An Investigation of Prospective Social Studies Teachers' Cognitive Structures Regarding Creative Drama

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Abstract

The aim of this research is to reveal the prospective social studies teachers' cognitive structures regarding creative drama through the Word Association Test (WAT). The study group of the research consists of 85 prospective social studies teachers, as the final year undergraduate students attending the course of drama at Faculty of Education in Nigde Ömer Halisdemir University, in the spring term of the academic year 2015-2016. In the research, as data collection tool, Word Association Test was used. To the prospective teachers, WAT was implemented as pretest before the course of drama and as posttest after a 14-week-drama course. According to the findings obtained, the word which the prospective social studies teachers associated with the key concept creative drama at most was *play* in the pretest; however, it was *improvisation* in the posttest. Moreover, it is seen that the prospective teachers have associated the key concept creative drama with more words in the posttest, when compared to the case in the pretest, and some certain concepts incorrect in the pretest have been eliminated in the posttest. This situation shows that the prospective teachers have had a conceptual development regarding creative drama at the end of drama course; additionally, new and correct concepts have been acquired instead of the incorrect ones. Also, it can be stated that word association test is an effective technique in detecting misconceptions and prospective teachers' conceptual development.

Keywords: creative drama, word association test (WAT), social studies, prospective teacher

1. Introduction

Human uses different ways to express feelings and thoughts. This can be sometimes a picture, poem, song, story, letter or enacting a slice of life. At this point, drama is a process that enables an individual to express his mood and thoughts by improvisations.

An exact Turkish equivalent of the concept 'drama' is not available. It is derived from the Greek word 'dran'. And the word 'dran' means do, perform, make. Within the scope of theater science, drama is defined as summarized, abstracted states of action (San, 2006a). When it is used for educational purposes, drama is called as creative drama, child drama, role playing, child play and educational drama. Creative drama is to act out dramatic experiences for the development of participants, rather than their stage performances. For this reason, the body of literature related to drama proposes to use the term of creative drama (Freeman, Sullivan and Fulton, 2003).

Heinig and Stillwell (1981) define creative drama in the way that; "It is spontaneous; does not have a written text; is not presentational, and therefore there is no need for it to be staged; is event-centric and the participants who are guided by the leader represent the cases and/or events which they have experienced and they imagine in the form of creative drama. The leader guides the group in order that they are able to discover, develop, and express their ideas and feelings through dramatic representations" (Cited by Ömeroğlu, 2006, p. 124).

The nature of creative drama is in a manner of a dramatic play that is inherently creative and occurs spontaneously (Baldwin and Fleming, 2003). Therefore, creative drama involves the interaction between the real world and fictional realm. Creative drama, in addition to its being an action, includes intellectual circumstances. Dramatic cases are sensed or perceived by the one who performs as if they are real, and so real emotions are experienced (Öztürk, 2006). Creative drama is a method which amuses by means of play, role playing, improvisation and acting out, and also educates and edutains (Genç, 2003). In brief, creative drama, which does not have the aim of putting on the stage and contains play-like processes within it, is the whole of role playing, improvisation and actings that individuals perform as based upon their own experiences.

Creative drama comprises three interrelated stages. These stages are in the following (Adıgüzel, 2006, 2013):

- Warm-up Preparation: This stage is the preparation for the process, for the participant who has just begun creative drama studies. Children's plays and also derived plays can be used. This is the stage at which activities are conducted by forming a group and through play-like techniques, and creative drama theme is determined.
- 2) Animation This stage includes the process within which a theme shapes and develops in the course of time, is determined, shaped and all the works of formation are carried out. Creative drama techniques are used in the animation stage.
- Evaluation Discussion: The results attained by creative drama studies are evaluated at this stage. Sharing of feelings and thoughts is realized by emphasizing the essence, significance and quality of creative drama process.

In creative drama including all these stages mentioned, improvisation and role playing are used as major techniques. "Improvisation is the creation of a situation in which characters speak spontaneously" (McCaslin, 2014, p. 107). As for role playing, it is to act out the personality traits and feelings of the characters in the play (Ömeroğlu, 2006). In addition to these techniques, in creative drama, some certain methods and/or techniques such "role reversal. simultaneous improvisation, teacher in role, dramatization, flashback. as interview-conversation-questioning-dialoging, hot seating, conscience alley, freeze frames, gossip chorus/circle, writing in role, inner voice, arranging meeting, pantomime, role cards, personal props -incomplete objects, rituals, ceremonies, cross-cutting (also called split-screen), group sculpting – creating scene in tableau, role alley", and so on, are also included (Adıgüzel, 2013, pp. 343-412).

Creative drama is an effective method in teaching social studies subjects. Students discover place, time and circumstances that they have never experienced before by role playing. Also, students benefit from the structured role playing in order to learn about the history and have knowledge about people, places and events in the past (Morris, 2001; Morris & Welch, 2004). Moreover, it can be enabled that students learn also the subjects of the disciplines such as geography, economics, sociology, anthropology and citizenship education which are included within the scope of social studies teaching, by treating these subjects with creative drama method so as to make students' learning by practicing and experiencing possible.

Drama course was included within the scope of compulsory subjects as "field and field training course" in Social Studies Teaching Undergraduate Program as of the academic year 2006-2007 by the Council of Higher Education (CoHE). In 2018, with the restructuring of teaching undergraduate programs by the CoHE, drama course was involved in "elective courses for field training" in Social Studies Teaching Undergraduate Program with the name "Drama in Teaching Social Studies". This course gives coverage to how drama will be able to be employed as a method, in addition to its providing prospective teachers with the acquisition of knowledge about theoretical content of drama (CoHE).

The necessity and effectiveness of creative drama as a course and a method is an unavoidable fact. As based on this, as well as it can be realized by conventional assessment and evaluation methods, alternative assessment and evaluation methods can also be used in order to detect the effectiveness of course and methods like creative drama.

Among the alternative methods for assessment and evaluation, one of the techniques widely used in revealing the cognitive structure is Word Association Test (WAT) (Bahar, Johnstone, & Sutcliffe, 1999; Ercan, Taşdere, & Ercan, 2010). Word association tests stand for a technique which enables to examine the associations or connotations that the pre-determined concepts arouse in one's mind and the relation among concepts (Bahar et al., 1999).

While WAT is being prepared, the key concept or concepts related to the subject of the research are determined at first. Afterwards, WAT is put into practice in a given time period that is appropriate to age group, in order to determine the words which these concepts associate with (Ustaoğlu & Aytaç, 2014).

As well as its being used as an assessment instrument, WAT can also be used as diagnostic tool. When WAT is employed as pretest at the beginning of the course and as posttest after the course subject has been taught, conceptual developments in student can be followed. Moreover, by creating a frequency table which shows how many times the words given in response to the key concept are repeated, conceptual networks can be diagrammed, too (Bahar, Nartgün, Durmuş, & Bıçak, 2010). In this way, by means of WAT, it is possible to find out the misconceptions, as well as seeing conceptual development (Ercan, Taşdere, & Ercan, 2010).

When the studies carried out by using word association tests were reviewed, it was seen that almost all of those studies had been realized in the field of science education (Atabek-Yiğit, 2015; Atabek-Yiğit, 2016; Bahar et al.,

1999; Bahar & Özatlı, 2003; Cardellini & Bahar, 2000; Çınar, 2016; Güneş & Gözüm, 2013; Kırtak & Demirci, 2012; Kostova & Radoynovska, 2010; Köseoğlu & Bayır, 2011; Kurt, 2013; Kurt & Ekici 2013; Kurt, Ekici, Aktaş, & Aksu, 2013a; Kurt, Ekici, Aktaş, & Aksu, 2013b; Nakiboğlu, 2008; Özatlı & Bahar, 2010; Özata-Yücel and Özkan, 2014; Özata-Yücel & Özkan, 2015; Polat, 2013; Schizas, Katrana, & Stamou, 2013). There are not many WAT studies which have been carried out in social sciences (Akman & Koçoğlu, 2016, Aydemir, 2014; Aykaç, Bilgin, & Bacakoğlu, 2016; Bahar & Hansel, 2000; Deveci, Çengelci-Köse, & Gürdoğan-Bayır, 2014; Ersanlı, 2016; Karatekin, Topçu, & Aydınlı, 2016; Karatekin & Elvan, 2016; Kaya & Aladağ 2016; Işıklı, Taşdere, & Göz, 2011; Şimşek, 2013; Tokcan & Yiter, 2017; Tokcan & Topkaya, 2018) and in the field of information technologies (Eren, Şahin, Çelik, & Aktürk, 2014; Önal, 2017). Also, any research for determining prospective social studies teachers' creative drama perception by WAT is not available. For this reason, the aim of this research is to reveal the prospective social studies teachers' cognitive structures regarding creative drama by means of WAT.

2. Method

2.1 Research Design

The research was patterned by a single group pretest-posttest design from the weak experimental designs. "In this research design, the effect of experimental treatment is tested by the study made through a single group. The measures for dependent variable of the subjects are obtained as pretest before the practice and posttest afterwards, by the use of same subjects and same measuring instruments" (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz, & Demirel, 2011, p. 198).

2.2 Participants

The participants of the research consists of 85 prospective social studies teachers in total, as 40 female and 45 male final (fourth) year undergraduate students attending the course of drama at Faculty of Education, in Nigde Ömer Halisdemir University.

2.3 Data Collection Tool

As data collection tool, WAT was used in the research. The student writes the words associated by the key concept as answer, in the time (usually 30 seconds) given in WAT (Nartgün, 2006). In that test, creative drama was determined as the key concept. The key concept was written as to be one under the other and ten times, so that the prospective teachers could get back to the key concept every time they wrote down a word (Bahar et al., 2010). Model practice is given below.

Creative drama	
Creative drama	

Before starting the practice, the prospective teachers were provided with the explanations for WAT and examples from different researches were presented to them. The prospective teachers wrote down the words which they thought related to the key concept of creative drama in 30 seconds next to them. To the prospective teachers, WAT was implemented as pretest before the course of drama and as posttest after a 14-week-drama course.

2.4 Analysis of Data

A frequency table demonstrating which words and also how many times those were repeated was created after the words that had been given in response to the key concept of creative drama were evaluated. Considering that frequency table created, the breakpoints were detected and conceptual networks were diagrammed. In the formation of conceptual networks, the breakpoint (BP) technique asserted by Bahar et al. (1999) was used. According to this technique, the point below a certain number of word given in response at most for the key concept creative drama included in the word association test was regarded as the breakpoint. Afterwards, the breakpoint was lowered to certain ranges and that procedure was maintained until all response words appeared in the conceptual network (Bahar et al., 2010). The breakpoints (BPs) in this research were determined as 60 and over, 50 to 59, 40 to 49, 30 to 39, 20 to 29, and 10 to 19.

2.4.1 Validity and Reliability

In order to ensure the validity of research, data encoding and analysis process was explained in detail. Response words which were associated by the key concept and the pretest and posttest frequencies of these words were all

included in the findings.

For enabling the reliability of research, the two researchers were asked for their opinion in order to confirm the concepts and frequencies obtained in the research. Consistency of the codes that researchers used independently was determined through the markings made as "Agreement" or "Disagreement". The reliability of data analysis carried out in that way was estimated by [Agreement/(Agreement + Disagreement) x 100] formula (Miles and Huberman, 1994). Average reliability between the researchers was found 97%.

3. Results

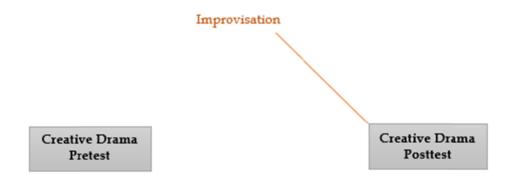
The pretest and posttest frequencies (f) of the response words which the prospective social studies teachers have associated with the key concept creative drama are presented in Table 1.

Words and Frequencies				
Pretest Posttest				
Play (55)	Body language (2)	Improvisation (62)	Perspective (6)	
Amusement (38)	Experience (2)	Play (54)	Role cards (6)	
Role enactment (36)	Passage of drama (2)	Role playing (51)	Alley (5)	
Theatre (34)	Haluk Bilginer (2)	Creativity (49)	Picture - poster (5)	
Improvisation (31)	Nejat Uygur (2)	Amusement (48)	Ability (5)	
Animation (29)	Freedom (2)	Improvisation (41)	Scenario (5)	
Creativity (23)	Plan (2)	Conscience alley (40)	Running (4)	
Empathy (22)	Casting (2)	Empathy (34)	Hot seating (4)	
Stage (18)	Audience (2)	Gesture - facial expression (28)	Cold hall (4)	
Music (14)	Simplicity in expression (2)	Freeze frames (25)	Forming a circle (4)	
Communication (14)	Loss of time (2)	Group (22)	Visual imagery (4)	
Costume (13)	Crying (1)	Activity (22)	Objectives (4)	
Active participation (11)	Active learning (1)	Preparation (22)	Art (4)	
Togetherness (11)	Friendship (1)	Evaluation (20)	Compromising (3)	
Socialization (10)	Pressure - Stress (1)	Roles (19)	Reading a poem (3)	
Gesture – facial expressions (10)	Diary of a Madman (1)	Character (18)	Punishing (3)	
Feeling (10)	Democratic classroom environment (1)	Warm-up (17)	Coherence (2)	
Art (10)	Expressing feelings (1)	Music (16)	Passage of drama (2)	
Group (9)	Erdal Beşikçioğlu (1)	Stage (16)	Aesthetics (2)	
Dance (9)	Different means of expression (1)	Feeling (15)	Station (2)	
Education (9)	Playing the role of different characters (1)	Plan (15)	Deciding (2)	
Collaboration (8)	Determination of differences (1)	Collaboration (15)	Audience (2)	
Permanent learning (8)	Assertiveness (1)	Acting (14)	Systematization (2)	
Ability (8)	Blindfolding - hustle (1)	Communication (13)	Skit (2)	
Activity (7)	Humor (1)	Socialization (13)	Slogan (2)	
Interaction (7)	Freeze frames (1)	Leader (13)	Responsibility (2)	
Self-confidence (6)	Warm-up (1)	Expressing oneself (13)	Adaptation (2)	
Authenticity (6)	Interest (1)	Self-confidence (12)	Six hats (1)	
Player (6)	Watching (1)	Role alley (12)	Metaphor (1)	
Naturalness (6)	Rules (1)	Story - poem (12)	Multi-thinking (1)	
Performance (6)	Wittiness (1)	Play room (12)	Drama journal (1)	
Learning by performing and experiencing (5)	Plotline (1)	Costume (10)	Ideal / Intellectual stage (1)	
Drama club (4)	Play therapy (1)	Interaction (10)	Critical thinking (1)	
Character (4)	Psychomotor skills (1)	Different ideas (10)	Flashback (1)	
Meeting - cohesion (4)	Responsibility (1)	Starting point (9)	Divergent thinking (1)	
Scenario (4)	Using the time efficiently (1)	Opinion (9)	Cooperative learning (1	
Imagination (3)		Laugh - smile (9)	Lateral thinking (1)	

Table 1. Frequencies of response words

Scene/ Setting (3)		Acting as a team (9)	Reasoning (1)
Thinking (3)		Cohesion (8)	Space (1)
Resting (3)		Event (8)	Private props (1)
Visual imagery (3)		Dance (8)	Self-devotion (1)
Learning by having fun (3)		Natural sources (8)	Pedagogy (1)
Flexibility (3)		Naturalness (8)	Pantalets - scarf(1)
Instructional (3)		Method - technique - practice (8)	Design (1)
Case (3)		Using material (7)	Experience (1)
Subject (3)		Skill (6)	Product (1)
Sympathy (3)		Humor (6)	Interpretation (1)
History (3)		Cushion (6)	
Total Word	84	Total Word	96
Total Frequency	588	Total Frequency	1013

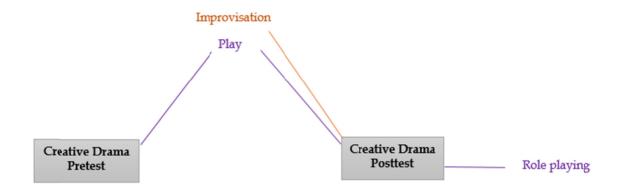
As is seen in Table 1, while the total number of words which the prospective social studies teachers associated with the key concept creative drama was 84 and total frequency of them was 588 in the pretest, the total number of the words in the posttest at the end of the 14-week-drama course was 96 and total frequency was 1013. The word associated with the key concept creative drama at most in the pretest is play (f=55); however, in the posttest, the word associated at most with the key concept is improvisation (f=62). Considering this frequency table, so as to observe the connections in the prospective social studies teachers' cognitive structures regarding the key concept of creative drama, the breakpoints were specified and conceptual networks were diagrammed. For each breakpoint, a different color was used while creating the conceptual networks. We can interpret the results which we have attained over the conceptual networks as follows;



BP 60 and Over

Figure 1. Conceptual network appearing in the range of the breakpoint 60 and over

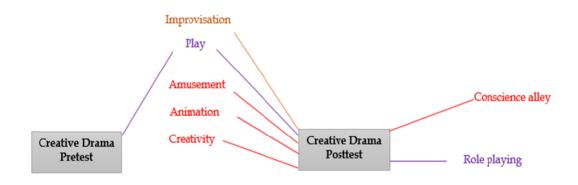
According to Figure 1, when the breakpoint was determined as 60 and over, the prospective teachers did not associate the key concept creative drama with any words in the pretest; however, in the posttest, it was associated with the word improvisation.



BP 50 to 59

Figure 2. Conceptual Network Appearing in the Range of the Breakpoint 50 to 59

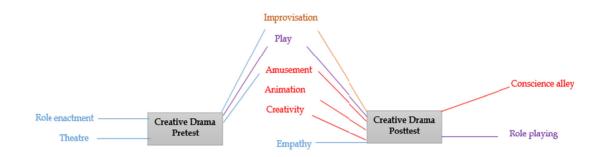
According to Figure 2, in the range of the breakpoint 50 to 59, the words play and p role playing appeared, when compared to the previous breakpoint. While play was the word which the prospective teachers associated commonly with creative drama both in the pretest and posttest, role playing was the word they associated with creative drama in the posttest.



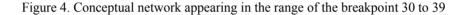
BP 40 to 49

Figure 3. Conceptual network appearing in the range of the breakpoint 40 to 49

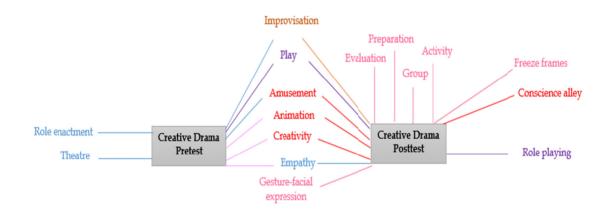
According to Figure 3, when the breakpoint was determined as 40 to 49, the word of conscience alley included in the creative drama methods and/or techniques and the words of amusement, animation and creativity appeared in the posttest. In this range, there is no word associated with the key concept creative drama in the pretest.



BP 30 to 39



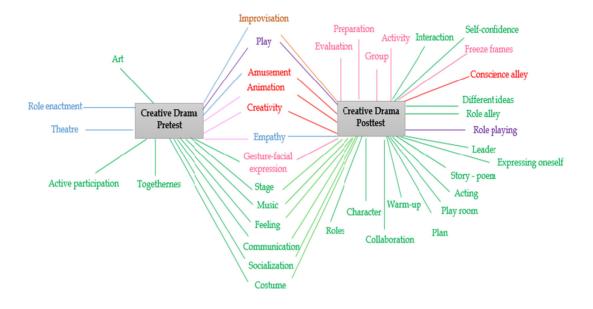
According to Figure 4, in the range of the breakpoint 30 to 39, while the prospective teachers associated the key concept creative drama with the words of role enactment and theatre in the pretest, they associated it with the word empathy in the posttest. The word improvisation appearing in the range of the breakpoint 60 and over and the word amusement in the range of 40 to 49 in the posttest were seen in that range in the pretest.



BP 20 to 29

Figure 5. Conceptual network appearing in the range of the breakpoint 20 to 29

According to Figure 5, when the breakpoint was determined as 20 to 29, it was seen that the prospective teachers associated the key concept creative drama with the words of evaluation, preparation, group, activity, freeze frames and gestures - facial expressions in the posttest. In addition to this, the words of animation and creativity that appeared in the range of 40 to 49 and the word empathy appearing in the range of 30 to 39 in the posttest were seen in that range in the pretest.



BP 10 to 19

Figure 6. Conceptual network appearing in the range of the breakpoint 10 to 19

According to Figure 6, in the range of the breakpoint 10 to 19, all relations among the concepts which reveal the prospective teachers' cognitive structures regarding the key concept creative drama are realized. In this range, while the words of art, active participation and togetherness have appeared in the pretest, the words of interaction, self-confidence, different ideas, role alley, story - poem, leader, expressing oneself, acting, play room, plan, warm-up, collaboration, characters and roles have appeared in the posttest. In addition, the prospective teachers have associated the key concept creative drama with the words of stage, music, feeling, communication, socialization and costume in this range both in the pretest and posttest. The word of gesture and facial expressions seen in the range of 20 to 29 in the posttest has appeared in this range in the pretest.

4. Discussion and Conclusion

The results obtained in the research which was carried out with the aim of determining the prospective social studies teachers' cognitive structures regarding creative drama by means of WAT are as follows: When the breakpoint was specified as 60 and over, the prospective teachers did not associate the key concept creative drama with any words in the pretest; however, it was associated with *improvisation* in the posttest. The reason why the prospective teachers have stated the word of improvisation in the posttest is that the improvisation is one of the techniques existing in the core or nature of the creative drama. In the research carried out by Aykaç, Bilgin and Bacakoğlu (2016) which aimed at examining the prospective English teachers' cognitive structures regarding drama and the concepts related to drama by means of word association test, the prospective teachers in the range of 15 to 19 associated the concept of drama with the word of improvisation in the posttest.

In the research, the words with which the prospective teachers commonly associated the key concept creative drama in both the pretest and posttest are *improvisation, play, amusement, animation, creativity, empathy, gesture*-*facial expression, stage, music, feeling, communication, socialization* and *costume*. Additionally, in the research carried out by Çoban and Çeçen (2013) with the objective of determining the prospective Turkish teachers' cognition for the concept of drama practices by using metaphors, similar results were found out. The prospective Turkish teachers associated drama practices with the concepts such as play, communication, entertainment, amusement, a means of socialization, stage for expressing oneself, and so on (Çoban & Çeçen, 2013). Also, in the research performed by Yüksel, Akyol, and Şenol (2016) with the aim of determining the prospective classroom teachers' cognition regarding drama, similar concepts such as play, amusement, empathy, stage, music and etc. were attained.

According to another result obtained from the research, it was realized that the prospective teachers associated the key concept creative drama with *role enactment* and *theatre* in the range of 30 to 39, and with the words of *art, active participation* and *togetherness* in the range of 10 to 19 in the pretest. This case indicates the result that the

prospective teachers have not had so much knowledge and perception before the course of drama and some of the concepts they have already acquired are mistaken and/or inaccurate. The concepts of role enactment and theatre which the prospective teachers associated with creative drama in the pretest are inaccurate. Creative drama uses dramatic forms, i.e. forms of theatre, but it does not mean performing a theatre and acting pattern (San, 2006b). Moreover, Adıgüzel (2006), by stating that creative drama benefits from the techniques of theatre, emphasizes that the most important ones of these techniques are improvisation and role playing. In role playing, participants act out by playing the part of a specific identity or personality during improvisation. However, in role enactment, there is no sincerity in behaviors (Adıgüzel, 2013). It can be said that role enactment and theatre concepts are not present in the prospective teachers' cognitive structures in the posttest; in other words, misconceptions have been eliminated. Prospective teachers have acquired the concept of role playing instead of role enactment concept in the posttest, i.e. the accurate concept instead of inaccurate one. Similarly, in the research carried out by Aykaç, Bilgin, and Bacakoğlu (2016), the prospective English teachers associated drama with the concepts of theatre and role enactment in the pretest. Furthermore, in the research made by Yüksel, Akyol, and Şenol (2016), the prospective classroom teachers associated drama and the improvisation stage of drama with theatre and art.

One of the important results obtained from the research is that the prospective teachers have acquired several concepts in creative drama posttest compared to pretest. The words which are not available in the pretest, but the prospective teachers have associated with the key concept creative drama in the posttest are, in accordance with the breakpoints, *role playing* in the range of 50-59; *conscience alley* in the range of 40-49; *evaluation, preparation, group, activity, freeze frame* in the range of 20-29; *interaction, self-confidence, different ideas, role alley, story - poem, leader, expressing oneself, acting, playroom, plan, warm-up, collaboration, character* and *roles* in the range of 10-19. The concepts that the prospective social studies teachers have associated with creative drama in the posttest are related to the stages of creative drama, techniques used in creative drama and the content of creative drama. Also, in the research carried out by Aykaç, Bilgin, and Bacakoğlu (2016), the prospective English teachers associated the concepts of drama. Within the scope of the research performed by Yüksel, Akyol, and Şenol (2016), the metaphors concerning the drama that were developed by the prospective classroom teachers are for the concepts of leader, preparation, and the ideas' becoming prominent.

In consideration of all these results obtained, it is seen that there has been a considerable enhancement in the prospective social studies teachers' cognitive structures, and new and accurate concepts have been acquired instead of the inaccurate ones, following the course of drama when compared to the case previous to receiving the mentioned course. Therefore, it can be stated that the word association test is an appropriate instrument to demonstrate the conceptual development and detect the misconceptions, as is in this research; in addition to its being fit for the purpose of revealing the prospective teachers' cognitive structures regarding creative drama. As based on the research results, the following suggestions can be put forth.

- With this research, the prospective social studies teachers' cognitive structures regarding creative drama have been detected by means of WAT. In the research, through WAT, misconceptions have also been revealed. By using WAT, researches can be conducted so that the cognitive structure in different disciplines and on particular subjects may be detected and misconceptions may be found out.
- In this research, creative drama has been used as the key concept within the scope of WAT applied to the prospective teachers. The cognitive structures of the secondary school 5th and 6th graders receiving the elective course of drama can be determined by means of WAT, with the use of other concepts related to creative drama. Also, different researches to determine the perceptions of other concepts related to creative drama can be designed.

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