



The Effects of Using Material in Visual Arts Class in Primary School on Increasing Motivation

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Abstract

The main purpose of this study is to determine the effects of using material in visual arts class in primary school on increasing the motivation of the student. The research has been conducted on sixty one students studying in 4-A and 4-B departments of Aziz Gül Primary School in Elazığ in 2013-2014 academic year. Materials such as colour knowledge, applications regarding to colour, collage and assemblage activities, t-shirt painting, sculpture studies, history of art studies and painting with the assistance of music has been applied on the students of 9-10 ages.

Study was carried out by using pre-test, post-test experimental method. Before experimental part, Visual Art Motivation Scale which was developed by Glynn et al. (2007) and Glynn et al. (2009) and adopted by researches has been used. The scale which has six main component and 30 items was translated into Turkish and Factor Analysis was applied to provide reliability. For the validity of Visual Art Motivation Scale expert opinion was taken.

The study has been conducted with pretest-posttest and experimental design with control group. Visual Arts Motivation Scale which was developed by Glynn et al. (2007) ve Glynn et al. (2009) has been applied to the students in order to assess the effects of those materials on the motivation in the visual arts class before the experimental processing begins and after the experiment.

The findings which are obtained by using Visual Art Motivation Scale which was developed by Glynn et al. (2007) and Glynn et al. (2009) analyzed with SPSS packet programme. At the end of the research, it is defined that using materials at primary school has a supportive feature for improving students' motivation and this support varies according to variables.

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1. Introduction

Besides being seen as a part of general education, Visual art is a field which has special features, education, methods and techniques. A contemporary primary school curriculum offers students to produce art, to give reaction, to put relation and to make evaluation. During primary school education, students can find a chance to compare their own artistic activities with others (Artut, 2004). Art education is based on multi-sides and generally tools. Not having necessary or insufficient tools may cause discipline and motivation problems so teacher should be sensitive about this issue. Using tools are essential in view of meaning and purpose of the lesson. In art education, it should be known that



enriching the visual tools by dividing into categories may affect to get better results (Artut, 2004). The visual tools which are used in education increase the number of the stimulus and options so, they contribute to pay attention to personal differences (İzci, 2004).

No object in nature can transform from stable position to moving one without a reason. Therefore, to activate the human organism and to make him behave, because of his nature, there should be some reasons (Akbaba, 2006). One of these reasons is motivation. Motivation is power which pushes a person for a specific purpose, makes him move, activates and direct him (Başaran, 1991). To increase the students' motivation, curiosity should be increased. Classroom environment, materials which are used, tools, teachers' capability and the quality of the teaching process are all related with motivation. There are students who have different personal, social and mental features in the classroom. It is difficult to motivate these students by using same method. Some of these differences are related to socio-economic status, family structure and performance. Besides these, hyperactivity, difficulty in learning and being gifted are effective on motivation level. For this reason, some curriculum and application should be used to increase the motivation (Yazıcı, 2008). Education designers should motivate the students to get innovative information and to use this information effectively (www.enocta.com).

2. Method

2.1. Research Method

This research has been carried out by using "one group pretest-posttest method" which is one of the experimental methods. This method was defined by Karasar (2005: 96) as "Independent variable is applied for a group whose members are chosen randomly. This application includes both measurement which is obtained before the application (pre-test) and measurement which is obtained after the application(post-test)." The symbolic appearance of the method is given below:

G_1	$O_{1,1}$	X	$O_{1,2}$
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G= Group, $O_{1,1}$ = Measuring, X=Level of independent, $O_{1,2}$ = Measuring.

It is accepted that being $O_{1,2} > O_{1,1}$ is because of "X". Since it is not known the effects of other variables, this acceptance is doubtful.

2.2. Sample and Universe

The universe of the research is Aziz Gül Primary School in Elazığ in 2013-2014 academic years. Sample is sixty one students studying in 4-A and 4-B classes. The distribution of the students according to variables is given in Table 1.

Table 1. The distribution of the students according to demographic variables

Variables		N	%
Gender	Female	29	47.5
	Male	32	52.5
Mother's education	Primary school	47	77.0
	High school	9	14.8
	University	5	8.2
Father's education	Primary school	23	37.7
	High School	21	34.4
	University	17	27.9
Total		61	100.0



2.3. Collecting data and Analyzing

In this study, to collect data, Visual Art Motivation Scale which was developed by Glynn et al. (2007) and Glynn et al. (2009) and adopted by researches has been used. The scale which has six main component and 30 items was translated into Turkish and Factor Analysis was applied to provide reliability. For the validity of Visual Art Motivation Scale expert opinion was taken. After getting necessary permission by e-mail, only stres dimation was used. Likert type scale was ranked as, (1) never, (2) seldom, (3) sometimes, (4) usually and (5) always.

The data which is obtained in this research is analyzed by using SPSS packet programme. To compare the avarage pretest-posttest score of motivation, dependent groups “t” was used. (Paired Samples t test) For the anaysis of the items in the scale, descriptive statistical methods (t test, MWU test, Anova, KWH test) were used.

2.4. Experimental Study

For choosing materials which would be applied for the students, related literatures were checked and a list was formed. For this list, opinion of three classrom teacher, three visual art teacher, two visual art scholar and two eduaction department scholars were taken. After discussion with experts, for 9-10 age group, color knowledge, application about colours, clip arts, assemblage, coloring t-shirt, sculpture works, art history studies and painting while listening music are determined to be applied. Then, some seminrs are given to the teachers of 4-A and 4-B classes who would conduct the experiment and a sample lesson were acted out. Following this pre-test was applied. Following six weeks, two VAL in a week were organized accoring to mentioned materials. During the lesson researcher observed the activities and took some notes. According to these notes, after every lesson, the following lesson was planned beforehand. At the end of the six month experimental process, post-test were applied and the process was completed.

3. Findings

3.1 Findings About Material Usage on Motivation

The table 2 shows students’ pre-test and post-test motivation avarage results.

Table 2: Comparison of the subjects’ motivation pre-test scores in VAL.

Test Group	N	\bar{x}	ss	sd	t*	p
Pre-test	61	3.97	1.11	60	-2.157	.036
Post-test	61	4.15	1.03			

P<.05

According to table 2, before the experimental process, the avarage motivation score of the subjects is $\bar{x}_{pre}=3.97$ in VAL. At the end of the material aid which was applied for six weeks, the avarage score of the students is $\bar{x}_{post}=4.15$. To determine whether there is a meaningful difference between pre-test and post-test of the avarage motivation score (Paired Samples t test) dependent groups “t” test was applied. According to these information, the difference between pre-test and post-test avarage score which the students got from the scale is meaningful (P<.05).

3.2 Findings About Material Usage on Motivation According to Variations

Comparisons of the avarage motivation scores of the students who are applied for the research according to variables of gender, education level of parents are in the table 3,4 and 5.



Table 3: Comparisons of post-test results of the subjects according to gender

Item No	Mann Whitney U Test		Different Groups
	MWU Value	p	
1	400.500*	0.043	1-2
6	382.000*	0.045	1-2

*p<.05

Table 4: Comparisons of post-test motivation results of the subjects according to mother's educational background

Item No	Primary school N=(47)		High school (N=9)		University (N=5)		Total (N=61)		Variance		Homogeneity Test	
	\bar{X}	S	\bar{X}	S	\bar{X}	S	\bar{X}	S	F	p	F	p
12	4.03	1.22	4.57	0.85	4.14	1.07	4.16	1.09	1.89	0.038	0.643	0.202
									5			

*p<.05

Table 5: Comparisons of post-test motivation results of the subjects according to father's educational background (parametric items)

Item No	Primary school N=(23)		High School (N=21)		University (N=17)		Total (N=61)		Variance		Homogeneity Test	
	\bar{X}	S	\bar{X}	S	\bar{X}	S	\bar{X}	S	F	p	F	p
21	4.15	1.21	4.73	0.54	4.89	0.31	4.61	0.82	2.90	0.011	0.741	0.115
									3			

*p<.05

Table 6: Comparisons of post-test motivation results of the subjects according to father's educational background (non-parametric items)

Item No	KWH Test		MWU Test		Different Groups
	KWH Value	P	MWU value	p	
115	6.739	0.027	180.500	0.227	1-2
			198.000	0.095	2-3
			123.500*	0.019	1-3

*p<.05

4. Discussion and Results

When the table 2 which shows students' pretest and last test average results is analyzed, in VAL, before this experimental study, students' average score on motivation is $\bar{X}_{pre}=3.97$. After one month



material application of materials on this group (experimental study), students' average score on motivation has become $\bar{x}_{last}=4.15$. To determine whether there is a meaningful difference between pre and post test of the student who applied the study, depended groups (Paired Samples t test) "t" test were used and these tests put forward that there is a meaningful difference ($p<.05$). It determined that some kind of materials such as color knowledge, application about colours, clip arts, assemblage, coloring t-shirt, sculpture works, art history studies and painting while listening music increase the motivation of students in VAL. When it is remembered that motivation is an important criteria during the learning process (Aydın ve diğerleri, 2005; Aydın, 1999; Selçuk, 2005; Erden ve Akman, 2001; Özden, 2000; Saban 2004), the value of this finding can be understood better. Most of the literature knowledge about the positive effects of materil usage (Taşpınar, 2012; Sevinç, 2005; Ergin, 1998) supports this idea. The quantity of the material used in the research can be another factor to increase motivation since; during the learning process the quantity of the material is essential in wiev of being sensuous and meeting personal differences. There are two possibilities of why material support increases the motivation of the student. Firstly, for 9-10 age group students who get bored easily, using multiple material may mean "breaking the routine" Therefore this "breaking the routine" activity by increasing the level of attention may support the motivation. Secondly, this age group are curious and energetic (Bacanlı, 2003). So using material which includes many activities and movement, because of matching their nature may support the motivation.

But this finding, increases of motivation by using material, can be interpreted as being not adequate. Because the pre test scores of the children was already high ($\bar{x}_{pre}=3.97$) and after application of the material, it has become only $\bar{x}_{post}=4.15$. 0.17 point from five increases can be seen inadequate in numeral meaning. It can be said many reasons for this. First of all, the materils which are used do not serve for the VAL curriculum attainment. Secondly, these materials ere not suitable for the 9-10 age group's growing features. Thirdly, the materials are not suitable for the school at which the study was carried out and the culture. Fourthly, the teacher may not have used these materials according to their nature. Another possibility is students' understanding the questions of the scale and not completing the questionnaire by giving attention. Other than that, the method has some limitation and they can be another possibility of this score. Because in one group pre test last test research method, researcher can not obtain any other information about variations which effect students except the material which is used.

Eventually, even though the motivation which is provided by materials does not affect the results mathmatically, even a small difference in motivation level is important. Because during learning period, motivation is difficult to obtain and keep it. Moreover, everybody knows that during learning process, keeping the motivation fresh and increasing it is an essential education problem. In Turkey where the education has been carried out by traditional and didactic method (Açıkgöz, 2003), this matter is more important. For this reason, the contribution of the materials to the motivation at primary school VAL should not be underastimated. The main problem is how to improve this contribution.

When the table 3, 4 and 5 which show variables of students which are applied for the research such as gender, education level of parents are analyzed, it can be realized that there is meaningful difference among students' answer according to gender in item 1. This finding can be interpreted as female students are more interested in learning art ($MR_1=32.08$) than male students ($MR_2=28.81$). This result can be related to more improved aesthetic senses of female student. The meaningful difference according to item 6 can be interpreted as female students care about getting good marks from art lessons ($MR_1=32.68$) than male students ($MR_2=28.17$). It can be concluded that female students are more sensible towards art education than male students.

According to table 4, there is a meaningful difference among students' opinion in item 12. According to analysis of this parametric item, The students whose mother are high school graduated ($\bar{x}_2=4.57$) care about learning art than taking good marks in comparison to students whose mother are university graduated ($\bar{x}_3=4.02$). This findin can be interpreted as the students whose mothers are high school graduated percieve the art from more idealist perspective.



According to table 5 which include variables of fathers' education level there is a meaningful difference among students' opinion in view of item 15 and 21. For the non-parametric item 15, KWH and MWU tests were applied and these tests show that difference between students' opinion is between 1 and 3. Groups. According to findings, the students whose fathers are university graduated ($MR_3=22.30$) believe that they can be more succesful in art project than the students whose fathers are primary school garduated ($MR_1=16.50$),.

According to variance analysis for parametric item 21, the students whose father are university graduated($\bar{x}_3=4.89$) are more confident to become succesful for visual art lesson than the students whose father are primary school graduated ($\bar{x}_1=4.15$). These findings can be interpreted as there are relationship among socio-cultural belonging, self confidence and motivation.

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