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Evaluation of Three-Dimensional Artworks Through Views of Pre-Service Visual Arts Teachers

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Abstract

Many studies on art education outline the positive effects of arts education on individuals' cognitive, social and emotional development; however, it can be seen that three-dimensional studies cannot be conducted adequately due to various reasons such as insufficient workshop facilities, short course durations, and difficulties in accessing materials in visual arts courses in state schools in Turkey. Therefore, it is possible to say that arts education will be incomplete in many aspects when including three-dimensional artworks are not included in the educational practices. From this point of view, this study aimed to interpret the opinions of preservice visual arts teachers regarding their views on three-dimensional artworks within the scope of the elective art workshop sculpture course. Therefore, as a qualitative research method, the 'case study' design was employed in the study. The study group consisted of 24 preservice visual arts teachers studying Visual Arts and Crafts Education Bachelor of Arts program at 4th grade at a state university in the Western Black Sea Region in Turkey. The research data were obtained through semi-structured interview forms and analyzed by the content analysis method. The study results showed that preservice visual arts teachers found the "plaster figure-sculpting" and "aerated concrete portrait block" artworks made within the scope of the elective art workshop sculpture course helpful in perceiving three-dimensional forms and understanding human anatomy. Moreover, they stated that they might prefer such works in their professional lives because it is convenient in terms of material cost and accessibility.

Keywords: Arts Education, Three-Dimensional Art Works, Sculpture, Anatomy, Sense Of Touch

Introduction

Arts Education refers to general and inclusive education of arts with all branches of art, including a specific arts education course given in schools (Yılmaz, 2005). In other words, 'art education' refers to the educational activities and works which inquire on all forms of art and the relationship between these arts in dimensions such as cognition, the artist, audience, society, culture, and education (Buyurgan & Buyurgan, 2012). A common misconception is that arts education is only for talented learners; however, many studies on arts education show its beneficial effects on individuals' cognitive, social, and emotional development (Marshall, 2016; Yılmaz, 2005). Özsoy (2007) emphasizes the benefits of arts education as it builds many different literacies and increases cultural development from an early age by accurately improving intuition, reasoning, and imagination skills.

Despite its substantial place in the educational system, there are many obstacles and lacking points in arts education (visual arts course in primary and middle schools) such as lack of suitable classrooms and materials, limited duration of lessons, qualified personnel or educational programs reflecting on today's educational needs (Atan & Dalkıran, 2008; Ayaydın, 2009; Buyurgan & Buyurgan, 2012; Konak, 2020; Yazar, Aslan, Şener, 2017). In

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addition to these problems, families and students do not see arts education as an essential course in addition to students' lack of interest in arts education, especially in middle school, are also among the common problems in Turkey.

Research on the reasons behind these problems shows that there are social conceptions such as the exam-centred educational system leading arts education to be neglected, and uncompromising status of being an artist as an occupation, in addition to the personal conceptions such as students thinking that visual arts lessons include repetitive and uninteresting activities (Dorukan, 2009). These factors may force visual arts teachers to include simple or two-dimensional artworks in their lessons and cause students' lack of interest or dislike towards visual arts education.

Providing many educational benefits, three-dimensional artworks can be preferred to attract students whose interest in visual arts education faded away due to the repetitive practices in their lessons. Different from two-dimensional artworks, students have the chance to improve their visualizing and application skills in three-dimensional artworks. During three-dimensional artwork practices, students could experience a new practice in which they can express their inner worlds in addition to copying a work of art (Kalkan, 2016). Contrary to two-dimensional artworks, Demir (2009) states that three-dimensional artworks have an immense educational value since the practice requires using both hands simultaneously. Allen (1978) holds that teaching practices towards the perception of the 'third dimension' are the perceptional education practices closest to human nature. While three-dimensional objects are concrete and artworks do not involve indirect representations, two-dimensional artworks, such as drawing, require transforming what one sees into a two-dimensional surface. It may be challenging to apply what one sees into a drawing; however, in three-dimensional artworks, one can sense the object by touching in addition to seeing, and the depth of which one touch is real. As Allen (1978) states, the sense of touch is vital in making meaning of the world around us; thus, its place in arts education cannot be overlooked. Many studies support Allen's claim; Johnson (2018) found significant improvements in students' art perceptions during art activities when the sense o touch was active. Similarly, Coster and Loots (2004) investigated the use of touch in arts education among visually impaired students. They revealed significant results regarding the role of the sense of touch in arts education.

Sense of touch and sight are among the most significant senses in making sense of the world; thus, its place in arts education cannot be ignored. Furthermore, it can be stated that the use of the sense of touch could provide efficiency in arts education through the use of three-dimensional artworks. In light of this statement, this study aims to reveal the views of preservice visual arts teachers towards their three-dimensional artwork practices in an elective art workshop sculpture course and investigate their views towards including such practices in their professional lives.

Method

Research Design

In this study, which aims to examine three-dimensional works of art in the light of visual arts teacher candidates, a qualitative research method was used to describe and discuss the research questions in depth.

Study Group

The study group of the research consists of 24 preservice visual arts teachers studying Visual Arts and Crafts Education Bachelor of Arts programme at 4th grade at a state university in the Western Black Sea Region in Turkey. Table 1 shows the gender distribution of the study group:

Table 1. *Gender Distribution of the Study Group*

	Female	Male	Total
Gender Distribution	17	7	24
	71%	29%	100%

Data Collection Tools

Data for the research was collected through the use of semi-structured interviews. The trifold interview form included personal information in the first section, while the second section included the questions on views on plaster figure-sculpting works. The third section consisted of questions on aerated concrete portrait sculpting. Two different field experts were consulted in order to establish validity, and necessary adjustments were made to finalize the interview form.

Data Collection Procedures

This research was conducted in the 2019-2020 academic year in the fall semester during the 'Elective Art Workshop Sculpture I' course. During 10 weeks, 'plaster figure sculpting' and 'aerated portrait' practices were conducted with 24 students who took the course.

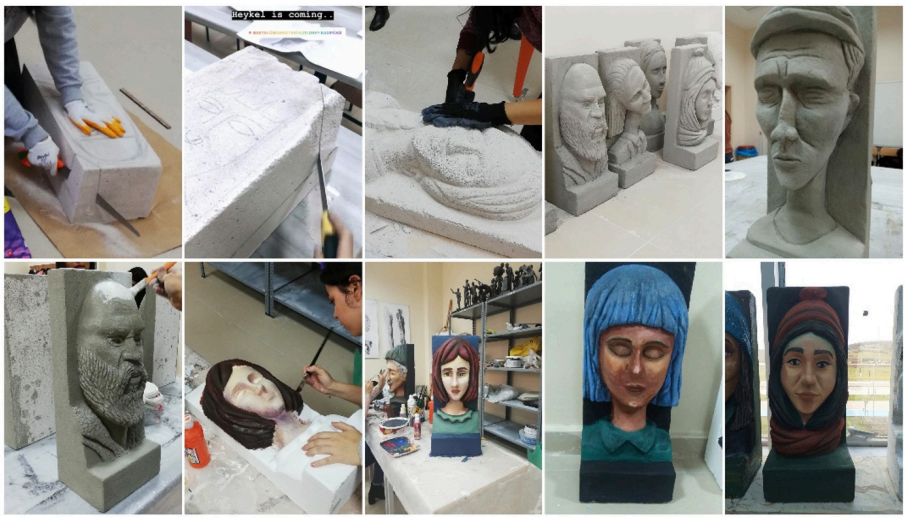
In plaster figure-sculpting practice, 30cm to 35cm sculptures were made with simple materials such as wires, newspapers, tape, plaster, and wood pedestals. Considering that most of the participants in the study group were taking the sculpting course for the first time, a theoretical presentation was made initially, and information regarding human anatomy was emphasized. After the theoretical briefing, the internal wire construction of the figure was prepared by taking into account the human anatomy and stabilized on a wooden pedestal esthetically. Various areas (head, bosom, buttocks, legs etc.) of the figure were strengthened with old newspapers and tapes. Human anatomy rules were also followed in this stage. The figure gained more details after reaching a particular volume and getting a few layers of plastering. The work left for drying was finalized after painting in the following weeks. Photos regarding the plaster figure work are given in Figure 1.

Just as the plaster figure work, easily accessible materials were used in aerated concrete portrait artwork, including portrait embossing practice. Aerated concrete used frequently in building walls was chosen because it's lightweight and easy sculpting compared to marble materials. The practice began with sketch drawings on paper and continued with sculpting. Tools such as saw, riffler, and chisel were used. The process of sculpting was also conducted step by step, taking into account the human anatomy. After sculpting, the coating was done to prevent pores, and the process was finalized by painting. Photos regarding the aerated portrait artworks are given in Figure 2.

After the two processes, interviews were conducted with students. Interviews were voluntary and conducted on the same day and at different hours. Questions in the interviews were repeated in different ways to get participants to elaborate on their answers; subsequently, highlights from their answers were noted down on the interview forms. No personal information was asked except the demographic information. Participants in the study group were named with codenames, including their gender and a number (e.g. MP for Male Participant 1 and FP for Female Participant 1).

Figure 1. *Photos Regarding Plaster Figure Art Works*

Figure 2. *Photos Regarding Aerated Portrait Art Works*



Data Analysis

Data collected in the interviews were analyzed by using the content analysis technique. Content analysis is conducted to compile, arrange, and interpret similar data in specific theoretical frameworks and themes (Yıldırım & Şimşek, 2011). In the content analysis, data collected from the interviews were read several times to determine common ideas and concepts as well as for the headlines to determine the codes and themes. In order to establish validity to the analysis, data were analyzed by different experts at different times, and forms created by the coders were matched to look for compatibility. Frequencies, mean scores, and ratings were presented with graphics and tables. In addition, direct quotations from the transcriptions of the interviews were provided in the analysis to create a clear description of the results.

Ethical Permission Information of the Study

In this study, all the rules stated in the Committee on Publication Ethics (COPE) were followed.

Ethics Committee Permit Information

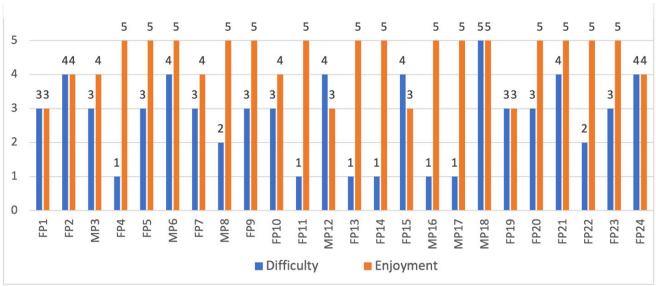
Etic Board that Conducts the Assessment: Bartin University Ethics Committee
Date of Assessment Decision: 16.02.2021
Assessment Document Number: 2011-SBB-0046

Findings

Findings Regarding Plaster Figure Sculpture Artworks

Interviews were conducted with preservice visual arts teachers to find out their experiences and views on plaster figure sculpture artworks. Questions in the interviews aimed to determine the levels of difficulty and enjoyment. A graphic representation of the data gathered regarding these levels is given in Figure 3.

Figure 3. *Levels of Difficulty and Enjoyment for 'Plaster Figure Sculpture' Art Works*



Difficulty and Enjoyment levels given in Figure 3 were evaluated from 1 (very easy/not enjoyable) to 5 (very difficult/very enjoyable). Frequency and percentages regarding the levels are given in Table 2.

Table 2. *'Plaster Figure Sculpture' Frequency Table (Difficulty and Enjoyment) (n=24)*

Difficulty			
(1= very easy, 5= very difficult)	Value	*f*	%
	1	6	25.0
	2	2	8.3
	3	9	37.5
	4	6	25.0
	5	1	4.1
Enjoyment			
(1= unenjoyable, 5= very enjoyable)	Value	*f*	%
	1	0	0.0
	2	0	0.0
	3	4	16.6
	4	5	20.8
	5	15	62.5

When Table 2 is examined, it can be seen that 37.5% of the participants stated that the artwork was moderately difficult, and 25% thought the practice was very easy. Moreover, 4.1% (1 participant) stated that the practice was very hard. Therefore, the mean score for the difficulty of the plaster figure-sculpting artwork was 2.75. However, it can also be seen that most of the participants (62.5%) viewed the practice as very enjoyable. Consequently, the mean score for the enjoyment level was 4.45.

Themes and codes that emerged from the interview responses of the preservice visual arts teachers regarding figurative plaster sculpting are given in Table 3.

Table 3. *Views Regarding Plaster Figure Sculpting Practice*

Theme	Code	*f*	%
Views regarding the practice	Learning about three-dimensional works and anatomy	9	37.5
	Difficulty in dealing with wires	7	29,1
	Creativity	4	16,6
	Risky/dangerous	1	4.1

As seen in Table 3, 37.5% of the participants viewed plaster figure-sculpting as beneficial in learning about three-dimensional works and anatomy. Participant FP13 declared this view by stating that "This practice helps us learn about human skeletal framework and muscles" (All excerpts from the transcriptions of the interviews were translated from Turkish to English by the researchers). Similarly, FP24's statement, "This practice benefitted us in learning about anatomy, and it should be continued in the future", also supported the view that plaster figure-sculpting was beneficial in teaching human anatomy.

29.1% of the participants stated that they had difficulty in bending and shaping wires. Participant FP21 mentioned this in her interview by saying that "I had difficulty since I did not have experience. Bending the wires was especially difficult". Another participant who shared the same view, FP2, also made the following statement: "I think working with wire is dangerous, we need to be careful. We can get hurt". Those who thought plaster figure-sculpting could be dangerous were 4.1% of the participants.

Preservice visual arts teachers' views regarding accessibility and price of the materials in plaster figure-sculpting artworks are given in Table 4.

Table 4. *Availability and Prices of Materials*

Theme	Code	*f*	%
Views regarding accessibility and price of the materials in plaster figure-sculpting artworks	Reasonable price	21	87.5
	Easily accessible	16	66.6
	High price	2	8.3

As seen in Table 4, most of the participants (87.5%) think that materials in plaster figure-sculpting are at a reasonable price, and only two participants (8.3%) stated that materials were high priced. For accessibility of the materials, 66.6% of the participants stated that they are easily accessible. Preservice visual arts teachers' views regarding these topics are as follows:

"Materials were very suitable for this work, and they were easily accessible. For this reason, I would like to repeat this activity in the future. I think it is an eye-catching work." (FP21), "Materials were easy to find everywhere, and we got them quickly." (FP17), "We struggled in finding the materials and its costs, but good work came out in the end" (MP3), "It was a little costly, but we had fun." (MP18).

Preservice visual arts teachers' views regarding which level of education plaster figure-sculpting should be included are given in Table 5.

Table 5. *Education Level*

Theme	Code	*f*	%
Views regarding which level of education plaster figure-sculpting should be included	University	22	91.6
	High school	22	91.6
	Middle school	9	37.5
	Depends on the material	2	8.3
	Dangerous	1	4.1

When Table 5 was examined, 91.6% of the participants believed that plaster figure artworks could be done at the university and high school levels. While 37.5% thought that the practice was suitable for middle schools, 8.3% stated that it could be done in primary school depending on materials such as play-doh, toothpicks, or clay. Some of the comments on the level of education were as follows: "I think this practice is suitable for students at universities or high school, but it can also be done with younger students if they use materials such as toothpicks or play-doh" (MP8). "Plaster figure-sculpting can be dangerous for primary or middle school students. I think it is more suitable for high school or above." (FP21).

Table 6 shows whether preservice visual arts teachers would incorporate plaster figure-sculpting artworks in their professional teaching in the future.

Table 6. *Incorporating in Teaching*

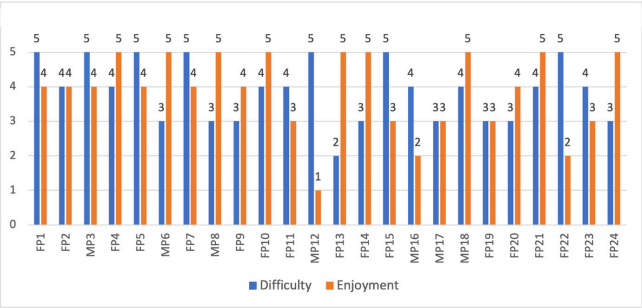
Theme	Code	*f*	%
Incorporating plaster figure sculpting in teaching in the future	I will	13	54.1
	It depends on the conditions	6	25
	I will not	3	12.5

When Table 6 is examined, 54.1% of the participants thought they would include the practice in their teaching. For example, MP18 made the following statement: "I will make use of the practice in my professional life. Even now, I used this practice in my practice teaching at eighth grade." Similarly, MP17 stated the following: "I will use this at my workplace. I enjoyed doing it, and I think my students will, too." In addition, 25% of the students stated that they would use it if the classroom, workshop, or materials were suitable. One of the participants who shared this view, FP21, stated the following: "After I graduate and become a teacher, I will use it if the student group and workshop conditions are suitable." On the other hand, 12.5% of the participants stated that they would not incorporate the practice in their teaching. The participants who gave these statements noted reasons such as danger or classroom management for not incorporating plaster figure sculpting in their teaching in the future. For example, FP19 made the following comment: "The institution I will work at is probably going to have young children. Bending the wires is hard for children. There can be a danger for them. That is not why I would not want to use it."

Findings Regarding Aerated Concrete Portrait Block Art Work

Various questions regarding the views towards aerated concrete portrait blocks were asked in the interviews with the preservice visual arts teachers. The first question aimed to gather the difficulty and enjoyment levels towards the practice. Data gathered in this regard are given in Figure 4 below.

Figure 4. *Difficulty and Enjoyment Levels for 'Aerated Concrete Portrait Block' Artwork*



As seen in Figure 4, difficulty and enjoyment levels were scored from 1 (very easy/not enjoyable) to 5 (very difficult/ very enjoyable). Frequency and percentages regarding the levels are given in Table 7.

that aerated concrete portrait block artwork is at moderate and above moderate difficulty levels. However, none of the participants thought the practice was very easy, and 29.1% of the participants valued the practice as very difficult. Therefore, the mean score for the difficulty level of aerated concrete portrait artwork was 3.87 in participants' responses. Enjoyment levels regarding aerated concrete portrait block were moderate to above moderate for most participants in the study. 37.5% of the participants stated that the practice was very enjoyable, and only 4.1% of the students stated the opposite. The mean score for the enjoyment level was 3.87 for the participants.

Table 7. *Frequency and Percentages for "Aerated Concrete Portrait Block" Artwork*

Difficulty			
	Value	*f*	%
(1= very easy, 5= very difficult)	1	0	0.0
	2	1	4.1
	3	8	33.3
	4	8	33.3
	5	7	29.1
Enjoyment			
	Value	*f*	%
(1= unenjoyable, 5= very enjoyable)	1	1	4.1
	2	2	8.3
	3	5	20.8
	4	7	29.1
	5	9	37.5

When Table 7 was examined, most participants thought Themes and codes for the views regarding aerated concrete portrait block artwork are given in Table 8.

Table 8. *Views Regarding the Practice*

Theme	Code	f	%
Views regarding the practice	Three dimensions and anatomy	12	50
	Needs muscle work	8	33.3
	I struggled since it was my first time	7	29.1
	It doesn't accept any error	6	25
	Fun to colour	5	20.8
	Dust is disturbing	4	16.6
	I felt insecure when I struggled	1	4.1

As seen in Table 8, half of the participants (50%) stated that aerated concrete portrait blocks were beneficial in understanding three-dimensional works and anatomy. For example, one of the participants, FP13, made the following comment on this topic: "This practice made it possible to understand more about human anatomy, and it is beneficial in improving looking, seeing, and applying what you see. It was both fun and educative to practice a three-dimensional portrait." Similarly, FP4 also stated the following: "This practice provided significant benefits in understanding three-dimensional forms."

Another significant finding was that some participants noted that the practice required muscle strength, and they struggled. For example, 33.3% of the participants stated that strength was needed and 29.1% stated that they struggled since it was their first time in such a practice, and 25% felt distant towards the practice since the mistakes would be apparent.

Some of the comments for this topic were as follows: "This practice required muscle work and constant attention. It

does not accept any mistakes. One needs to be very careful, but it is very satisfying at the end of the day. I did not notice how the time passed while working." (MP8), "I struggled a lot when I first started the practice since I did not have any experience in such a practice. Three-dimensional thinking was harder than two-dimensional work at first, but it was easier once I got the logic." (FP21), "I struggled since it was my first time, especially in sculpting downwards. A more simple work can be done for the first experience." (FP4), "When I first started, I did not have any belief or enthusiasm that I could succeed. After I started, the work improved with the help of the instructor, and we made good artworks." (FP24)

20.8% of the participants thought that the colouring process of the practice was very enjoyable. For example, MP16 stated the following in this topic: "It was a practice that I thought was difficult while sculpting but was fruitful at the end. The most entertaining part was sculpting." However, some participants (16.6%) reported being disturbed by the dust present while sculpting, and they noted that a proper workshop or an open area was necessary for the practice. For example, one of the participants, FP19, stated the following on this topic: "Making aerated concrete portrait blocks was a nice practice, but the biggest problem was the excessive dust. I prefer an open area for this practice."

One of the noteworthy findings regarding aerated concrete portrait block artwork was that one participant (4.1%) reported feeling insecure and inexperienced since he struggled. His comment was: "I have struggled, and my self-confidence was shaken during the practice since I did not have any experience." (MP12)

Views of preservice visual arts teachers regarding the accessibility and cost of materials in aerated concrete portrait block artwork are given in Table 9.

Table 9. *Accessibility and Costs of the Materials*

Theme	Code	*f*	%
Views towards the accessibility and costs of the materials	Easily accessible	13	54,1
	Can be bought in bulk	10	41,6
	Price was costly	10	41,6
	Fair price	5	20,8
	Aerated concrete was hard to carry	4	16,6

As seen in Table 9, 54.1% of the participants thought that materials were easily accessible, while 41.6% stated that sculpting and cutting tools were costly. For this matter, the same number of participants noted that materials could be bought in bulk. 20.8% of the participants stated that the materials were reasonably priced, and 16.6% of the participants thought aerated concrete was hard to carry, which was more troubling than its cost.

Some of the participant comments in this regard were as follows: "The materials in practice were a little costly. We had to buy together with my friends." (FP5), "I think that the materials are a little high priced for students. This will be my primary concern in using this practice in the future."(MP16), "Materials were easily accessible, but aerated concrete was hard to carry." (FP7).

Table 10 shows which level of education the aerated concrete portrait artwork would be suitable for according to the study's views of preservice visual arts teachers.

Table 10. *Level of Education*

Theme	Code	*f*	%
Views regarding which level the practice is suitable	University	24	100
	High school	17	70,8
	Middle School	3	12,5
	Dangerous	3	12,5

When Table 10 is examined, it can be seen that most participants held the view that aerated concrete portrait block artwork was most suitable for the university and high school levels. All participants stated that university-level was suitable, and 70.8% thought high school was suitable. Moreover, 12.5% of the participants thought it could be suitable for middle school if the practice were more straightforward, and 12.5% also believed that sharp tools might be dangerous for younger students.

Some of the comments on this topic were as follows: "I think this practice is suitable for high school and university. Students at middle and primary school levels might face difficulties in using the tools." (FP4), "The practice requires some force. That is why I think it is suitable for university level." (FP14), "Because the materials are at an advance level and much attention is needed in using them, I think only university students should use it." (FP1), "This practice can be dangerous for young students since it requires the use of sharp tools." (FP19).

Table 11 shows the data regarding whether preservice visual arts teachers would incorporate the aerated concrete portrait blocks in their future teaching careers.

Table 10. *Level of Education*

Theme	Code	*f*	%
Views towards incorporating the practice in teaching	Depends on the condition (age and workshop)	10	41,6
	I prefer not	6	25
	I might use small and simple practices	3	12.5

As seen in Table 11, 41.6% of the participants prefer to incorporate the practice in their teaching. FP13 stated the following on this topic: "If the workshop conditions are suitable, I would like to do an activity like this. It will help students gain experience on three-dimensional works." Similarly, MP16 also stated the following: "I would like to do an activity like this, but conditions in the future also matter, of course. If the materials and the environment are suitable, I will do it."

A quarter of the participants (25%) stated that they would not incorporate the aerated concrete portrait blocks in their teaching. This was because too much dust came off around the workshop, and the practice could be dangerous. Some of the comments on this topic were as follows: "It is not possible to do this activity except for the university level. I think I will most probably work with younger groups of students in the future. Therefore, I would not prefer to do it since it will be difficult and demanding." (FP22), "I do not think I will do this activity since too much dust goes off and it gets dirty." (FP5), "Because sharp tools are used in the activity, it will be dangerous for young students. That is why I will not do it." (FP19).

Furthermore, 12.5% of the participants stated that the aerated concrete portrait block artwork could be done on a smaller scale and in simpler ways. For example, FP11 made the following comment on this topic: "It can be struggling for younger groups to work with such dimensions. It could be more enjoyable to work in smaller scales where students could work easily." Similarly, FP24 made the following statement: "I would like to do this activity. A simpler activity could contribute to students' motor skills".

Discussion, Conclusion and Suggestions

This study examined the views of 24 preservice visual arts teachers (fourth-grade students) towards the plaster figure-sculpting and aerated concrete portrait block artworks in the scope of elective art workshop sculpture course at a state university in the Western Black Sea Region in Turkey.

Results of the study showed that the majority of the participants viewed the artworks as very enjoyable (4.45/5 for plaster figure sculpting and 3.87/5 for aerated concrete portrait block). This finding was significant when the difficulty levels were considered (2.75/5 difficulty level for plaster figure sculpting and 3.87/5 difficulty level for aerated concrete portrait block). Difficulty in visual arts education activities could cause dislike among students and withdrawal from the activities. However, although aerated concrete portrait block activity was viewed as difficult, it was seen as enjoyable. These findings support Aslan and Şener's (2014) suggestion that introducing variety and enriching arts education activities could increase students' interest. This finding was also significant as it demonstrates the positive effects of three-dimensional activities, which educators sometimes see as challenging and demanding in grabbing students' attention and increasing interest in arts education. Another significant finding was the three-dimensional artworks' contribution to understanding human anatomy and objects with volume. Therefore, accomplishing the aims of arts education depends on three-dimensional activities, just as two-dimensional activities (Çapar, 2006). This is because three-dimensional artworks carry exceptional significance in understanding depth and perceiving the world through the sense of touch (Akıncı, 2009). The findings of this study also support this statement since most of the participants stated that practising three-dimensional works helped them improve their creativity by working on the anatomic details and three-dimensional perception. Therefore, this finding also supports the significance of accommodating three-dimensional artworks in visual arts education courses.

One of the most prominent problems in arts education courses is the materials needed for activities and their accessibility (Ayaydın, 2009; Çapar, 2006; Konak, 2020; Yazar, Aslan, & Şener, 2014). With these problems in mind, the present research included easily accessible and reasonably priced materials that preservice visual arts teachers could use in their teaching in the future. In light of the results of this study, it was found that the majority of the participants viewed plaster figure-sculpting activity as reasonably priced (87.5%) and easily accessible (66.6%) while viewing aerated concrete portrait block activity as moderately priced (41.6%), but easily accessible (84.1%). Furthermore, when the participants' views were examined, the most costly item in aerated concrete portrait block activity was found to be the hand tool. Therefore, it was suggested that hand tools could be bought in bulks.

Participants in this study stated that conducting three-dimensional activities in their teaching will depend on the school grade level and workshop condition. Most participants, who stated they would do the activities if the conditions (workshop, materials and grade) were satisfactory, thought that the high school or university levels and small-scaled artworks with materials such as play dough and toothpicks would be more suitable. This finding was significant because it showed preservice teachers' capability to deal with obstacles in their teaching by producing solutions with different points of view.

This study aimed to interpret the experiences of preservice visual arts teachers regarding three-dimensional artworks. It can be said that a negative attitude towards arts education emerges from the obstacles in teaching. Although the problem is multifaceted, the findings of this study showed that the preservice visual arts teachers could bring about solutions by formulating solutions to the problems in their teaching.

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