

## Teaching of Art Education and its Impact in Students' Design Decisions and Thinking Skills

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### Abstract

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This paper for teaching of art education and its impact in students' design decisions and thinking skills, the study sample consists of 32 students of the third level, batch 2014 – 2015, from the faculty of Education at the King Faisal University: Saudi Arabia. The descriptive analytical and experimental methods were used in this research. The researcher to prepare topics for teaching of art education depends to a great extent on the individual, and the environment. The generation of ideas is considered one of the most important elements, where brain-storming plays an important role, which is subjected to stringent evaluation process before being implemented. An encouragement and support from educators towards creative signs of students would help in the development of creativity. An awareness of creative and innovative process and an involvement in the solution of a creative problem may help students to develop creative and innovative talents. To promote creativity and innovation, areas e.g. projects, laboratory experiments, design of systems and components, where opportunities exist for the development of creativity. The results confirmed the existence of a difference in the quality and value of creative concepts for students in both groups: the experimental and control group, which confirms that the teaching of art education could positively impact students' design decisions and thinking skills. The researcher recommended developing creativity, students should be encouraged / trained in divergent thinking and provides opportunities to cultivate these habits that would lead to a better development of creativity.

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**Keywords:** Teaching of arts education, design decisions, thinking skills

### Introduction

The future of a nation depends heavily on the quality of the population of youth in the nation since this group will be future leaders who will play a crucial role in ensuring the ability of the nation to sustain her development and economic growth. Youth, defined by the United Nations as individuals in the 15-24 age range, constitutes approximately 18 per cent of the world population (World Youth Report, 2010). Creativity can be defined as the ability of a person to produce something new – new, at least, for that person (Leuba, 1986). It is an ability, which enables a person to think, dream-up, and visualize new/unusual solution to problems encountered. Innovation is the process of reducing a creative idea to practice, making a system, components or equipment (Torrance, 1976). It can be treated as a controlled process of attempts to improve a known process or product to achieve a desired goal. Education plays an important role in the identification and development of creativity. It enables to motivate students and inculcate in them the usefulness of performing creatively (Hawlder, 1995). It is important to have elements creative activities in the educational program and the educators need to emphasize the importance of these activities. Students can play an active role and act creatively only when the process of creativity and innovation is made known to them [5]. Educators play an important role to inspire and motivate students to act creatively. Everyone is born with a natural ability for creative thinking and a favorable environment must exist for the successful development of these attributes.

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This paper deals with the creative and innovative process, how educators can inspire students to perform creatively, and the educational program / environment that must be included to maximize the utilization of creative and innovative talents of students.

### **Importance of the Study**

1. The researchers are expecting to teach the subject of creativity for students in higher education, thereby enhancing the creative and creation.
2. The study will provide teachers with an effective strategy to develop their performance and improve the current teaching methods.
3. The researchers predict that this study enables an area for further studies to develop different strategies in the field of art education teaching.
4. To recognize the importance of teaching student learns the value of creativity.

### **The Objectives of the Study**

1. Experience a climate of openness, mutual respect, and support for undertaking critical and creative thought.
2. Develop the foundational knowledge, values, and skills/abilities needed for thinking critically.
3. Develop the foundational knowledge, values, and skills/abilities needed for creative thinking.
4. Integrate critical and creative dispositions and abilities to meet learning needs and real life challenges.

### **Hypotheses of the Study**

1. Teaching of art education could positively impact students' design decisions and thinking skills.

### **Methodology of the Study**

This study involved a total sample of 32 students of the third level, batch 2014 – 2015, from the faculty of Education at the King Faisal University: Saudi Arabia. Firstly, the 30 students were asked to draw any design. This test was marked out of 10 using the criteria below. Then there was a 2-week wash out period. After this period, the specific teaching of art education was taught which depends to a great extent on the individual, and the environment; independent research on the Internet; references and visits to explore for them different design. Each student was then given the same task to undertake: draw another design based on idea. The task was marked out of 10 marks. The task was chosen as a valid measure of critical thinking.

The total score for the test is 10 marks and the marks were distributed as follows:

1. First insight – the seeds of creation. Two marks.
2. Preparation for divergent thinking. Two marks.
3. Incubation for subconscious data. Two marks.
4. Illumination of subconscious mind. Two marks.
5. Verification of idea. Two marks.

A teacher from the school that was not directly involved in researching this project marked the task work. A discussion with the students after the test also revealed that students were more confident with their designs after being participants in the creative thinking program and they explained their ideas thoroughly. They also indicated that in the future they would use creative thinking to help them creativity and develop their design choices. The sample was divided into two main groups: experimental and control group. The purpose of conducting cross-validation was to determine the validity and reliability of the instruments employed. The collected data was analyzed by the statistical program (STATISTICAL PACKAGE FOR SOCIAL SCIENCE, SPSS) using the appropriate statistical treatments. The T- test for independent data was conducted to verify the significant differences between test scores before and after the teaching of art education.

### **Keywords which best sum up the Concept of Creativity**

#### **Creativity and Education**

Creativity has been described (among various descriptions) as the use of imagination or original idea in order to create or improve on something.<sup>1</sup> Creativity is not a privilege of a specific culture or civilization, rather it is a gift

from the Creator, who decides who to be conferred with the power of creative thinking, power of imagination and ability to improve on an existing or idea in order to make it more captivating and beneficial to the people. The influence of education on the development of creativity has been investigated to a great extent by many researchers (Torrance, 1976) Teaching for the development of creativity strengthens the rational ability of students – the imaginative ability to interrelate knowledge (Parnes, 1966). The development of creativity through education is still not very clear. Some teachers with exciting ideas have probably contributed to creativity of students without being able to say what they did and why they did. Poor teaching, on the other hand, may put brakes on the development of creativity. The change of attitude of teachers towards creative signs in students would help in the development of creativity. Studies show that creative students are irritating at times and they very often do not conform to the usual standard.

A teacher cannot teach, a student has to learn. Learning is a learner active exercise. A teacher must be able to create an interest among students in the subject and inspire them to pursue learning. It is necessary to identify areas of instruction where opportunities exist for the cultivation of creative habits e.g. projects / design, case studies, industrial attachment, and final year projects. Students should be encouraged to solve the problem in a number of different ways and highlight the merits and shortcomings of each method. Creative problem solving can be introduced in the existing curriculum where students can solve open-ended type of problem, which requires improvement (Felder, 1987). Students may be asked to find as much information as possible either from a visit to the site or from literatures. Once the relevant information has been found, they would think about probable solutions. All these ideas can be put together, discussed, fully evaluated before implementation is carried out. For engineering students, laboratories should be the center of these activities, where students should be allowed to play with their ideas and appropriate recognition should be given.

### **Creative Environment**

If the environment comprising the teaching staff, the students and the culture is not conducive to creative thinking, merely providing good facilities and well planned curriculum are not adequate for the healthy development of creativity and innovation. It is felt that more activities / opportunities that encourage creativity among students should be included in the teaching-learning program. This enables the students to apply theories and techniques that they learn to solve a problem. Students in undergraduate program may be provided with undergraduate research opportunity program (UROP) [10]. Some of the attributes of creative environment observed by researchers [10-12] are as follows: a) incentives, b) deadline, c) visual thinking, d) receptive to new ideas, e) spirit of playfulness, f) one problem at a time, and g) personal touches. There must exist a compelling reason for generating new ideas – money, status, a new and better career and even emotional satisfaction. A sense of urgency –deadline – must be imposed. At some point, it may be necessary to block out verbal thoughts and concentrate on forming a mental picture of the problem. Judgment should be applied when all the ideas have been developed. Allow the mind to wonder, toys with ideas and consider creativity as fun although the results may be serious. This approach enables a significant increase in idea generation.

### **Creativity in Classroom Practice**

Creativity here may be twofold: a criterion to be present at the planning moment and at reflecting upon and sharing dialogically in class. Assessment of coursework should also involve sharing and the active participation of the students. Therefore the parameters (or levels alongside the continuum) of creativity that are to be assessed should be made clear with the students beforehand, to arise awareness and for clarification. If the teacher, acting as an example (in the sense of providing a model, not exempt from analysis or criticism), shows to be creative, s/he is also stimulating this quality in her/his students, making them active participants while contacting with the chosen materials and tasks, developing a critical approach to the FL linguistic and cultural space. From the perspective of the teacher (and to a different extent of the student as well) this may involve taking risks (as opposed to the 'reproduction' paradigm that implied a more secure and unchallenging method).

In my experience, students are best encouraged to be creative when they are given independence to choose their own focus for tasks, and, indeed to decide what they will study. Students might be encouraged to be creative. More time in the curriculum needs to be put aside for students to interact creatively with the material: for example, a stimulus text quickly followed by student-centered activities where students themselves search for, present and discuss material.

The most creative work by our students emerges particularly in level one portfolio work, in year abroad projects and in discussion and debate at level three, as well as in presentation and role play tasks at all levels, in the use of a range and combination of activities, combining genres, senses, periods, the Internet. Stimulating and supporting the work of students outside the classroom will also be an area in which staffs demonstrate creativity. Portfolio work can be a powerful motivation for students to engage with this.

### Discussion of the Results

Analysis data of the first hypothesis:

- Teaching of art education could positively impact students' design decisions and thinking skills.

**Table 1**

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Experimental Before	2.44	32	1.014	.179
	Experimental After	3.62	32	.793	.140

#### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Before & After	32	.531	.002

**Table 2**

#### Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Before & After	-1.188-	.896	.158	-1.510-	-.865-	-7.499-	31	.000

Since the potential value = (0.000) is less than (0.05), it means there is a significant difference between the students' test grades before and after the teaching of art education. The above tables (1-2) showed that there is a significant difference between the students of the experimental group before and after the teaching of art education. Through the potential value, this amounted to (0.000). This potential value is less than the level of error allowed (0.05%) for the benefit after teaching of art education through the arithmetic mean value, which is amounted to (3.62) that is greater than the arithmetic mean value before teaching of art education, amounting to (2.44). Through analyzing the results, the researchers noted that before the test of creativity the students were not able to be creative when they are given independence to choose their own focus for tasks, and did not use nature materials in their implementation. The results showed there is a significant difference between group's performances. This confirms that the positive impact for students when using creative thinking to development of the design decisions and thinking skills. After an analysis of the result hypothesis can be accepted. Obviously teaching of art education could positively impact students' design decisions and thinking skills. The results revealed that using creative thinking for students improved after the test. Therefore, it could be argued teaching of art education could positively impact students' design decisions and thinking skills. And an efficient utilization of the creative process can be achieved through a thorough knowledge of the process.

A creative process can be broadly divided into the following steps:

- First insight – the seeds of creation are sown in this phase. An idea occurs to a person for the first time, where a problem exists that requires a solution.
- Preparation – divergent thinking, which explores several possibilities, would be of great value rather than convergent thinking, which concentrates mainly on a single path of reasoning.
- Incubation – the process of preparation is followed by a period of incubation, where conscious concentration ends and instead subconscious data processing takes place. The next stage of creative process cannot occur until the subconscious mind has performed its task.
- Illumination – once the thought processes of subconscious mind are successful, everything falls into place when a sudden, new insight, discovery of the previously unrelated ideas conceived as a solution to the problem, occurs in the mind. The creative process reaches its climax at the moment of illumination.
- Verification – in this final stage of creative process, results are carefully controlled against objectives. Intellect and judgments are brought into play and the raw materials of creative achievements are refined at this stage. Independent opinion of others may also be sought and it may be necessary to review / revise the idea or even come up with new ideas.

### Results

1. There are significant differences between group's performance before and after the program, in addition is a significant difference between the experimental group and control group before and after the test. This confirms that the teaching of art education could positively impact students' design decisions and thinking skills.

### Recommendations

1. To promote creativity of individual student, education has a strong role to play.
2. Creative students very often fail to conform normal standards. A change in attitude of lecturers towards creative signs of students would lead to a better development of creativity.
3. To develop creativity, students should be encouraged / trained in divergent thinking and provide opportunities to cultivate these habits.
4. Students should be encouraged to solve a problem in different ways – a design problem offers such opportunities.

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