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YARATICI DRAMA DERSİNİN YARATICI DÜŞÜNMEYE ETKİSİ

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Özet

Araştırmada, yaratıcı drama derisini alan İlköğretim Bölümü Matematik Öğretmenliği ikinci sınıf öğrencilerinin yaratıcı düşünme düzeyleri belirlenmiştir. Çalışmanın amacı, yaratıcı drama dersinin öğrencilerin yaratıcı düşünme düzeylerini ne yönde etkilediğini ortaya çıkartmaktır. Veri toplama aracı olarak Torrance Yaratıcı Düşünme Testi Sözel-A ve Sözel-B formları kullanılmıştır. Uygulama ve formun değerlendirilmesi araştırmacı tarafından yapılmıştır. Çalışma sonunda, öğrencilerin akıcılık, esneklik, özgünlük ve toplam yaratıcılık puanlarının arttığı ortaya çıkmıştır. Yaratıcı drama dersini alan öğrencilerin çok sayıda fikir üretebildikleri, çok yönlü düşünebildikleri, olaylara bakış açılarında önemli ölçüde ilerleme olduğu, özgün düşüncelerini ortaya koyabildikleri, buluşlar yapabilme ve bir ürün meydana getirebilme yeteneklerinin geliştiği sonucuna varılmıştır.

Anahtar Kelimeler

Akıcılık
Esneklik
Özgünlük
Yaratıcı Düşünme
Yaratıcı Drama

Makale Hakkında

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THE EFFECT OF CREATIVE DRAMA COURSE ON CREATIVE THINKING

Abstract

In this research, the creative thinking levels of the sophomores of the Primary School Mathematics Teaching Department who took the creative drama course were determined. The aim of the research is to reveal in what way the creative drama course affects the students' creative thinking levels. Torrance Test of Creative Thinking Verbal-A and Verbal-B Forms were used as a data collection tool. The application and the evaluation of the form were conducted by the researchers. At the end of the research, it was seen that the students' fluency, flexibility, originality and overall creativity scores increased. It was concluded that the students who took creative drama course were able to

Keywords

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About Article

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generate many ideas, could think multi-directionally, had considerable progress in their perspectives for the events, could put forward their original ideas, and that their ability to make inventions and to create a product was improved.

INTRODUCTION

All original and outstanding works that societies have are the works which were created by people who had creative thinking skills. The most important education issue for any society is to identify children with creative qualities in time and to create and improve creative thinking skills in individuals (Çağlar, 1999, p. 1624). Today, there is a need for creative individuals and forming an educational model particular to their creativity. It is necessary to explore children and youth who have creative qualities in time and to improve creative thinking skills of theirs (Ersoy and Başer, 2009, p. 128). The future of mankind depends on creative individuals and on training particular to their creativity (Silver, 1997). We enable the development of creative individuals when we reveal creativity throughout the process of education. The individuals are not usually encouraged to be creative. Thus, it is necessary to lead individuals to think creatively. What is important is to provide students with creative learning settings in schools. In creative learning settings, individuals start to think creatively.

Creativity is concerned with the product rather than the process and its definition consists of reasoning, inventing and problem-solving (Csikszentmihalyi, 1996; Ruggiero, 2004). Creativity can be developed through education. Bentley (1999) defines it as a process of receiving information, then turning into a new form and reorganizing it until a new idea is created. People's creative thinking skills are seen to develop when they feel confident, they do not care what people and society around them say, and they managed to break their molds. According to Buzan (2001) creativity is defined as being superior to others in terms of creating new ideas, solving problems in an original way, and in terms of imagination, behaviours, and productivity.

Creativity includes a number of cognitive processes, such as perception, awareness, sensitivity, innovation, flexibility, fluency, intuition, comprehension and invention (Tegano, Moran, & Sawyers, 1991; Russ, 1996; Prentice et al., 2003; Lubart & Guignard, 2004). There is a need for the development of the learning environment creativity. Creativity is one important aspect of children's cognitive and psychosocial development. It stands out the importance in process of teaching methods. There are many teaching methods in education system. It is very essential that student center learning. Especially, creative drama lesson is necessary for creative learning environment.

Though the different activities (such as role playing) in drama, education could have close linkage in enhancing children's creativeness and communication ability (Hui and Lau, 2006, p. 35). There is a necessity for students' needs and environment for creativity in teaching Mathematics. It is required to provide suitable environments and include teaching methods in this process for teaching and learning Mathematics. In teaching Mathematics, it is necessary to use teaching methods through which the students can express themselves

easily. Creative drama as a teaching method in which the student is in the center of learning allows students to think creatively.

The creative drama method is a teaching method that can be used in various fields (Fulford et al., 2001, p. 3). It has also recently been used as a method in education and training programs. The creative drama method is high of importance for programs, due to the fact that it puts the individual in the center of learning and traditional education and training approach is not efficient enough.

Creative drama in education is the way that the individuals should animate and significant any experience, any event or any abstract concept in the playful process in which old cognitive patterns and observations are reviewed in a group study by getting use of improvisation, role playing and benefiting from the theater or drama techniques (San, 1991: 263; Modan, 1995: 12).Creative drama is essential that students be active in the constructivist educational process. Individual has a direct role in warming-up, animation and evaluation stages in the method of creative drama. Therefore, creative drama, takes the student in the center of learning by assisting him in understanding a problem and in the awareness process.

In this study, we tried to determine the changes in the creative thinking levels of the students who took the creative drama course. The creative thinking skills of the students were evaluated in terms of fluency, flexibility and originality aspects.

Problem Status

Answers were searched for the following sub-problems in order to be able to respond this problem; "What is the creative thinking level of the sophomores of the Primary School Mathematics Teaching Department?"

Sub-Problems

1) What is the pre-and post-test Fluency scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?

2) What is the pre-and post-test Flexibility scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?

3) What is the pre-and post-test Originality scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?

4) What is the pre-and post-test overall creativity scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?

Method

General screening models were used in the research. General screening models are the screening arrangements carried out on the entire population or a group, sample or samples taken from it in order to reach a general conclusion about the population, in a population constituted by a large number of members (Karasar, 2002, p. 79).

Participants

The participants of the research are the sophomores of Primary School Mathematics Teaching Department of Faculty of Education at Ondokuz Mayıs University (N = 38).

Data Collecting Tool

Torrance Test of Creative Thinking Verbal-A and Verbal-B Forms were used as a data collecting tool. Torrance Test of Creative Thinking was first published in the United States of America in 1966. The test can be applied to preschool, high school and university age groups. Torrance Test of Creative Thinking has a different significance in the literature for its direct measurement of creativity. The test which was developed in 1966 is composed of "verbal" and "figural" parts. There are a total of ten sub-tests; seven subtests in the verbal section and three sub-tests in the figural section. The subtests in the verbal section are respectively these tasks: asking questions tasks, guessing causes and consequences tasks, product improvement tasks, unusual uses tasks, unusual questions tasks and assume that tasks (Torrance, 1970; Torrance & Ball, 1984; Aslan, 2001, p. 24). Each sub-test was evaluated on fluency, flexibility and originality aspects.

Data Analysis

Torrance Test of Creative Thinking Verbal A and Verbal B Form which were used for data collection was applied to 38 students in the sample. Students were given 45 minutes at the application stage. The answers of the students were scored by two researchers and then transferred to SPSS packaged software and analyses were conducted. Correspondence percentage was calculated %90.

Calculating Fluency Scores

The number of the appropriate answers that each student gave for seven activities on Torrance Test of Creative Thinking Verbal A form were calculated by adding them separately in relation to the activities in order to evaluate the fluency aspect. The appropriateness of the responses depends on the association with the activity conducted. The student who gave appropriate answers to seven activities had seven different fluency scores. In fluency scores, each item that the student writes is taken into evaluation. Only the questions which were not related to the pictures, in short meaningless questions were not taken into evaluation. In fluency scores, 1 point was given for each item and 0 point was given for the items which were not taken into evaluation.

Calculating Flexibility Scores

While evaluating flexibility aspect, the answers that each student gave for seven activities were calculated by categorizing them. These categories consist of what was given in the instructions manual and the new categories created by the researchers from the responses given by the group on which the application was performed.

Calculating Originality Scores

While calculating originality, originality load of each written item was selected from the list in the Instructions Manual of Torrance Test of Creative Thinking. Appropriate load values for each item were selected from this list. 2 points was given to the students' answers which were given by using high level of thinking skills. The other responses were evaluated by 0 and 1.

Findings

In this section, the findings obtained as a result of the analysis conducted with statistical methods in relation to each sub-problem of the data obtained from the students who participated in the research and the comments on these findings were included.

Before the statistical analysis of the data collected, it is necessary to see whether it fits the normal distribution or not. The normality distribution table of creative thinking scores of the students who took creative drama course is given below.

Table 1. Normal Distribution Data (Shapiro-Wilk's Scores)

Test Type	Shapiro-Wilk's Test Statistics	Test Type	Shapiro-Wilk's Test Statistics
Fluency Scores Pretest	0,945	Fluency Scores Posttest	0,847
Flexibility Scores Pretest	0,979	Flexibility Scores Posttest	0,939
Originality Scores Pretest	0,959	Originality Scores Posttest	0,915

In order to determine whether the data had a normal distribution, W test statistics is calculated. W test statistics varies between the range of $0<W\leq1$. The values close to 1 indicate that the variable has a normal distribution and the values close to 0 indicate that the variable does not have a normal distribution (Özdamar, 2004, p.292). As it is understood from the table above the data indicates a normal distribution.

The Findings in Relation to the First Sub-Problem

The analyses for the sub-problem of "What is the pre-and post-test Fluency scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?" are presented below.

Table 2. Independent Samples t-test Analysis of the Pre- and Post-test Fluency Scores

Test Type	N	$\bar{X}$	Ss	t	p
Pre- test	38	23,11	10,01	6,50	0,00*
Post- test	38	45,58	23,02		

*p<0,05.

Table 2 reveals that there is a significance difference between the pre- and post-test Fluency scores (p=0.00; p<0,05). This finding revealed that the students' ability to be able to generate an idea increased at the end of the creative drama course.

The Findings in Relation to the Second Sub-Problem

The analyses for the sub-problem of "What is the pre-and post-test Flexibility scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?" are presented below.

Table 3. Independent Samples t-test Analysis of the Pre- and Post-test Flexibility Scores

Test Type	N	$\bar{X}$	Ss	t	p
Pre- test	38	13,50	4,65	3,31	0,00*
Post- test	38	30,63	10,35		

*p<0,05.

The table above indicates that pre- and post-test scores have revealed a significant difference in terms of flexibility scores (p=0,00; p<0,05). It was revealed that the students could think multi-directionally and that there was a considerable progress in their perspectives for the events at the end of the creative drama course.

The Findings in Relation to the Third Sub-Problem

The analyses for the sub-problem of "What is the pre-and post-test Originality scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?" are presented below.

Table 4. Independent Samples t-test Analysis of the Pre- and Post-test Originality Scores

Test Type	N	$\bar{X}$	Ss	t	p
Pre- test	38	10,26	5,10	10,59	0,00*
Post- test	38	42,34	17,96		

*p<0,05.

Table 4 reveals that pre- and post-test originality scores indicate a significant difference (p=0,00; p<0,05). In conclusion it can be said that the students' abilities to generate their original ideas, make inventions and create a product improved.

The Findings in Relation to the Fourth Sub-Problem

The analyses for the sub-problem of "What is the pre-and post-test overall creativity scores of the sophomores of the Primary School Mathematics Teaching Department who participated in the research?" are presented below.

Table 5. Independent Samples t-test Analysis of the Pre- and Post-test Overall Creativity Scores

Test Type	N	$\bar{X}$	Ss	t	p
Pre- test	38	46,86	18,59	8,82	0,00*
Post- test	38	122,55	49,46		

*p<0,05.

According to the overall creativity scores, a significant difference emerged between pre- and post-test (p = 0.00; p <0.05). That the average of post-test ($\bar{X}$ = 122.55) was higher than the average of pre-test($\bar{X}$ = 46.86) is in the direction that the students' creative thinking levels increased as a result of the applied teaching method.

RESULTS

There was an increase in the creative thinking level of the sophomores of Primary School Mathematics Teaching Department at the end of the creative drama course. Creativity covers a process, because I used the Torrance Test of Creative Thinking Verbal-A and Verbal-B Forms for children's creative development in the creative drama course.

At the end of the process the increase in *fluency scores* revealed that the students' ability to generate ideas increased. The ability to generate ideas is the most important ability for a creative thinker. In today's society, there is a need for individuals who can express themselves and present their ideas. The individual's ability to choose the most valuable one among the ideas he generated is an indicator for the improvement of fluency aspect.
It was concluded in the research that the students could generate ideas and present their ideas. The results obtained for fluency aspect are consistent with some studies (Torrance, 1969, p. 223; Williams et al., 1973, pp.115; Sincoff and Sternberg, 1988, p. 650; Isaksen and Puccio, 1988, p. 669; Julie and Robert, 1988, p. 650). The number of relevant ideas reveal that number of ideas (Julie ve Robert, 1988; Isaksen ve Puccio, 1988). In this study's findings had proved the important of fluency scores.

It can be said that the students could think multi-directionally and there was an increase in their perspective for the events as a result of the increase in *flexibility scores* in the research. The individual who has gained the flexibility ability can look at the events he encounters from a different and multi-directional perspective and develop a different point of view (Ersoy, 2012, p. 325). In this study, the students has many different perspective views for the improvement of flexibility aspect. Because, post-test mean score ($\overline{X}$ =13,50) is higher than pre-test mean score ($\overline{X}$ =30,63). This result is very important for students flexibility scores to creative thinking.

It is stated in the studies in the literature (Torrance, 1970, p.393; Khatena and Dickerson, 1973, p. 842; Dennis, 1979, p. 274; Auth, 2005, p.19) that the flexibility aspect increased as a result of different teaching methods. These results are consistent with our research. Because, different teaching methods causes gaining to permanent learning for students.

The increase in *originality scores* which is another aspect of the research states that the students' ability to put forward their original ideas, make inventions and create a product improved. The originality aspect of creative thinking skill makes the individual gain the abilities to put forward a new and original product, generate original ideas and give original reaction in the face of an event (Ersoy, 2012, pp. 328). In this study reveal that the students' abilities to generate their original ideas, make inventions and create a product improved. As a result, it is revealed that the students gained the ability to select the original one and put forward original ideas. Some studies in the literature (Shivley et. al., 1972, p. 63; Auth, 2005, p.15; Ersoy and Başer, 2009; p. 135) support the results of our work.

Many theorists have argued that creative thinking is necessary for different learning methods (Torrance, 1970; Shivley et. al., 1972; Khatena and Dickerson, 1973; Dennis, 1979; Julie ve Robert, 1988; Isaksen ve Puccio, 1988; Auth, 2005; Ersoy and Başer, 2009). Especially, creative drama method is proposed as a learning methods.

In addition, the increase in overall creative thinking scores revealed that the students' creative thinking levels developed as a result of the applied teaching methods. That the creative thinking can be developed as a result of the application of different teaching methods in the study is consistent with other studies (Dennis, 1979; Silver, 1997, p. 77; Laius and Rannikmae, 2004, p.283; Auth, 2005; Sulaiman, 2011, p.41; Ersoy, 2012; p. 313). As a result, creative drama method has a significant impact on increasing students' creative thinking skills and it can be said that the applied teaching method is effective.

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