

*Araştırma Makalesi / Research Article***An Explanatory Sequential Mix Methods Approach to Understanding of the University Art Students and Art Education with Respect to Creativity**

Yaratıcılık Bağlamında Üniversite Sanat Öğrencilerini ve Sanat Eğitimi Anlamaya Yönelik Açıklayıcı Sıralı Karma Yöntem Yaklaşımı

Gamze YAVUZ KONOKMAN¹  & Aybige DEMİRCİ ŞENKAL² 

DOI : [10.63556/ankad.v10i2.362](https://doi.org/10.63556/ankad.v10i2.362)

Geliş/Received: 24/10/2025

Kabul/Accepted: 02/02/2026

Abstract

The study, aiming to determine the creativity of the art students at universities in Türkiye and evaluation of the art education with respect to improvement of the creativity, has designed as an explanatory sequential mix method. The sample, selected using convenience sampling method, consists of 280 university students having been educated at the the departments of art at the universities in Ankara, the capital city of Turkey. The research design includes the collection of the quantitative data firstly through "How creative are you?" scale and the collection of qualitative data through questionnaire, analyzed to explain and clarify the results of the quantitative data collected at the first phase. It has been concluded that more than half of the university art students in Turkey are above average in terms of creativity. However, The findings on the non-existence of the exceptionally creative art student or too few very creative ones take attention. The results of the qualitative data indicate that the components of the creative theory such as knowledge, intelligence, motivation and environment, have been stated to be way of educating the university art students as more or exceptionally creative.

Key words: University art students, art education, creativity, explanatory sequential mix method

Öz

Türkiye'deki üniversitelerde öğrenim gören güzel sanatlar öğrencilerinin yaratıcılık düzeylerini belirlemek ve sanat eğitiminin yaratıcılığın gelişimi açısından değerlendirilmesini amaçlayan bu araştırma, açıklayıcı sıralı karma yöntem deseniyle yürütülmüştür. Kolay ulaşılabilir örnekleme yöntemiyle seçilen belirlenen çalışma grubu, Türkiye'nin başkenti Ankara'daki üniversitelerin güzel sanatlar bölümlerinde öğrenim gören 280 öğrenciden oluşmaktadır. Araştırma tasarımı, ilk aşamada "Ne kadar yaratıcısınız?" ölçeği ile nicel verilerin toplanmasını, ardından bu verileri açıklamak ve derinleştirmek amacıyla anket yoluyla nitel verilerin toplanmasını ve analiz edilmesini içermektedir. Bulgular, Türkiye'deki üniversitelerde öğrenim gören sanat öğrencilerinin yarısından fazlasının yaratıcılık açısından ortalamanın üzerinde olduğunu göstermektedir. Bununla birlikte, son derece yaratıcı ya da istisnai derecede yaratıcı öğrencilerin bulunmaması veya sayılarının çok az olması dikkat çekici bir sonuçtur. Nitel bulgular ise, yaratıcılık kuramının bileşenleri olan bilgi, zekâ, motivasyon ve çevre unsurlarının, üniversitede öğrenim gören sanat öğrencilerinin daha yaratıcı veya istisnai derecede yaratıcı bireyler olarak yetiştirilmelerinde etkili değişkenler olarak ifade edildiğini ortaya koymaktadır.

Anahtar Kelimeler: Sanat alanı lisans öğrencileri, sanat eğitimi, yaratıcılık, açıklayıcı sıralı karma yöntem

¹ Assoc. Prof. Dr. Ankara Music and Fine Arts University, Music and Fine Arts Education Faculty, Educational Sciences Department, Ankara, Türkiye. gamzekonokman@mgu.edu.tr

² Prof. Dr., Ankara Music and Fine Arts University, Music and Fine Arts Education Faculty, Fine Arts Education Department, Ankara, Türkiye. aybigesenkal@mgu.edu.tr

Önerilen Atıf/Suggestion Citation

Yavuz Konakman, G. & Demirci Şenkal, A., (2026). An Explanatory Sequential Mix Methods Approach to Understanding of the University Art Students and Art Education with Respect to Creativity. *Anadolu Kültürel Araştırmalar Dergisi*, 10(2), 610-626.

1. INTRODUCTION

Creativity has been defined as “the production of novel, appropriate ideas in any realm of human activity, from science, to the arts, to education, to business, to everyday life” (Amabile, 1997). This definition indicates such sides of the creativity as a subjective judgement of the novelty and appropriateness and the value of an outcome of a particular action (Ford, 1996). Also, Dewett (2007) has defined creativity as “the production of novel and useful ideas, processes, or products by a person or group”. Also, the production of novel and useful ideas and products are similarly emphasized in the definition of the creativity (Kaufman & Sternberg, 2019). These definitions of the creativity focus on the novelty, usefulness and appropriateness of whatever has been produced such as an idea, a process or a product. In contrast, there are others, focusing on what the creativity is producing creative acts regardless of whether the outcomes are creative, novel and useful or not. However, mostly accepted definition is whatever has been produced such as an idea, a product or any process should be novel, useful and appropriate.

This generates a problem or a question on how to evaluate “whether any act such as idea, product or process is useful or novel.” This is a big question? Some evaluate the thinking process while creating any act, whereas others pay attention on the personal traits such as openness, etc. or the useful and creative outcomes. An answer to this big question should be generated in order to label a person, an act, a process or a product creative. Because the concept of the creativity includes two sides, one of which is the novelty. This indicates any person can be creative in everyday life without domain specific in terms of producing act new. Therefore, what is evaluated is whether the generated act such as idea, product, process, etc is new or not. The concept “new” should be defined and theorized. What is new has which properties should be defined and then it can be possible to decide whether any act is novel or not. The other side of the creativity is related to usefulness of the act. Whether deciding on whether any act is useful or not is another problem because of including subjective ideas and evaluations. Despite no agreement on whether creativity relates to a process, a product or a person, two dimensions of the creativity such as new and useful are agreed (Petrowski, 2000). Moreover, these two dimensions are so subjective that the criterias of novelty and usefulness or theories on these concepts should be generated to make decision on a creative act, a creative process or a creative product. These criterias and theories are so necessary that creativity is a principal term in various domains ranging from art to psychology, sociology, science, engineering, etc.

According to Amabile (1997), creative theory presents three major components of the creativity such as expertise or domain skills, creativity thinking skills and intrinsic task motivation. What domain skills mean is those expertise skills gained as a result of education or life experience as well as intelligence or talent related to a specific domain (Amabile, 1997). Creativity occurs when individuals’ skills related to his expertise domain are supported with intrinsic motivation. Personality traits of creative individual such as curiosity, self-expression and interest also lead to intrinsic motivation (Amabile, 1997). Technical, procedural and intellectual knowledge are necessary to create novel and useful ideas, products or process (Al-Ababneh, 2020). Moreover, thinking processes as major component of the creativity can be listed as defining problem, merging ideas to produce new one, providing solutions to these problems novel and useful, etc. Thinking process can not be considered without imagination and technical, procedural and intellectual knowledge. It can be inferred that intrinsic motivation is a emotional necessary for thinking process for creative act. Environment is important as well in terms of giving chance to the learners to think creatively on the problems related to domain and to develop their own domain related skills and to be motivated intrinsically.

Sternberg and Lubart’s creativity theory (1991, 1992 and 1995) is defined as reorganization of Amabile’s model in terms of regarding personal traits and intellectual styles. The six components of this theory are listed as intelligence, knowledge, intellectual styles, personality, motivation, and environment. Zhang and Sternberg (2011) state that three types of intelligence such as (1) seeing problems from new perspective, (2) deciding which of ones’s ideas are worthy being followed or which are not, (3) knowing how to persuade others to accept the value of the newly proposed ideas, are equally significant for creativity. The second component is defined as knowledge. This means that any body knowing nothing can not be creative. People are able to get knowledge in a specific domain through their education or their life experiences Whereas creativity isn’t possible with lack of knowledge, being too knowledgeable

related to a specific domain may prevent someone from being creative because they may be so absorbed in a particular way of seeing things, so that they can't see them in a novel ways (Zhang and Sternberg, 2011). The third one is described as intellectual styles such as the legislative, global and liberal styles, which are important for creativity and mean preferred ways of using one's ability (Zhang and Sternberg, 2022). According to Zhang and Sternberg (2011), while the legislative style refers to one's own way of thinking, the global style is related to one's thinking on the general situation of a subject matter to decide on the important ideas. Liberal style means also thinking in new ways. These three types of intellectual styles are important for being creative. The fourth component of this theory is personality. Personality traits can be listed as curiosity (Chan & Chan, 1999), taking risk (Sternberg and Lubart, 1995), being artistic (Aljughaiman & Mowrer-Reynolds, 2005; Chan & Chan, 1999), interested in new things and independent (Chan & Chan, 1999). The fifth component for creativity is motivation, the effect of which is emphasized in such researches (Amabile, 1997; Kreitler & Casakin, 2009). Intrinsically motivated is so necessary for one to start a new task and continue studying on it. The last factor for creativity is providing environment, the features of which are helping spark creative ideas, supporting creative ideas and leading to improve and evaluate creative ideas (Zhang and Sternberg, 2011). Environment is supportive to compose original ideas, merging ideas to create a new one and evaluating these ideas. This theory, explaining how to be creative, emphasized the existence of these six components.

According to Sternberg and Karami (2021), a theoretical framework is necessary in order to understand what the creativity theory is emphasized and what it is ignoring, namely understanding the structure and the boundaries of the phenomena of the theory. Therefore, 8P theoretical framework for understanding the theories of creativity is generated and this framework includes purpose, press, person, problem, process, product, propulsion, and public (Sternberg and Karami, 2021). What is *purpose*? means what the creativity is. The definition of the creativity includes the generation of ideas or products which are on the one hand novel, on the other hand useful. Sociocultural context is an important factor to decide on the novelty and usefulness of the an idea or a product. What it means is that an idea or a product can be on the one hand novel or useful in any culture or at any society, on the other hand it can not be with regard to the time and the place of generated idea or product. Sternberg and Karami (2021) have exemplified this as "the Impressionism of Monet and Renoir was novel in the context of the late nineteenth and early twentieth centuries but Impressionist artists painting scenes on Boston's Newbury Street would seem much less creative—they are too late." They also give example of Native American handicrafts and clothes which are cultural and not novel to Native American, on the other hand they are very novel to the colonists' culture. Sternberg (2021) explained the purpose of creativity as being useful and constructive for any domain or potentially for society. As a second element of the framework is press which means environmental context leading people to act creatively. Motivation, intrinsic or extrinsic, is provided through the environmental context. This case is explained by Bronfenbrenner's theory in which people can learn by interacting with people, objects or others in the environment categorised from microsystem to macro system. This classification is based on the directly or indirectly environmental effect on an individual's learning and an individual's continuously more complex interactions with others in his external environment. Not only where one lives and has personal interactions but also culture, society or the world as a larger context are the environmental press providing people with acting creatively. The third element of the framework is person. This means personal aspects contributing to creativity. These are exemplified as intelligence, personality features, motivation, thinking styles and modifiability. Intelligence is classified in term of such abilities as generating novel and useful ideas (creative intelligence), evaluating these ideas (analytical intelligence), putting the ideas into practice (practical intelligence), and using the ideas for a common good (wisdom) (Sternberg, 2020). Some personality features supporting creativity are exemplified in the research of Feist (2019), Sternberg and Lubart (1995) as openness to experience, ability to accept failure, willingness to take risks, intellectual independence, self-efficacy, willingness to shape environments to match one's interests and needs, etc. Thinking styles as personal feature play a significant role in creativity. Sternberg (1997) defines these styles as *legislative style* characterizing whoever does something his own way, not the others' accepted way and *liberal style*, referring to a preference for new, original and different things rather than politically ideologically, conventional and widely accepted things. The fourth component of the framework is problems. This means that people should encounter such problems and tasks requiring creative solutions. For example, writing a novel or producing a

painting is a situation or a task that people can generate divergent solutions to these problems (Sternberg and Karami, 2021). The fifth element of the framework is process in which the existence of mental operations produces creative work. These processes includes defining problem, gathering information, and establishing criteria by which a creative act will be evaluated, letting the mind work on the problem consciously and insightly (Wallas, 1926). The sixth element of the framework is the outcomes of creativity, namely products. Such elements as poems, paintings, stories, scientific experiments and discoveries, engineered products, etc. leading to change civilization are labelled typically as the product of the creativity. However, Guilford (1967 akt. Sternberg and Karami,) has classified the products as units, classes, relations, systems, transformations, and implications. What it means is whatever is novel and useful to the society, culture, or the world such as a unit, a relation, a system, a painting, a story, etc. is the product of creativity. Propulsion means that creative thing, normally expected to be novel, leads to change something somehow (Sternberg and Karami, 2021). As a last step, public refers to the ones who decide on what is useful and novel, namely creative or not. If any work isn't evaluated by public as a novel or useful one, this creative work doesn't have any meaning because of not existing any certain criteria of the judgement for what is novel and useful (Sternberg and Karami, 2021).

Although there is a general perception on the the relation between creativity and science, it is a fact that creativity takes place in two domains which are science and arts (Snow, 2012). Art is considered as a domain in which creativity can be developed because of including designing pedagogy. As regards one of the purposes of the art curriculum in Turkey from preschool education to university education, it is aimed to educate a person as a creative individual. Designing pedagogy is a way of generating constructivist learning environment in art education. How such environment should be designed is presented at the studies of Adam and Forrin (2016) emphasizing that learners encounter the challenges that lead them to make creative choices and instructors behave as a mentor instead of an expert informing knowledge and encouraging learners to act independently. The classroom is a place with full of practices. Budge (2016) states that instructors model how to perform as a creative individual instead of informing technical skills in art to the learners at university education. Moreover, open ended design assignments and projects are important to develop creative art students. Through such relatively free and open ended design assignments and practices the art students become free on their choices in their design with the appropriate level of scaffolding. Moreover, in art education the evaluation of the process instead of final product or work is an important because of considering the developing process of the students. When creativity is considered as a primary learning outcome in art education, the students' creativeness can not be evaluated only by focusing on final products instead of considering the process. De la Harpe et al (2009) state that "core component of creative practice is the product (object or event) of creative thinking, many are also proposing that the process of developing or making (including art) is an equally valued outcome of art education". Therefore, formative feedback on the learning process rather than summative feedback on the final product is seen primarily important to educate the students as a creative individual through art education.

Creativity can not be considered as seperated from art education because of the discipline based features of art such novelty, creation, aesthetics, generation, product, etc. Moreover, creativity become expected outcome of the art education for the last years through the art curricula. Sternberg (1999) supports this view as a statement that people are not described creative in a general sense, their creativity is related to domain specific such as their creativity in the visual arts and judged by a community of the experts within this domain. Although creativity is described as a significant outcome in many art education curricula, the studies on the evaluation of the students' creative outcomes and their creative characteristics aren't enough (Zimmerman, 2006). Not only whether the students of the art education have become creative or not, but also the students' creativity can be supported or developed through art education is a big problem need to be analyzed. Because art is a discipline in which the products such as paintings, writings, drawings, etc. are expected to be novel and creative. Art is also the most appropriate discipline in which the students are educated as a creative individual. However, another big qesiton need to be answered is that "How creative the art students are?" Therefore, this study aims to present the creativity of the art students at universities in Turkey and evaluate art education with respect to improvement of the creativity. The research question stated below are answered in this study:

1. How creative are the university art students?

2. What do the university art students think about the development of creativity through art education at University?
3. What are the university art students' suggestions on art education at university in terms of creativity?

2. METHOD

2.1. Research Model

This research was designed as the mixed-methods sequential explanatory design in which both quantitative and qualitative data in two phases of the same study were collected and analyzed. The method design of the research was decided as regarding such factors as the priority of the types of data (quantitative or qualitative) during the collecting or analysis phases of the study, the sequence of the data collection, the phases of the research in which the quantitative and qualitative data are merged and interpreted together (Ivankova, Cresweel and Stick, 2006). Creswell et al. (2003) state that the mixed-methods sequential explanatory design consists of two distinct phases: quantitative followed by qualitative. In this design, the quantitative data is firstly collected and analyzed. And then, the qualitative data are collected and analyzed to explain and clarify the results of the quantitative data collected at the first phase.

The quantitative side of the research presented the creativity of the art education university students in Turkey. This quantitative data was collected and analyzed at first. The factors reasoning for their creativity, the problems on developing the creativity, suggestions on how to educate a creative individual through art education, learning environment promoting creativity, etc. were the qualitative side of the research, collected to explain and clarify the first data.

2.2. Study Group

The sample of the study, selected using convenience sampling method, consisted of the students having been educated at the departments of art at the universities in Ankara, the capital city of Turkey. The demographic features of the sample group are shown in Table 1.

Table 1. The Demographic Features of the Sample

Variable		Frequency	Percentage (%)
Gender	Male	224	80,0
	Female	56	20,0
Age	18-24 years	245	87,5
	25-31 years	17	6,1
	32 years and above	18	6,4
University	Gazi University	72	25,7
	Hacı Bayram Veli University	202	72,1
	Ankara Music and Fine Arts University	6	2,1
Faculty	Fine Arts Faculty	77	27,5
	Education Faculty	78	27,9
	Art and Design Faculty	125	44,6
Department	Visual Arts Education	6	2,1
	Visual Communication Design	77	27,5
	Painting Education	72	25,7
	Traditional Turkish Arts	6	2,1
	Crafts	15	5,4
	Graphic Design	21	7,5
	Textile Design	15	5,4
	Visual Arts	20	7,1
	Jewelery	13	4,6
	Fashion Design	35	12,5
Grade	1 st Grade	157	56,1
	4 th Grade	123	43,9

2.3. Data Collection Tools

The quantitative data was gathered with “How creativity are you?” scale developed by Whetton and Cameron (2015) and adapted to Turkish by Aksoy (2004). The scale consists of 40 items. The factor analysis results indicate the existence of only one factor scale with the value of the variance as 45%. The answer categories to each item are organized as “I agree”, “I am undecided” and “I disagree”. The points of each item differ from 1st item to 39th one. Items in the scale are designed as the rating scale type. However, the last item is designed to present various adjectives scored by each participant ranging from 0 (zero) to 2 (two). The points gained by the participants refer to the level of their creativity. The levels of creativity based on the points of the scale are presented as “95-116 points range (*exceptionally creative*); 65-94 points range (*very creative*); 40-64 points range (*above average*), 20-39 points range (*average*); 10-19 points range (*below average*); below 10 points (*noncreative*)”. The Cronbach Alpha internal consistency coefficients of the scale are found .94 (Aksoy, 2004). This analysis results of the scale are the indicator of usability of the Turkish version in terms of reliability and validity.

The qualitative data of the research were obtained through questionnaire with open ended questions. These questions are about the positive and negative side of art education on their creativity and their suggestion on how to educate a creative art education university student. Moreover, the elements encouraging their creativity at art education and the problems of art education on the development of the students’ creativity are aimed to be presented through the qualitative data. The content validity of the open-ended questions and the suitability of the questions in terms of explanatory enough for the quantitative data, understandability and clarity were ensured by taking experts’ view.

2.4. Data Analysis

Descriptive statistics were done to analyze the quantitative data. The frequency and percentage values, indicating the creativity level of the participants, are presented at Table 2.

Table 2. The Frequencies and Percentages of the Creativity Level of the Art Students

Rating categories	Range of Points	Frequency	Percentage (%)
Noncreative	less than 10 point	-	-
Below average	10-19	1	0.3
Average	20-39	74	26.4
Above average	40-64	198	70.8
Very creative	65-94	7	2.5
Exceptionally creative	95-116	-	-

The results at Table 2 indicate that more than half of the art students (70.8%) are above average with respect to creativity. In addition, 26.4% of the participants are categorized as average in terms of creativity. The finding on the non-existence of the exceptionally creative art student and too few very creative ones take attention. Similarly, It is found that there is nobody who is non-creative.

The prerequisites for the comparison test statistics such as normality test scores were considered and then non-parametric statistics were decided to be done. The results of Kolmogorov-Smirnov test regarding creativity in terms of each variable as a normality test indicate that the sample is not distributed normally ($p < .05$). This test’s scores at Table 3 require the analyses of the quantitative data with non-parametric tests.

Table 3. Kolmogorov-Smirnov Test Scores

	Kolmogorov-Smirnov		
	Statistic	df.	sig.
Gender	,491	280	,000
Age	,514	280	,000
University	,451	280	,000
Faculty	,282	280	,000
Departments	,279	280	,000
Class	,372	280	,000

Since the assumption of normality was not met, Mann-Whitney U test, the non-parametric equivalent of the t-test, was performed for gender variable. Similarly, Kruskal Wallis Test as the non-parametric equivalent of one-way ANOVA was performed for such variables as department, faculty, university and age.

Content analysis method was used to analyze the qualitative data. The data analysis was carried out in seven phases. Marshall and Rossman (2006) explain these phases as “(i) Organizing the data, (ii) immersion in the data, (iii) generating categories and themes, (iv) coding the data, (v) offering interpretations through analytic memos, (vi) searching for alternative understandings and (vii) writing the report for presenting the study”. In this study the researcher reread the data and used tables to organize the data and then themes and codes were generated based on the conceptual structure of the literature by two different researchers. Then, the codes were categorized and themes were created in general aspect. Then the relation between codes and themes were checked. Validity of the results was provided with such strategies as peerdebriefing and direct quotation.

2.5. Ethics Committee Approval

In all stages of this research—including the preparation of the conceptual framework, the implementation of data collection tools, the collection, analysis, and interpretation of data—ethical principles have been strictly observed. The ANKAD Editorial Board bears no responsibility for any ethical violations that may arise; all responsibility rests solely with the authors. I hereby declare that this study has not been submitted for evaluation to any other academic publication venue outside of ANKAD. All rules specified in the “Higher Education Institutions Scientific Research and Publication Ethics Directive” have been followed in the conduct of this study. None of the acts defined under the second section of the Directive, titled “Actions Contrary to Scientific Research and Publication Ethics,” have been committed. Ethics committee approval for the research was obtained from the Ethics Committee of Ankara Music and Fine Arts University Rectorate, with decision number 2022/17, during the meeting dated June 28, 2022 (Meeting No. 8).

3. FINDINGS

The results of the Mann-Whitney U test indicates non-existence of the significant difference in terms of gender variable ($U = 5750,5$ $p > .05$). The test results are presented at Table 4. As regards the findings, it is inferred that gender is not an element not resulting in the difference on art students' creativity.

Table 4. Mann Whitney U Test Results of Art Students' Creativity by Gender

Gender	N	Sum of Means	Sum of Rank	U	p
Female	224	138,17	30950,50	5750,5	,336
Male	56	149,81	8389,50		
Total	280				

Art students' creativity levels are analyzed with respect to their ages, the universities they have been educated as well as their faculties and departments. The Kruskal Wallis Test's results present that art students' creativity doesn't differ with respect to their ages ($\chi^2=2,243$ $p > .05$). Similarly, art students' creativity is expectedly medium or high without depending on which university they have been educated. This means the university is not a variable leading to significant difference among art students in terms of their creativity. Another variables are faculty and department which art students have been educated at. However, The Kruskal Wallis Test's results similarly present that art students' creativity doesn't differ with respect to their faculties ($\chi^2=2,935$ $p > .05$) and their departments ($\chi^2=11,042$ $p > .05$). For example, the creativity level of art students having been educated at the faculty of fine arts doesn't differ significantly from the ones at the education faculty. Moreover, without depending on their departments their creativity doesn't change significantly. Namely, the creativity level of art students educated at visual arts education is similar to such students' creativity at the department of graphic designs or other departments, e.g. Visual Communication Design, Traditional Turkish Arts, Jewellery, Fashion Design, etc. Detailed information about the Kruskal Wallis Test results is given at Table 5.

Table 5. Kruskal Wallis H Test Results of Art Students' Creativity in terms of Age, University, Faculty and Department

Variable		N	Sum of Means	X ²	p
Age	18-24 years	245	138,14	2,243	,326
	25-31 years	17	167,71		
	32 years and above	18	146,92		
	Total	280			
University	Gazi University	72	145,58	2,935	,231
	Hacı Bayram Veli University	202	137,20		
	Ankara Music and Fine Arts University	6	190,75		
	Total		280		
Faculty	Fine Arts Faculty	77	137,03	2,935	,402
	Education Faculty	78	145,58		
	Art and Design Faculty	125	137,30		
	Total	280			
Department	Visual Arts Education	6	190,75	11,042	,273
	Visual Communication Design	77	137,03		
	Painting Education	72	145,58		
	Traditional Turkish Arts	6	158,42		
	Crafts	15	132,10		
	Graphic Design	21	139,45		
	Textile Design	15	130,97		
	Visual Arts	20	153,18		
	Jewelery	13	179,35		
	Fashion Design	35	112,64		
	Total	280			

Themes and codes about art students' comments on the development of the creativity level through art education are listed at Table 6.

Table 6. The Qualitative Data Analysis on Art Students' Views on the Development of Creativity through Art Education at University

Theme		Code	Frequency
Positive side	Curriculum	Nature of course content as Art	10
		Gained skills and knowledge	Ability to imagine
	Gained skills and knowledge	Ability to observe environment	10
		Thinking skills	24
		Technical knowledge	10
		Knowledge on ethics	5
		Aesthetic perception	10
	Emotional objectives	Self-confidence	15
		Motivation	20
	Learning environment	Intensity of producing works of art	20
		Encountering artists' work of art frequently	21
		Producing original works many times	21
		Freedom in producing work of art	18
		Instructor's mentoring	20

Negative side	Curriculum	Restricted curriculum	5
	Instructors' feedback	Not giving constructive feedback to the works of art	10
		Instructor's mentoring based on only rules	8
	Learning environment	Rules based	9
		Without freedom	9
		Not generating any ones' own styles	7
		Only theoretical knowledge	8

Art students' positive views on the development of the creativity level through art education are frequently coded as *thinking skills* and *aesthetic perception* with respect to skills and knowledge theme. This means that such thinking skills as observing, analyzing, thinking from different perspectives, inferring, etc. and aesthetic perception are gained through art education. *Self-confidence* and *motivation* are the emotional objectives the art students have obtained. These emotions such as motivation is a significant starter element for thinking creatively, namely, generating novel and useful ideas. In terms of learning environment, *intensity of producing works of art*, *encountering artists' work of art frequently*, *producing original works many times*, *freedom in producing work of art* and *instructor's mentoring* are frequently stated codes indicating positive side of learning environment at art education in terms of developing creativity. In contrast, only *theoretical knowledge*, *rules based*, *not generating any ones' own styles* and *without freedom* are the codes stated to present the negative side of the art education. Not being free in someone's ideas, feelings and style, only generating the works of art by regarding technical knowledge, criterias and rules are seen as an obstacle to generate the works of art such as paintings, novel, etc. original and useful for the society. Moreover, *instructors' feedback* such as not giving constructive feedback to the works of art, *their mentoring based on only technical knowledge* are stated codes, presenting also negative side of the practices of the art education. Such views of art students supporting these codes are exemplified below:

"We think from different perspective upon painting or drawing in such a way that we can be more creative."

"Our aesthetic perception is improved through the art education so that we can produce more original works of art."

"Learning new things in the discipline of art make me more motivated."

"The positive effect is the improvement of my thinking skills and aesthetic perception."

"I think about art education as positive one because of encouraging me about thinking a lot and practicing much at my works of art."

"The subjective and restrictive views of the instructors' on my works make me unmotivated and preventing me from thinking originally and producing novel idea sor works."

"I am happy about encountering artists' work of art much more so that my creativity can be improved."

"I can not be free at generating my works in terms of my style and ideas."

I think negatively because of restricted curriculum forcing us to paint in a certain pattern.

"...the negative effect of the art education, not giving chance to work freely."

"I think lack of empathy is a reson why creativity can not be improved through art education."

Themes and codes about art students' suggestions on how art education should be designed to educate an art student as a creative one are presented at Table 7.

Table 7. The Qualitative Data Analysis on Art Students' Suggestions on Art Education at University

Theme	Code	Frequency
Curriculum	Increased art lessons	10
	Increased design lessons	5
	Increased drawing lessons	7
	Courses designed to shape the students' own styles	10
	Non-restrictive content of the lessons	15
	Original course content	16
	Intensity in practices and exemplifying a lot	20
	Extracurricular activities	5
	Extension of the duration of the discipline based lessons	8
	Teaching methods to develop creativity	15
	Project based teaching method	5
	Process based evaluation techniques	18
	Evaluation of creativity without limited to the instructors' views	6
	Taking main art courses from different instructors	5
Learning environment and workshop	The environmental design of workshops	12
	Extension of the duration of the workshops	10
	Increase in the types of workshop	12
	Organizing exhibitions and seminars	8
	Designed to develop the students' qualifications	13
	Interaction and communication with lots of artists	21
	Not be limited to assigned homework	8
	Scholarship provided	5
	Motivated workshops	5
	Freedom in the students' views and feelings	18
	Developing the students' own style	10
Instructors	High quality in teaching methods	8
	Proficiency in the discipline	10
	Processing lesson on time	5
	Following current developments in the discipline	10
	Young and dynamic educators	3
	Continuous feedbacks	20
	Non restrictive guidance and mentoring	21
	Respectful towards the students' views and feelings	15
Technology based learning environment	Intensity of digital technologies at lessons	8
	Interactive activities	10
	Being trained on current computer programs	7
	Being trained on related technologies for the sector	6
Social activities and group works	Students' club activities	8
	Social activities	10
	Group studies	9

Art students' suggestions on art education at university to develop creativity are categorized such themes as *curriculum, learning environment and workshop, instructors, technology based learning environments, social activities and group works*. Their suggestions, presented under the theme of curriculum, *the content and design of art lessons* are the codes, stated frequently. Non restrictive original content is expected mostly by art students for the development of their creativity. Moreover, teaching methods and process based evaluation techniques are a suggested way of educating art students as more creative individual. Under the theme of learning environment and workshop, mostly stated views are coded as *the environmental design of workshops, extension of the duration of the workshops, increase*

in the types of workshop, organizing exhibitions and seminars, interaction and communication with lots of artists and motivated workshops. These frequently stated codes indicate that art students are expected to practice mostly with artists or to learn how to produce art at practical and motivated learning environment. The integration of digital current technologies and being trained on current digital programs are also suggested. With respect to the theme of instructor, *high quality in teaching methods, proficiency in the discipline, processing lesson on time, following current developments in the discipline, continuous feedbacks, non restrictive guidance and mentoring and respectful towards the students' views and feelings* are frequently stated codes, indicating that art students are expected to be educated by qualified instructors in terms of pedagogy and the theoretical knowledge in the discipline. Furthermore, such activities as club activities, social activities and group activities are also seen as a way of developing creativity of art students. Some views supporting these codes are exemplified below:

"Students' ideas, perspectives and styles should be respected."

"The students should be free in producing their ideas, styles or products."

"The lessons helping art students to have their own style should be designed."

"The lessons should be designed to improve the students in terms of domain based qualifications."

"The students should be free in practicing their methods and their ideas so that they can make inference."

"The students should be given more freedom in the preference of content, project or work of art, etc."

"The instructors should make guidance on our ideas upon producing our works."

"...we should be educated by the professional instructors."

"The instructors should follow the current developments in their discipline and adapted them to their courses."

"We should practice more at the works of art, improving creativity."

"The number of the lesson on design and drawing should be increased."

"The different courses from the various branches of the art should be entegrated in the curriculum."

"The content should be designed giving chance to the students to encounter the artists much more and practice more."

"The evaluation should be objective not based on only the exams."

"The contents should be free and original. There may be more examples in lessons."

"Workshop facilities can be increased."

"Club works, group studies should be done much more and the student clubs, the aim of which is to improve creativity should be established."

".....Opening more exhibitions, providing more communication with artists...."

4. CONCLUSION

More than half of the university art students in Turkey are above average with respect to creativity. However, the findings on the non-existence of the exceptionally creative art student and too few very creative ones take attention. Snow (2012) states the existance of the creativity in the domain of art in addition to science. It can be interpreted as the fact that the discipline based features of art such novelty, creation, aesthetics, thinking skills, imagination, motivation. etc. are the elements a person should have to be creative. Moreover, making judgement on the creativity of any individual is discipline or domain based. What it means is that individuals are not described creative in a general sense, their creativity is related to domain specific such as their creativity in the visual arts and judged by a community of experts

within this domain. Therefore, the creativity of art students is significantly important to be evaluated with respect to their discipline or domain.

Although art students are described to be creative enough as an expected finding, what takes attention is the non-existence of exceptionally creative art students or the existence of few very creative ones. With respect to the nature of art as a discipline, art not only requires creativity in the process of art students' generating ideas or products, solving problems with novel solutions, but also is an effective way of developing an individual as a creative one. Therefore, in order to be an art student, you should be enough creative and get advantages of art education to be exceptionally creative. Therefore, how to design art education plays an important role in educating individuals as creative or exceptionally creative.

Art students' positive views on the development of the creativity through art education are frequently coded as thinking skills and aesthetic perception. This means that such thinking skills as observing, analyzing, thinking from different perspectives, inferring, generating novel ideas or products, etc. and aesthetic perception are gained through art education. According to Amabile (1997), creative theory presents three major components of the creativity, one of which is thinking skills. Moreover, thinking processes as major component of the creativity can be listed as defining problem, merging ideas to produce new one, providing solutions to these problems novel and useful, etc. In addition, seeing problems from new perspective, deciding which of one's ideas are worthy being followed or which are not, knowing how to persuade others to accept the value of the newly proposed ideas, are equally significant for creativity (Zhang and Sternberg, 2011). Therefore, it is inferred that art education is a significant way of seeing problems from new perspective, deciding on ideas worthy or not, generating novel and appropriate products, persuading others in terms of the value of the newly proposed idea or products. Thinking process can not be considered without imagination and technical, procedural and intellectual knowledge. Al-Ababneh (2020) supports the interaction of technical, procedural and intellectual knowledge in the creation of novel and useful ideas, products or process. Therefore, the technical knowledge provided by instructors which is stated by the art students as a negative side is necessary but not enough to be creative. The procedural and intellectual knowledge the art students need to have but not have enough through art education are prerequisite for creativity.

Self-confidence and motivation are the emotional objectives the art students have obtained. These emotions such as motivation is a significant starter element for thinking creatively namely, generating novel and useful ideas. One of the major components of creative theory is motivation (Amabile, 1997). Creativity occurs when individuals' skills related to his expertise domain are supported with intrinsic motivation. Sternberg and Lubart's creativity theory (1991, 1992 and 1995), as reorganization of Amabile's model, also presents motivation as one of the components of the theory necessary for one to start a new task and continue studying on it. Therefore, it is inferred that the art students should be motivated to generate novel and original works and define ideas from different perspectives. This is the way of educating creative art students.

In terms of learning environment, intensity of producing works of art, encountering artists' work of art frequently, producing original works many times, freedom in producing work of art and instructor's mentoring are frequently stated codes indicating positive side of learning environment at art education with respect to developing creativity. According to Sternberg and Lubart's creativity theory (1991, 1992 and 1995), the last component for creativity is providing environment, the features of which are helping spark creative ideas, supporting creative ideas and leading to improve and evaluate creative ideas (Zhang and Sternberg, 2011). Environment is important as well in terms of giving chance to the learners to think creatively on the problems related to domain and to develop their own domain related skills and to be motivated intrinsically. Art students' generating lots of novel works of art focusing on the problems of the society or the world and their contact with many artists frequently are the environmental effect on their creativity. This environmental effect is explained by Bronfenbrenner's theory in which people can learn by interacting with people, objects or others in the environment categorized from microsystem to macro system. This means not only where one lives and has personal interactions but also culture, society or the world as a larger context are the environmental press providing people with acting creatively. Namely, this environmental effect includes the art students' learning through their continuously more complex interactions with the artists and their instructors' effective mentoring. This findings are also

supported with the negative side of art education, presented by the participants of the study. Not being free in someone's ideas, feelings and style, only generating the works of art by regarding technical knowledge, criterias and rules are seen as an obstacle to generate the works of art such as paintings, novel, original and useful for the society. Moreover, instructors feedback such as not giving constructive feedback to the works of art, their mentoring based on only technical knowledge are stated codes, presenting also negative side of the practices of the art education. As a result, environmental factors such as instructors, pedagogies, works of arts, encountered artists, etc. and the factors about intelligence such as generating novel and useful ideas, evaluating these ideas, putting the ideas into practice, etc. are significant ways of educating art students as creative or exceptionally creative.

Art students' suggestions on how they should be educated on art to be exceptionally creative or more creative are classified in terms of curriculum, instructor, learning environment and workshops, technology based learning and social activities. Non-restrictive original content is expected to be designed. Art students expect to generate novel and useful ideas, evaluate these ideas, put the ideas into practice through the art education. Moreover, technology based learning environment and the frequency of the workshops, the frequency of interaction with the artists, the existence of the seminars and exhibitions are the expected environment to practice more, criticize the works of art from different perspective and produce novel and useful idea or products. In terms of instructor's profile, his proficiency in the discipline and pedagogy, processing lesson on time, following current developments in the discipline, continuous feedbacks, non restrictive guidance and mentoring and respectful towards the students' views and feelings are frequently suggested. Not only curricular and environmental components but also instructors' feedbacks and pedagogical behaviors are significantly indicator of the creativity. The student's active participation in the learning process with their novel feelings, ideas or products and non restrictive positive guidance and objective process based evaluation by the instructor are necessary for the development of the creativity. Such environmental features encouraging novel and useful ideas or product for the creativity are supported by the study of Getzels & Csikszentmihalyi (1976 cited at Zimmerman, 2006) differentiating less creative students who produced realistic drawings without much inventiveness from creative ones who attempted to solve the problems by producing novel solutions. Furthermore, such activities as club activities, social activities and group activities are also seen as a way of developing creativity of art students. Such activities are the way of someone's interaction with others and this interaction affect art students' ideas, feelings, styles or products directly or indirectly. This is explained by Bronfenbrenner's theory in which people can learn by interacting with people, objects or others in the environment categorised from microsystem to macro system. The more effective such interaction is in terms of producing novel and original ideas to solve the problems of the society or the world in the discipline of art, the more creative art students will be.

5. DISCUSSION

Art students are expected to be more creative because of the nature of the discipline requiring novelty and originality in producing ideas, feeling and products. So that the problems of the culture, society or the world can be solved through the art. "How creative are art students in Turkey?" should be answered to eliminate the obstacles of producing novel and useful ideas or products through art. Therefore, this study has become important with respect to its' findings on art students' creativity and how art should be taught to develop creativity. The students of art are seen to be creative enough but they are expected to be more creative or exceptionally creative. The way of educating exceptionally creative art students are designing learning environment in which the students explain their novel ideas and produce novel and useful painting, writings, namely the works of art. Moreover, the role of the non-restrictive instructors, mentoring their art students in producing novel ideas, feelings, styles and products are another way of educating creators. Moreover, process based evaluation techniques such as portfolio, self evaluation form, peer evaluation form, rubrics, etc. can be used to evaluate the developmental process of art students' thinking skills, intelligence, motivation, technical knowledge which are the elements of the creative theory. Objective evaluation can be possible with the help of the use of various process based evaluation techniques together. Accurate feedback on time and in place by the instructors are discussed to be mostly significant for art students to improve their discipline based knowledge, intelligence and thinking skills. The frequency of the workshops, the frequency of interaction with the artists, the existence of the seminars and exhibitions and social activities related to art are the expected

environment to practice more, criticize the works of art from different perspective and produce novel and useful ideas or products in such a way that they can be educated as exceptionnly or more creative through art.

6. REFERENCES

- Adams, R.S & Forrin, T. (2016). Characterizing the work of coaching during design reviews. *Design Studies*, 45, 30-67.
- Aksoy, B. (2004). Problem based learning in Teaching Geography [Cografya öğretiminde probleme dayalı öğretim yaklaşımı]. *Unpublished Doctorial Thesis*, Gazi University Educational Sciences Institue,
- Al-Ababneh, M. M. (2020). The concept of creativity: Definitions and Theories. *International Journal of Tourism & Hotel Business Management*, 2(1), 245-249.
- Aljughaiman, A., & Mowrer-Reynolds, E. (2005). Teachers' conceptions of creativity and creative students. *The Journal of Creative Behavior*, 39(1), 17-34.
- Amabile, T.M. (1996). *Creativity in context*. Colorad: Westview Press, Inc.
- Bronfenbrenner, U. (2009). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Budge, K. (2016). Learning to be: The modelling of art and design practice in university art and design teaching. *International Journal of Art & Design Education*, 35(2), 243-258
- Chan, D. & Chan, L. (1999). Implicit theories of creativity: Teachers' perception of student characteristics in Hong Kong. *Creativity Research Journal*, 12(3), 185–195.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L. & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori, & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage.
- De La Harpe, B., Peterson, J.F., Frankham, N., Zehner, R., Neale, D., Musgrave, E. & McDermott, R. (2009). Assessment focus in studio: What is most prominent in architecture, art and design? *International Journal of Art & Design Education*, 28(1), 37-51. <https://doi.org/10.1111/j.1476-8070.2009.01591.x>
- Dewett, T. (2007). Linking intrinsic motivation, risk taking and employee creativity in an R&D environment. *R&D Management*, 37(3), 197-208.
- Feist, G.J. (2019). The function of personality in creativity: The nature and nurture of the creative personality. In J.C. Kaufman, & R.J. Sternberg (Eds.), *Cambridge handbook of creativity* (pp. 113–130). New York, NY: Cambridge University Press. <https://doi.org/10.1017/CBO9780511763205.009>
- Ford, C.M. (1996). A theory of individual creative action in multiple social domains. *Academy of Management Review*, 21(4), 1112-1142.
- Ivankova, N. V., Creswell, J. W. & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, 18(1), 3-20. <https://doi.org/10.1177/1525822X05282260>
- Kaufman, J.C., & Sternberg, R.J. (Eds.) (2019). *Cambridge handbook of creativity* (2nd ed.). New York, NY: Cambridge University Press. <https://doi.org/10.1017/9781316979839>.
- Kreitler, S., & Casakin, H. (2009). Motivation for creativity in design students. *Creativity Research Journal*. 21, 282–293.
- Petrowski, M.J. (2000). Creativity research: Implications for teaching, learning and thinking. *Reference Services Review*, 28(4), 304-312.
- Snow, C.P. (2012). *The two cultures*. New York, NY: Cambridge University Press.

- Sternberg, R. J. (Ed.). (1999). *Handbook of creativity*. Cambridge University Press.
- Sternberg, R.J. (2000). Creativity is a decision. In A.L. Costa (Ed.), *Teaching for intelligence II* (pp. 85–106). New York, NY: Skylight Training and Publishing Inc.
- Sternberg, R.J. (2021). Positive creativity. In A. Kostic & D. Chadee (Eds.), *Current research in positive psychology* (pp. 33–42). New York, NY: Palgrave-Macmillan.
- Sternberg, R. J., & Lubart, T. I. (1991). An investment theory of creativity and its development. *Human Development*, 34(1), 1–31.
- Sternberg, R. J., & Lubart, T. I. (1992). Buy low and sell high: An investment approach to creativity. *Current Directions in Psychological Science*, 1(1), 1–5.
- Sternberg, R. J., & Lubart, T. I. (1995). *Defying the crowd: Cultivating creativity in a culture of conformity*. New York: Free Press.
- Sternberg, R.J. & Karami, S. (2021). Integrating diverse points of view on intelligence: A 6P analysis and its implications. *Journal of Intelligence*, 9(33). <https://doi.org/10.3390/jintelligence9030033>
- Wallas, G. (1926). *The art of thought*. Cambridge, MA: Jonathan Cape.
- Whetten, D. & Cameron, k. (2015). *Developing management skills* (9th ed.), Pearson Education Inc., Upper Saddle River.
- Zhang, L. F., & Sternberg, R. J. (2011). Revisiting the investment theory of creativity. *Creativity Research Journal*, 23(3), 229-238. <https://doi.org/10.1080/10400419.2011.595974>
- Zimmerman, E. (2006). It takes effort and time to achieve new ways of thinking: Creativity and art education. *The International Journal of Arts Education*, 3, 74-87.

Araştırma Makalesi / Research Article

An Explanatory Sequential Mix Methods Approach to Understanding of the University Art Students and Art Education with Respect to Creativity

Yaratıcılık Bağlamında Üniversite Sanat Öğrencilerini ve Sanat Eğitimi Anlamaya Yönelik Açıklayıcı Sıralı Karma Yöntem Yaklaşımı

Gamze YAVUZ KONOKMAN  & **Aybige DEMİRCİ ŞENKAL** 

DOI : [10.63556/ankad.v10i1.362](https://doi.org/10.63556/ankad.v10i1.362)

Geliş/Received: 24/10/2025

Kabul/Accepted: 02/02/2026

Geniş Özet

Giriş

Sanat, doğası gereği yenilik, yaratım, estetik, üretim ve özgün ürün gibi yaratıcılıkla doğrudan ilişkili özellikler taşıdığından yaratıcılıktan bağımsız düşünülemez. Ayrıca son yıllarda sanat eğitimi programlarında yaratıcılık, eğitimin beklenen bir çıktısı hâline gelmiştir. Sternberg (1999), bireylerin genel anlamda değil, alanlarına özgü biçimde yaratıcı olduklarını, örneğin görsel sanatlar alanındaki yaratıcılığın o alandaki uzmanlar topluluğu tarafından değerlendirildiğini belirtmektedir. Pek çok sanat eğitimi programında yaratıcılık önemli bir hedef olarak yer alsa da, öğrencilerin yaratıcı ürünlerinin ve yaratıcılık özelliklerinin değerlendirilmesine yönelik çalışmaların yeterli olmadığı görülmektedir (Zimmerman, 2006). Bu bağlamda, sanat eğitimi öğrencilerinin yaratıcı bireyler hâline gelip gelmedikleri kadar, yaratıcılıklarının sanat eğitimi yoluyla ne ölçüde desteklenip geliştirilebileceği de önemli bir araştırma konusudur. Çünkü resim, yazı, çizim gibi ürünlerin özgün ve yaratıcı olması sanat disiplininin doğasında vardır. Sanat, bireylerin yaratıcı bireyler olarak yetiştirilmeleri için en uygun disiplindir. Bu çalışma, Türkiye’deki üniversitelerde sanat eğitimi alan öğrencilerin yaratıcılık düzeylerini ortaya koymayı ve sanat eğitiminin yaratıcılığın gelişimi açısından değerlendirilmesini amaçlamaktadır.

Yöntem

Kolay ulaşılabılır örnekleme yöntemiyle belirlenen çalışma grubu, Türkiye’nin başkenti Ankara’daki üniversitelerin güzel sanatlar bölümlerinde öğrenim gören 280 öğrenciden oluşmaktadır. Araştırma tasarımı, ilk aşamada “Ne kadar yaratıcısınız?” ölçeği ile nicel verilerin toplanmasını, ardından bu verileri açıklamak ve derinleştirmek amacıyla anket yoluyla nitel verilerin toplanmasını ve analiz edilmesini içermektedir. Nicel veriler istatistiksel veri analizi teknikleriyle, nitel veriler içerik analizi yöntemiyle değerlendirilmiş olup, nitel ve nicel veriler araştırma olgusunun ortaya konulmasında birlikte yorumlanmıştır.

Sonuç ve Tartışma

Araştırma bulgularına göre, Türkiye’deki üniversitelerde öğrenim gören sanat öğrencilerinin yarısından fazlası yaratıcılık açısından ortalamanın üzerinde yer almaktadır. Bununla birlikte, “çok yaratıcı” ya da “istisnai düzeyde yaratıcı” öğrencilerin bulunmaması veya sayılarının oldukça az olması dikkat çekici bir sonuçtur. Snow’un (2012) da belirttiği gibi yaratıcılık yalnızca bilim alanında değil, sanat alanında da var olan bir olgudur. Bu durum, sanatın doğasında bulunan yenilik, estetik, düşünme becerisi, hayal gücü ve motivasyon gibi bileşenlerin, bireyin yaratıcı olabilmesi için temel koşullar olduğunu göstermektedir. Ayrıca yaratıcılığın değerlendirilmesi alan veya disiplin temellidir. Yaratıcılık, genel bir kişilik özelliği olarak değil, belirli bir alana (disipline) özgü olarak değerlendirilmelidir. Bir başka deyişle, bir kişinin “yaratıcı” olup olmadığı, her konuda geçerli bir nitelik değildir. Örneğin, bir kişi görsel sanatlarda çok yaratıcı olabilir ama aynı kişi bilimde veya müzikte o kadar yaratıcı olmayabilir.

Bu yüzden birinin yaratıcılığını değerlendirirken, o kişinin hangi alanda üretim yaptığı ve o alanda üretim yapan kişilerce nasıl değerlendirildiği önemlidir. Dolayısıyla, bu çalışma da sanat öğrencilerinin ilgili disiplinde çalışmalar üretiyor olmaları ve lisans eğitimleriyle ilgili alanın profesyonelleri olmaları açısından yaratıcılıkları hakkında öz değerlendirmelerine dayalı önemli bulgular sunmaktadır.

Araştırmanın önemli bir sonucu, sanat eğitiminin öğrencilerin düşünme becerileri ve estetik algı gelişimine önemli katkılar sağladığını göstermesidir. Katılımcıların görüşleri, sanat eğitimi sürecinde gözlem, analiz etme, farklı bakış açılarından düşünme, yeni fikir üretme ve çıkarım yapma gibi bilişsel süreçlerin yoğunlaştığını ortaya koymuştur. Bu bulgu, Amabile'nin (1997) ve Zhang & Sternberg'in (2011) yaratıcılık kuramlarında vurgulanan "yaratıcı düşünme becerisi" bileşeniyle örtüşmektedir. Yine de, teknik bilginin öğretmenler tarafından aşırı vurgulanması, öğrencilerin yaratıcılıklarını sınırlayan bir unsur olarak öne çıkmaktadır. Teknik bilgi gerekli olsa da, süreçsel ve entelektüel bilginin eksikliği yaratıcı üretimin derinleşmesini engellemektedir.

Araştırma, sanat öğrencilerinin duygusal hedefler açısından da öz güven ve motivasyon kazandığını göstermiştir. İçsel motivasyon, yaratıcılık sürecinin temel itici gücü olarak tanımlanmıştır (Amabile, 1997; Sternberg & Lubart, 1995). Bu bağlamda sanat öğrencilerinin, yeni fikirler geliştirmek ve özgün ürünler ortaya koymak için motive edilmeleri büyük önem taşımaktadır.

Öğrenme ortamı açısından, sanat eğitiminin yaratıcılığı geliştirmede etkili olduğu görülmüştür. Sürekli üretim, sanat eserleriyle karşılaşma sıklığı, özgür çalışma alanları ve öğretim elemanlarının rehberliği öğrencilerin yaratıcılık düzeyini artıran unsurlar arasında yer almıştır. Bununla birlikte, öğretmen merkezli yaklaşımlar, öğrenme ortamının yeterince özgür olmaması ve yalnızca teknik bilgiye dayalı mentorluk uygulamaları yaratıcı düşünmeyi sınırlandırmaktadır. Bronfenbrenner'in çevresel sistemler kuramı bağlamında değerlendirildiğinde, öğrencilerin sanatçılarla ve öğretim üyeleriyle kurdukları etkileşimler, çevresel bir baskı değil; yaratıcı eylemi tetikleyen destekleyici bir faktör olarak görülmektedir. Sanatçılarla işbirliği, özgün ders içerikleri, teknoloji destekli atölyeler, uygulama temelli seminerler, süreç temelli değerlendirmeler, işbirlikli öğrenme ve yapıcı geribildirim odaklı mentorluk yaratıcı öğrenme ortamını destekleyen unsurlar olarak sanat öğrencilerinin öneriler olarak karşımıza çıkmaktadır.

Sonuç olarak, sanat eğitiminin öğrencileri yaratıcı bireyler olarak yetiştirmesi için yalnızca teknik bilgi aktarımına değil, aynı zamanda eleştirel düşünme, içsel motivasyon, özgür ifade ve etkileşimsel öğrenme ortamlarına odaklanması gerekmektedir. Yapılandırmacı ve uygulama ağırlıklı bir sanat eğitimi anlayışı, öğrencilerin yaratıcı potansiyellerini istisnai düzeye taşıyabilecek temel koşuldur. Bu araştırmanın bulguları, gelecekte yapılacak çalışmalara yönelik çeşitli açılımlar sunmaktadır. Öncelikle, çalışma yalnızca Ankara'daki üç üniversiteyle sınırlı olduğundan, farklı bölgelerdeki üniversiteleri kapsayacak biçimde genişletilmiş örneklerle yürütülecek araştırmalar, sanat eğitiminin yaratıcılığa etkisinde kültürel ve kurumsal farklılıkları ortaya koyabilir. Ayrıca yaratıcılığın alan temelli bir olgu olduğu dikkate alınarak, müzik, drama, tasarım ve mimarlık gibi farklı sanat disiplinleri arasında karşılaştırmalı çalışmalar yapılması önerilmektedir. Sanat eğitiminin uzun vadeli etkilerini belirlemek amacıyla boylamsal araştırmalar yürütülmesi; süreç temelli değerlendirme, dijital atölye uygulamaları veya özgür tasarım projeleri gibi pedagojik yaklaşımların deneysel olarak incelenmesi de gelecekteki araştırmalar için önemli yönelimlerdir. Bunun yanında, sanat eğitimi veren öğretim elemanlarının yaratıcılığı destekleyen rehberlik biçimleri, pedagojik anlayışları ve değerlendirme yaklaşımlarının derinlemesine incelenmesi, öğretmen faktörünün etkisini görünür kılacaktır. Günümüzde giderek önem kazanan dijital sanat uygulamaları, yapay zekâ destekli tasarım süreçleri ve sanal atölye ortamlarının öğrencilerin yaratıcı düşünme biçimleri üzerindeki etkilerinin araştırılması da yeni bir çalışma alanı olarak değerlendirilebilir. Ayrıca, nitel veri derinliğini artıracak şekilde öğrencilerin yaratıcı süreçlerinin, ürün geliştirme aşamalarının ve özgün fikir üretim biçimlerinin portfolyo ya da gözlem analizleriyle incelenmesi önerilmektedir.