



Global Journal of Arts Education



Volume 05, Issue 1, (2015) 31-38

www.awer-center/gjae

Views of students in sculpture workshop lessons regarding waste material use and recycle products

Canan Demir *, Faculty of Education, Department of Fine Arts Education, Abant Izzet Baysal University, Bolu, Turkey.

Suggested Citation:

Demir, C. (2015). Views of students in sculpture workshop lessons regarding waste material use and recycle products. *Global Journal of Arts Education*, 5(1), 31-38.

Received 23 January, 2015; revised 27 February, 2015; accepted 15 March, 2015.

Selection and peer review under responsibility of Assist. Prof. Dr. Seyda Eraslan Taspinar, Atatürk University, Turkey

© 2015 SPROC LTD. Academic World Education & Research Center. All rights reserved.

Abstract

Students in sculpture workshop lessons use various materials as allowed by the technical knowledge and pattern within artistic production process. The used materials may be waste materials as well as ready purchased materials. Students contribute to artistic production process, nature and social responsibilities while using waste materials. With this research, 1 year experience of future visual arts instructors regarding waste material use in sculpture workshop lessons and their views regarding this are tried to be determined. It is supposed that the students' using the waste materials in education and learning process will be effective in enhancing their awareness towards the environment. This is important in terms of their being sensitive to people their environments and making use of the waste materials as well as artistic production. Qualitative research methods are used in the study. Study groups are used instead of universe and sample for healthy content analysis of interviews. Interviews are analyzed using content analysis and descriptive analysis. As a result of the study, various codes and themes regarding waste material use by students in sculpture production process are found.

Keywords: visual art education, sculpture education, waste materials, recycling.

*ADDRESS FOR CORRESPONDENCE: **Canan Demir**, Faculty of Education, Department of Fine Arts Education, Abant Izzet Baysal University, Bolu, Turkey. *E-mail address:* smaracanan@gmail.com / Tel.: +90-535 3460216

1. Introduction

Art and education through art makes the lives of individuals peaceful by positive contributions. Waste material use in sculpture production process, which is the subject of our research, gains artistic and technical knowledge to the individual for his/her field and has an environmental friendly purpose of transformation from garbage to art. While this process relaxes the individual, the individual makes artistic production with considerations of finding beauty, goodness, truth and harmony. This makes him/her uncomfortable due to the ugliness surrounding the individual and makes him/her take steps towards removing those by speaking about these. Wastes, which are deeply included in our lives, become wastes as a result of living purposes of people. Waste transformation is considered as a very valuable contribution in an artistic beauty and sensitivity reflection for people.

Many reasons which effect the qualified sculpture education may be listed. However, one of the most important reasons is that the materials used in sculptures by students are expensive and even if the students could purchase these materials, their possibilities to bring the materials to school are limited. No matter from which point we consider, even affording one Standard material in sculpture production process is a huge financial burden for the student.

It is considered that use of waste material in sculpture workshop lessons will relieve the student financially and it allows the use of different materials. In addition in the sculpture production process, that the students will collect the waste from garbage when needed and keeping and transforming the waste thrown away as a contribution to his/her sculpture will make a positive difference in the students view of environment, nature and people.

In positive view of the student regarding his/her environment, the contribution of his/her life style and the production depending on this are undeniable facts that we encounter. Because, a student (an individual) who believes/doesn't believe in his/her action/actions will build his/her life on his/her own experienced realities.

2. Method

This section of the research includes information regarding the research problem, study group, data collection techniques and analyses of the data. Qualitative research methods are used.

The answers will be sought for the questions below in order to reveal the views of students regarding the use and transformation of waste material in sculpture workshop

What are their views regarding use of waste material in sculpture workshop lessons?

a) How is the effect of waste material use on their sensitivity to environment?

b) What are the reasons of preference of waste material?

c) What are their considerations regarding sculpture production using waste material?

d) What are their anxieties regarding the use of waste material?

Study Group: The study group of the research is comprised of 15 students in a visual arts instructor trainer institution. The students have been using waste materials in sculpture workshop lesson for 1 year, that is 2 terms. Gender distribution of the study group is given in the table below. Study group also comprises the cases of the research. Codes like "Ö1,Ö2,.....Ö15" are given to each student.

Table 1. Gender Distribution Of The Study Group

Gender Distribution	
Girls	Boys
10	5
Total Student	15

3. Data Collection Techniques

Techniques of Interview and Document are used collectively in the research. The interview questions are the questions prepared by the researcher to be asked to the sculpture workshop students in order to reveal the views of students regarding the waste materials they choose, collection of the material and transformation of it to an artistic product. Interview questions are prepared as an interview form. Various documents related to literature are used while examining the documents.

3.1. Data Analysis

Interview data of study group will be analyzed using content analysis and documents are analyzed using descriptive analysis. Content analyses of the interviews are transferred into a table using matrixes. As a result of the study, various codes and themes regarding waste material use by students in sculpture production process are found. The codes and themes which are found are supported by documents.

3.2. Validity-Reliability

To ensure the validity-reliability of data collection tool, the questions formed to collect the research data were examined by three experts, required statement changes were made, and pilot application was made with 3 university students. Sections using which the desired answers couldn't be obtained or which yield similar results were edited and Interview questions were given their final form.

Raw data collected through interviews were sent to an expert and the harmony between the codes of researcher and that of the expert are evaluated. This harmony was evaluated using the reliability estimation of Miles and Huberman (1994).

The cases where the experts used the same codes for student statements are accepted as agreement and where they used different codes are accepted as dissensus. In sections with contradiction, the opinions of two experts were taken separately and encoding was made. The reliability of data analysis performed in this way was estimated as Agreement/ (Agreement+Dissensus)x100 formula (Miles & Huberman 1994). Average reliability was found %87,5 in all codes.

Table 2. Reliability

Interviews	Total code number 16
Agreement	14
Dissensus	2
Reliability	87,5

4. Findings and Discussion

As seen in the matrix below, I. Main Theme is **Waste Material Use in Sculpture Workshop Lessons**. Four sub-themes are found regarding waste material use in sculpture workshop lessons. Codes related to the sub-themes are given under each theme.

Photo 1. Main Theme Matrix

TREE NOD / FREE NOD (TEMA) (KOD)	INTERVIEWS															Rİfmes	%
	CASES (VAKALAR)																
	Ö1	Ö2	Ö3	Ö4	Ö5	Ö6	Ö7	Ö8	Ö9	Ö10	Ö11	Ö12	Ö13	Ö14	Ö15		
1 WASTE MATERIAL USE IN SCULPTURE WORKSHOP LESSONS																	
A) REASON OF WASTE MATERIAL PREFERENCE																	
cheap material	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	93.3
easy to access material	0	1	0	1	0	1	1	0	0	1	1	0	0	1	0	7	46.67
different material	0	1	1	0	1	1	0	0	0	0	1	1	0	0	0	6	40
ready material constraints	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6.67
time saving	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6.67
B) ENVIRONMENTAL SENSITIVITY																	
Recycling	0	0	1	1	0	1	1	1	0	1	1	0	1	1	1	10	66.67
Environmental Sensitivity Message	0	1	0	1	1	1	0	1	1	0	1	1	1	0	1	10	66.67
Appreciation by the Society	0	1	0	0	0	0	1	1	0	1	0	0	0	0	0	4	26.67
Contribution to Recycling and Pleasure	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3	20
Contribution to Country	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	6.67
C) CONSIDERATIONS RELATED TO PRODUCTION.																	
creative ideas-designs	0	1	1	1	1	0	1	0	0	1	0	1	1	1	0	10	66.67
garbage art	1	0	0	0	1	0	0	1	1	1	1	0	1	1	1	9	60
working freedom	0	0	1	0	1	0	1	0	0	0	0	1	0	0	0	5	33.3
D) ANXIETIES																	
dirty	1	1	1	0	0	0	0	0	0	1	0	0	1	0	1	6	40
security precautions	1	1	0	0	0	0	0	0	0	1	0	0	1	0	1	5	33.3

The findings obtained as a result of research are comprised of codes under four sub-themes related to the main purpose of the research. Themes and codes obtained as a result of content analysis are given in the matrix below.

One of the sub-themes is **Reason of Waste Material Preference**.

Photo 2. I. Sub-Themes Matrix

TREE NOD / FREE NOD (TEMA) (KOD)	INTERVIEWS															Rİfmes	%
	CASES (VAKALAR)																
	Ö1	Ö2	Ö3	Ö4	Ö5	Ö6	Ö7	Ö8	Ö9	Ö10	Ö11	Ö12	Ö13	Ö14	Ö15		
1 WASTE MATERIAL USE IN SCULPTURE WORKSHOP LESSONS																	
A) REASON OF WASTE MATERIAL PREFERENCE																	
cheap material	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	14	93.3
easy to access material	0	1	0	1	0	1	1	0	0	1	1	0	0	1	0	7	46.67
different material	0	1	1	0	1	1	0	0	0	0	1	1	0	0	0	6	40
ready material constraints	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6.67
time saving	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6.67

The **“Cheap Material”** code, which is the most repeated code regarding the theme is repeated by 14 people 14 times at the rate of %93.3. The students made the statements below regarding this code.

< INTERVIEW\Ö2> - *“It is the most convenient material as it will not be a burden for the students due to cheapness”.*

< INTERVIEW\Ö3> - *“That it is cheap is another advantage, it is even free when you collect from garbage”.*

As understood from the statements of Ö2 and Ö3, the cheapness of waste material is an important factor in its preference.

“Easy to Access material” and **“Different Material”** codes were repeated at the rate of %46. Quotes from interview records are as follows:

< INTERVIEW\Ö7> - *“It is useful for us that it is cheap and easy to Access. Or we will have to purchase materials from the industrial estate”*

< INTERVIEW\Ö10> - *“Ready material is kind of a material I will prefer when my time is limited. Because I bring them to school more easily. For example, it was a problem for us even to carry the material to the campus. It is not the case with the waste.”*

< INTERVIEW\Ö6> “In visual terms, a sculpture made of waste material is more noteworthy than a plaster sculpture. It is a more original material”.

As seen in the interview record, Ö7 and Ö10 consider that the waster materials are easy to Access. Also Ö4 mentioned material authenticity as a reason of preference.

We encounter a repeat rate of %6.67 regarding the code “Time Saving” and “ready material constraints”. Quotes from students regarding this code are given below.

< INTERVIEW\Ö13> - “I think using the waste provide time saving. Ready material is what I prefer when my time is limited. I prefer using waste material.”

< INTERVIEW\Ö14> - “Ready material revealed after something with waste materials I started thinking that restricts me.”

Second sub-theme was Environmental Sensitivity.

Photo 3. II. Sub-Themes Matrix

TREE NOD / FREE NOD (TEMA) (KOD)	INTERVIEWS															Rİmes	%	
	CASES (VAKALAR)																	
	Ö1	Ö2	Ö3	Ö4	Ö5	Ö6	Ö7	Ö8	Ö9	Ö10	Ö11	Ö12	Ö13	Ö14	Ö15			
1 WASTE MATERIAL USE IN SCULPTURE WORKSHOP LESSONS																		
B) ENVIRONMENTAL SENSITIVITY																		
Recycling	0	0	1	1	0	1	1	1	0	1	1	0	1	1	1	1	10	66.67
Environmental Sensitivity Message	0	1	0	1	1	1	0	1	1	0	1	1	1	0	1	10	66.67	
Appreciation by the Society	0	1	0	0	0	0	1	1	0	1	0	0	0	0	0	4	26.67	
Contribution to Recycling and Pleasure	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3	20	
Contribution to Country	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	6.67	

The most repeated code related to the theme of Environmental Sensitivity was “Recycling”. It was repeated 10 times a repeat rate of %66.67. The students made the statements below related to this code.

< INTERVIEW\Ö10> - “We transform waste into artistic productions”

< INTERVIEW\Ö14> - “We transform materials regarded as unnecessary or lost its function”

< INTERVIEW\Ö15> - “We learned that the waste we throw away are used and turned into art.

While Ö10 stated that they transform waste into art products related to the recycle code, Ö14 mentioned unnecessary or dysfunctional objects can be regained by recycling. Ö15 emphasized the waste transformation into art production. Recycling is processing the waste which can be re-used through various physical and/or chemical operations, transforming it into secondary raw material and including it in the production process again (cevreonline, 2015).

Rate of “Environmental Sensitivity Message” is high with 10 repeats by 10 people.

< INTERVIEW\Ö4> - “It made me look more sensitively to my environment and I learned what I can do with things I deemed unnecessary.”

< INTERVIEW\Ö9> - “I certainly made contributions to environment. At least I didn’t pollute.

< INTERVIEW\Ö11> “I can find and use something out of everything according to my own point of view. I believe that we contribute to our country and nature both by the sculpture we make and by producing less waste.”

Ö4 stated that using waste material for his/her sculpture is important in his/her sensitivity to the environment. Ö9 mentioned that he/she can contribute by having the awareness of not polluting the environment. Ö11 said that he/she can make contributions to the nature by producing less waste. As expressed by Erten, many environmental issues which threaten both

our lives and the lives of next generations face and challenge us. (Erten, 2004). Therefore we need to be more sensitive towards the environment.

The repeat rate of the code “**Appreciation by the Society**” is %26.67 Quotes related to the code are given below.

< INTERVIEW\Ö7> - “Use of waste materials drew massive attraction from the environment. It is an important factor in surprising the audience by the Works that they see the materials they see in daily life and deem worthless are in this form. Therefore it was appreciated and this made us happy.”

As stated by Ö7, the sculptures made out of waste materials were appreciated by the society. This made the students happy.

Another code revealed from the interview records of the students is “**Contribution to Recycling and Pleasure**”. This code was repeated at the rate of %20.

< INTERVIEW\Ö1> - “I prefer waste material because it is a great pleasure form e that I transform a material thrown away by a person into an artistic object”

As stated by Ö1, it is a pleasure to shape a material called as junk by others.

Repeat rate of “**Contribution to Country**” code is %6.67. Quotes related to the code are given below.

< INTERVIEW\Ö15> - “I prefer using the waste material to throwing it away. If each art student behaves the same, it is a contribution to the self and the country.

Ö15 thinks that using waste material in art field should be perceived as a contribution to country.

Third sub-theme is **Considerations Related to Production**.

Photo 4. III. Sub-Themes Matrix

TREE NOD / FREE NOD (TEMA) (KOD)	INTERVIEWS															RİFRES	%
	CASES (VAKALAR)																
	01	02	03	04	05	06	07	08	09	010	011	012	013	014	015		
1 WASTE MATERIAL USE IN SCULPTURE WORKSHOP LESSONS C) CONSIDERATIONS RELATED TO PRODUCTION.																	
creative ideas-designs	0	1	1	1	1	0	1	0	0	1	0	1	1	1	0	10	66.67
garbage art	1	0	0	0	1	0	0	1	1	1	1	0	1	1	1	9	60
working freedom	0	0	1	0	1	0	1	0	0	0	0	1	0	0	0	5	33.3

First of the findings related to the sub-theme is “**Creative ideas-designs**” code. The repeat rate of the code is quite high. Ö12, Ö13 and Ö14 made the statements below regarding this code.

< INTERVIEW\Ö12> - “Using ready materials is easier, I believe using waste materials in different shapes for different designs is more effective.”

< INTERVIEW\Ö13> - “It is cheap, but when you make good designs out of these, it makes valuable products

< INTERVIEW\Ö14> - “We can make different designs by combining objects or garbage.

The students said that even if the waste is cheap, it will contribute them to create interesting designs.

The code “**Garbage Art**” was repeated at the rate of %60. The statements below were made regarding the code.

< INTERVIEW\Ö8> -“ The materials people throw away as garbage are transformed into visual objects addressing the aesthetic sentiments of people. I think there is nothing negative as long as care was taken. We make art out of garbage.”

< INTERVIEW\Ö9> - “Waste is dirty when it is waste. It is not dirty when it is used. It will be an aesthetic product.”

Departing from the statements of Ö8 and Ö9, the students mentioned that the objects we perceive as dirty and waste are transformed into art by correct design and aesthetic purposes. I believe that creative re-use has the potential to spark new ways of looking at the world... if one thing can be turned into another, what else can we change? (Unger, 2015)

Repeat rate of code “**Working Freedom**” is %33. Quotes related to the code are given below.

< INTERVIEW\Ö5> - “Waste material might be unfavorable but it is a beautiful sentiment to feel relaxed and free inside that dirt.

< INTERVIEW\Ö7> - “I can work freely with waste material. I can make additions and exclusions everywhere I wish, I can destroy and remake. When I work freely, I implement my wish better. Therefore I prefer waste material.”

Ö5 stated that he/she feels herself/himself more relaxed and free working with waste material, even if it is dirty. Ö7 mentioned that he/she was more relaxed while destroying and remaking the material.

Fourth and the last sub-theme is the theme of **Anxieties**. Theme of Anxieties was included in the study as a less repeated and emphasized theme.

Photo 4. IV. Sub-Themes Matrix

TREE NOD / FREE NOD (TEMA) (KOD)	INTERVIEWS															Rİmes	%	
	CASES (VAKALAR)																	
	Ö1	Ö2	Ö3	Ö4	Ö5	Ö6	Ö7	Ö8	Ö9	Ö10	Ö11	Ö12	Ö13	Ö14	Ö15			
1 WASTE MATERIAL USE IN SCULPTURE WORKSHOP LESSONS																		
D) ANXIETIES																		
dirty	1	1	1	0	0	0	0	0	0	1	0	0	1	0	1	6	40	
security precautions	1	1	0	0	0	0	0	0	0	1	0	0	1	0	1	5	33.3	

Repeat rate of “**Dirty**” code is %40.

< INTERVIEW\Ö10> - “It is unhealthy that it is dirty. Infections may be caused by dirty oxidized tools even in simple injuries.”

< INTERVIEW\Ö13> - “That it is dirty may affect our health”

As stated by Ö10 and Ö13, the students mentioned that the waste material is dirty which might be unfavorable for health. They were anxious that they might get infected due to the oxidized tools. But it was noted that the “Security Precautions” code was repeated by the same students. The students stated they might use the waste material only if the necessary precautions are taken.

Repeat rate of “**Security Precautions**” code is %33.3

< INTERVIEW\Ö10> -“ There is no danger in using them as long as necessary precautions are taken.”

< INTERVIEW\Ö13> - “They can be used if precautions are taken”

< INTERVIEW\Ö15> - “It is a bit dangerous, but there is no danger when you are careful.”

Ö15 mentioned regarding Security Precautions that waste materials might be dangerous but there would be no danger as long as people are careful.

5. Conclusion and Recommendations

The students have different opinions regarding use of waste material in sculpting. Yet, that the number of codes is small shows us that the number of people sharing the same opinion is noteworthy.

One of the sub themes is **Waste Material Preference Reason**. Noteworthy points related to the 1st theme were that the students repeated the codes they regard as contribution to themselves in education-training process. These are cheap materials, easy and accessible materials, different materials, ready material limitations and time saving codes.

Second sub-theme was **Environmental Sensitivity**. Noteworthy points related to the 2nd theme were that using waste material in sculptures was summed up as a manifestation of environment and environment friendly attitudes. The students were mostly affected by environmental sensitivity messages produced by waste materials. Relevant codes were; recycling, environmental sensitivity message, appreciation by the society, contribution to recycling and pleasure, contribution to country.

The 3rd sub-theme was **Considerations of Production**. Noteworthy points related to the 3rd theme were the idea of freedom created by ideas- designs produced in the sculptures. They cleaned the waste taken out of garbage and turned it into an artistic object. Relevant codes were creative ideas-designs, garbage art, work freedom.

The 4th sub-theme was Anxieties. The 4th theme was **Anxieties**. The theme is the last and students state the little anxiety regarding using waste materials. The related theme wasn't mentioned as negative thoughts. While stating their concerns due to the dirty waste materials, students mentioned that these concerns will be removed if necessary precautions are taken. Codes of the last theme were dirty and security precautions.

To enable students to use waste materials in sculpture lessons or other practical lessons, waste material collection and recycling units can be established. The workers in the units may store the waste according to types. Again in these units, students may be informed by labels including the features and dirt levels of any product. An addition list showing the security precautions to be taken against hazards that may occur during the use of waste material may be prepared within the relevant information. Waste collection and recycling units may be opened to the use of students.

As shown by the research results, use of waste material in student production process will contribute to recycling both materially and morally.

References

- Cevreonline. (undated). *What is recycling?*. Retrieved March 17, 2015 from: http://cevreonline.com/atik2/geri_donusum.htm
- Erten, S. (2004). What is environmental education and environmental awareness, environmental education should be how. *Cevre ve Insan Dergisi*, 65, 66.
- Miles, M. B., & Huberman, A., M. (1994). *Qualitative Data Analysis*. London: Sage Publication
- Unger, J. T. (undated). The Fine Art of Recycling. Retrieved, March 18, 2015 from: http://www.johntunger.com200910the-fine-art-of-recycling.html#.VQ1YH_msUk0