with a variety of methods and techniques designed to familiarize teachers must design a training technique to teach fixed and uniformly.
- To take advantage of creative thinking, the power of individual creativity educate and encourage individuals to exercise that creative talent is also essential to make them fertile.
- Optimally utilize semi-pattern thinking of the design should utilize teaching methodologies.

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