



## The Views of English Teachers on Creative Problem Solving and Its Influence<sup>1</sup>

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### Abstract

With the renewal of the program in 2012, the effective use of creative problem solving, which is one of the new methods, has been introduced instead of memorizing in English education. The views of English teachers on creative problem solving and its influence are worth investigating. The aim of the study is to investigate the opinions of English teachers about creative problem solving and its impact. In the study, the case study design from the qualitative research design was used. In this study, criterion sampling method, one of the sampling methods, was used. The criterion in the research; is an English teacher working in public schools. The study group of the research consists of 10 English teachers working in public schools at primary and secondary education level in Aydın province Nazilli district. A semi-structured "Interview Form" developed by Önel (2013) was used as a data collection tool. Data analysis was done with descriptive analysis. According to the English teachers in the study group, creative problem-solving activities improve students' scientific process skills and achievements. It makes the lessons more effective and fun. Creative problem-solving activities should be given more space as they positively affect students' attitudes towards the English lesson. According to the results of the research, the English teachers in the study group encountered creative problem solving while they were studying at the university. She finds creative problem solving useful as it makes her English lesson fun and thought-provoking. He agrees that creative problem-solving activities should be included more frequently as they enable students to produce original solutions to problems in the English lesson and make the lesson fun. Based on the research findings, it can be suggested that English lessons should be based on creative problem-solving activities and more creative problem-solving techniques should be included.

**Key Words:** English teacher, creative problem solving, opinion.

## İngilizce Öğretmenlerinin Yaratıcı Problem Çözme ve Etkisi Hakkındaki Görüşleri<sup>1</sup>

### Öz

2012 yılında yapılan program yenilenmesiyle İngilizce eğitiminde ezberletmek yeni yöntemlerden yaratıcı problem çözmenin etkin kullanılması getirilmiştir. İngilizce öğretmenlerinin yaratıcı problem çözme ve etkisi hakkındaki görüşleri araştırılmaya değerdir. Çalışmanın amacı İngilizce öğretmenlerinin yaratıcı problem çözme ve etkisi hakkındaki görüşlerinin araştırılmasıdır. Çalışmada nitel araştırma deseninden durum çalışması deseni kullanılmıştır. Bu çalışmada örnekleme yöntemlerinden ölçüt (kriter) örnekleme yöntemi kullanılmıştır. Araştırmadaki ölçüt; kamu okullarında görev yapan İngilizce öğretmeni olmasıdır. Araştırmanın çalışma grubunu Aydın ili Nazilli ilçesindeki ilköğretim ve ortaöğretim kademesindeki kamu okullarında görev yapan 10 İngilizce öğretmeni oluşturmaktadır. Veri toplama aracı olarak Önel (2013) tarafından geliştirilen yarı yapılandırılmış "Görüşme Formu" kullanılmıştır. Verilerin çözümlemesi betimsel analizle yapılmıştır. Çalışma grubundaki İngilizce öğretmenlerine göre yaratıcı problem çözme etkinlikleri öğrencilerin bilimsel süreç becerilerini ve başarılarını geliştirmektedir. Derslerin daha etkin ve eğlenceli geçmesini sağlamaktadır. Yaratıcı problem çözme etkinlikleri öğrencilerin İngilizce dersine karşı olan tutumlarını olumlu etkilediğinden daha fazla yer verilmesi gerekmektedir. Araştırma sonuçlarına göre çalışma grubundaki İngilizce öğretmenleri yaratıcı problem çözmeyle üniversitede lisans eğitimi alırken karşılaşmıştır. Yaratıcı problem çözmeyle İngilizce dersini eğlenceli ve düşündürücü hale getirdiği için faydalı bulmaktadır. Yaratıcı problem çözme etkinliklerinin

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öğrencilerin İngilizce dersinde problemlere özgün çözümler üretmesini sağladığı ve dersi eğlenceli hale getirdiği için daha sık olarak yer yer verilmesi gerektiği konusunda hemfikirdir. Araştırma bulgularına dayanarak İngilizce derslerinin yaratıcı problem çözme etkinliklerine dayalı işlenmesi ve yaratıcı problem çözme tekniklerine daha fazla yer verilmesi önerilebilir.

**Anahtar Kelimeler:** İngilizce öğretmeni, yaratıcı problem çözme, görüş.

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## Introduction

Based on the principles of developing four basic skills in English education, students' awareness of the functional integrity of listening, speaking, reading, and writing skills is implemented through creative problem-solving methods. The English course consists of the acquisitions of students being able to communicate in a foreign language and learning a new culture. In the English course, a new language and culture is taught. English lesson is life itself as it covers reading, writing, listening, and speaking.

In the field of English education, innovations were experienced with the program renewal in 2012. English lessons have been taught since the 2nd grade of primary school. In English education, effective use of creative problem solving, one of the new methods, has been introduced instead of memorizing. Creative problem-solving method is based on reflective thinking and creating meaningful usage environments instead of memorizing in education. According to Baş and Beyhan (2012), reflective thinking is a high-level cognitive thinking skill. Creative problem solving, as a high-level cognitive thinking skill, makes the learner active in learning. According to Ünver (2003), creative problem-solving activities provide students with the opportunity to determine their goals, take responsibility for their own learning, evaluate themselves, see their mistakes and correct them again.

In English education, students will be able to learn English more easily and permanently with the creative problem-solving activities carried out by their teachers. Instead of memorizing patterns, transferring information and loading non-functional information, English teachers are expected to apply creative problem-solving activities that students enjoy learning and are happy with the views of English teachers on creative problem solving and its impact are worth investigating. In this study, the views of English teachers on creative problem solving and its impact were investigated.

## Literature Review

Creativity and creative thinking are an integral part of human life. Creativity is as old as human history. Mankind has exhibited many examples of creativity in social life in technology, which is the reflection of science and science in daily life. "Creativity" has been handled in a multifaceted way since the 1950s (Öncü, 2003; Öno1, 2013). According to Bessis and Jaqui (1973), creativity is giving new identities to old ideas and making new synthesis from known ones. According to Torrance & Goff (1989), creativity as a personality trait is to go out of the mold, to be open to innovations, not hesitate to try different ways, to try new and different solutions, to produce original ideas. Creativity as a product is an invention, a scientific theory, an improved product, a literary work, a new design. At the core of creativity is to consider existing things from a new perspective. Creativity manifests itself

in every phase of an individual's life. According to Argun (2012), creativity, which expresses both emotional and intellectual life, becomes a lifestyle with encouragement and guidance. Creativity provides many benefits to both the individual and the society (Runco, 2004). Creative thinking is a way of thinking that reveals creativity and requires going beyond existing thought patterns. According to Torrance & Goff (1989), creative thinking is being sensitive to problems, producing a large number of ideas and associations, producing unusual and rare ideas, perceiving or describing a different way. According to Kale (1994), creative thinking is a way of thinking that includes thinking processes such as intuitively grasping, constructing, asking questions, analyzing and synthesizing, solving problems, criticizing, producing original solutions and information. Different ways of thinking are used in creative thinking. According to Akçam (2007), it becomes inevitable to go beyond the normal thought patterns in order to solve the problems encountered in daily life.

Problem(s) are difficulties that we encounter in every aspect of life, especially in daily life, and that need to be solved. The problem is a situation of difficulty with new and unknown aspects for the individual, and at the same time, it is a phenomenon that takes place in the learning process. According to Bingham (1998), the problem is the obstacle that confronts a person's current forces gathered in order to reach the desired goal. According to Morgan (2015), a problem is a conflict situation in which an individual is prevented from reaching a goal. Problems can be long-term, short-term, simple or complex. We have to solve the problems we encounter in our daily lives. Problem solving covers all areas of life. Problem solving, first of all, includes a series of efforts to eliminate the difficulties encountered in order to achieve a certain goal. According to Heppner & Petersen (1982), problem solving is a process that includes cognitive, affective and behavioral processes. According to Morgan (2015), problem solving is finding the best way to overcome the obstacle encountered. Problem solving is one of the most decisive factors in the process of being an individual and coping with problems. From the moment the individual encounters a problem, he or she starts to take initiative(s) to solve the problem. The individual continues to engage in problem-solving attempt(s) with different solutions as the result of the problem-solving attempt(s) emerges. Solutions to the problem(s) vary according to the type and complexity of the problem. Problem solving is a learnable skill. According to Larkin et al. (1980), students can learn to solve problems.

Creative problem solving is an approach that uses critical and analytical thinking together with creative thinking in solving the problem(s) (Özkök, 2005; Önel, 2013). According to Mitchell & Kowalik (1999), creative problem solving enables individuals to redefine the problems they face, generate new solution ideas and act on new solution ideas. According to Isaksen et al. (2011), creative problem solving is a methodological framework that increases the possibility of increasing creative performance, overcoming obstacles, reaching goals and helping problem solving by using creativity. Creative problem solving started with the brainstorming technique that Alex Osborn introduced in the 1930s. Creative problem solving has been developed through various researches. Creative problem solving consists of several stages. According to Mumford et al. (1991), creative problem solving consists of eight stages: problem structuring, information coding, category search, category selection, category combination, reorganization, evaluation of ideas, implementation of the solution, and monitoring. According to Proctor (2015), creative problem solving is finding the object (defining the problem area), finding the truth (gathering information), finding the problem (defining the problem correctly), finding an idea (developing the solutions in the problem), finding a solution (evaluating all possible solutions). and making choices among them) and finding acceptance (applying the chosen ideas correctly).

Creative problem-solving skills can be gained to the individual(s) through education. With the renewed education programs, it is aimed to provide students with creative problem solving skills.

Studies show that with education, the individual(s) can acquire creative problem-solving skills, and the individual(s) can solve the problem(s) he/she may encounter by using this skill, the creative problem-solving skill gained by the individual through education is effective in solving real-life problems (Cramond et al., 1990). According to Shack (1993), both gifted and normally talented students can learn and use creative problem-solving skills effectively. Proctor (2001) stated that creative problem-solving skills affect students' personal creativity characteristics positively. According to Özkök, students gained creative problem-solving skills by integrating knowledge from various disciplines within the framework of the relevant theme (2005). Creative problem-solving activities positively affect students' scientific process skills and academic success (Önol, 2013). Digital storytelling activities improve students' creative problem-solving skills (Yılmaz & Çelik, 2020).

In English education, students will be able to learn English more easily and permanently with the creative problem-solving activities carried out by their teachers. Instead of memorizing patterns, transferring information and loading non-functional information, English teachers are expected to apply creative problem-solving activities that students enjoy learning and are happy with the views of English teachers on creative problem solving and its impact are worth investigating. In this study, the views of English teachers on creative problem solving and its impact were investigated. In line with this purpose, answers to the following questions were sought.

1. What are the views of English teachers working in public schools about creative problem solving?
2. What are the opinions of English teachers about the effect of creative problem solving?

### **Method**

This research is qualitative research aimed at realistically investigating and understanding the past and present positions of social phenomena and events in their natural environment. The case study design from the qualitative research design was used.

### **Research Sample**

The study population of this research is English teachers working in public schools in Aydın province Nazilli district. In this study, criterion sampling method, one of the sampling methods, was used. In the criterion sampling method, the criteria are determined by the researcher beforehand and those who meet these criteria are taken into the sample (Marshall & Rossman, 2014). The criterion in the research; is an English teacher working in public schools.

The study group of this research consists of 10 English teachers working in public schools at primary and secondary education levels in the Nazilli district of Aydın province. The study group consists of 10 English teachers who teach in public primary schools, secondary schools, imam hatip secondary schools and high schools in the public institutions of Aydın province, Nazilli district in the second semester of the 2020-2021 academic year.

### **Research Instrument and Procedures**

Interview technique was used as data collection method in the research. In this study, a semi-structured "Interview Form" developed by Önol (2013) was used as a data collection tool. There are 5 main questions and sub-questions for each question in the interview form. The main and sub-questions in the semi-structured "Interview Form" are as follows:

1. Have you encountered any creative problem-solving activities before? a- If yes, what kind of problem-solving technique were these? b- In which grade did you encounter this activity? c- Was it different from the activities we did as a practice?
2. What are your thoughts on creative problem-solving activities? a- What are your positive/negative thoughts? b- Which of the creative problem-solving techniques did you like?
3. Has creative problem solving made any progress for you? a- What kind of changes did it create? b-What are the pros for you? c- Did it affect the problem-solving process? d-What kind of progress did it make for the English course?
4. How often would you like creative problem-solving activities to take place in the lessons? a-Which stage of the course would you like to take part in? b-Do you want to have a creative problem-solving activity in your English class?
5. Have you encountered a problem situation? How would you go about using the following items? Please order. a- I find the solution. I find complexity. I identify the real problem and causes. b- I find the solution. I identify solutions. I find appropriate acceptance.

In the second semester of the 2020-2021 academic year, data were collected with 10 English teachers teaching in public primary, secondary schools, imam hatip secondary schools and high schools in the Nazilli district of Aydın province. Before applying the semi-structured interview form, it was stated to the participating English teachers that it was on a voluntary basis. After obtaining the necessary permissions, the teachers were contacted before the interview and an appointment was made. Before the interview, video and audio recordings of the interviews were kept by obtaining permission for video audio recording a semi-structured interview form was applied to the study group. Online video calls were made with English teachers via Zoom.

### **Validity and Reliability**

In order to ensure the validity of the semi-structured interview form in the application of Zoom, maximum attention was paid to the selection of the participants on a voluntary basis and to avoid any guidance. The participants were provided with clear and unequivocal information about the purpose and method of the research and how the data collected from them would be used, and it was ensured that they gave correct answers without hesitation. In order to ensure the reliability of the semi-structured interview form, the interviews were recorded and the data were transferred to the computer environment. The analyzed audio recordings were dumped into a Word file and the obtained data were evaluated.

### **Data Analyzing**

The analysis of the research data was made with descriptive analysis. According to Yıldırım and Şimşek (2018), in descriptive analysis, a description is made by making one-to-one quotations by associating them with the themes, without changing the participant's expressions, and when necessary, some themes and relations between them can be revealed. The data obtained as a result of the interview made over Zoom has been presented in a descriptive way without any change. By re-reading the data, themes related to creative problem solving, which were discussed in the research, were formed based on the common points in the answers. While writing the opinions of the English teachers, coding was used and they were coded as English teachers (ES). The numbers used in coding indicate the order of the English teacher.

## Findings

In this study, the opinions of English teachers working in public schools on creative problem solving and its impact were investigated. In the research, the data were collected with the semi-structured "Interview Form" developed by Öno1 (2013). Descriptive analysis was used in the analysis of the data. The findings obtained by the analysis of the data were arranged according to the sub-problems.

### Findings relating to do first sub-problem

As the first sub-problem in the research, "What are the views of English teachers working in public schools about creative problem solving?" question has been addressed. In order to find answers to the first sub-problem, the 1st, 2nd and 4th questions in the interview form were asked to the English teachers selected for the study group and their answers were analyzed by descriptive analysis.

English teachers asked, "Have you encountered any creative problem-solving activities before? " The themes of "I came across it while I was studying at the university (5)", "In my first years of teaching (4)", "When our teachers did activities in high school (2)", "When I researched to find activity in the lesson (1)" were formed. ET1 explained the theme "I came across it while I was studying at the university" as follows:

*"I have never encountered creative problem solving activity directly and in such a variety before, but we used the brainstorming technique in the activities we did while we were studying at the university. "*

English teachers' "What are your thoughts on creative problem solving activities?" The themes of "useful (8)", "different (5)", "thoughtful (5)", "fun (5)", "difficult (4)", "loved problem solving (2)", respectively. was created. ET1 explained the "Useful" theme as follows:

*"At first it felt a bit boring and different. (...) It has positive effects. Lessons started to become more fun and thought-provoking. For example, I think the discussion parts are very useful for me."*

ET5 explained the "Useful" theme as follows:

*"Just as reading a book improves one's vocabulary, creative problem-solving activities also improve students in solving problems. I have students who say, "I am not afraid of problems, because it improves me". It is very good for students to think about problems in detail. I was never bored during the process of doing the activities. On the contrary, I can say that I had a lot of fun with the students. "*

"How often would you like creative problem-solving activities to take place in the lessons?" The themes of "I would like it to take place more often (9)", "I would like it to be at the beginning of the lesson (7)", "I would like it to be at the end of the lesson (5)", "we are already doing it (1)" were created regarding their views on the question. ET6 explained the theme "I wish it took place more often" as follows

*"I would like it mostly. It will be much better for us if our students use them, especially while the subject is being taught in the lesson. In fact, activities based on theoretical knowledge, but offer students the opportunity to be creative. I think it will be good for us."*

ET3 explained the theme of "I wish it took place more often" as follows:

*"I want every lesson. In my opinion, such activities make the lesson more instructive and memorable. Our students also become more creative by using these activities. In this way, the topics are easier to remember by the students and we teach them in a fun way."*

### **Findings relating to do second sub-problem**

As the second sub-problem in the research, "What are the opinions of English teachers about the effect of creative problem solving?" question has been addressed. In order to find answers to the second sub-problem, the 3rd and 5th questions in the interview form were asked to the English teachers selected for the study group, and their answers were analyzed and interpreted with descriptive analysis.

English teachers asked, "Did creative problem solving make any progress in you?" The themes of "developed positively (10)", "increased interest in the lesson (8)", "changed their views and attitudes towards English positively (7)" were formed. BC5 explained the theme of "Provided a positive development" as follows:

*"I learned how to solve the problems I encountered and how to teach my students. I saw that there are always English problem situations, that the problem is not just a numerical equation, it is actually not that difficult to understand what you read, complete the end, and make inferences, that is, it is solvable. Actually, there are easy solutions, but we couldn't see it. The problems we solved with the students were fun and easy. It was more useful in problem solving to reach a conclusion by making a lot of inferences and examining them."*

ET7 explained the theme of "Provided a positive development" as follows:

*"After these exercises, I became a more practical thinker. What we do are the things we encounter in our daily life. It is on the events that I come across that I can now think more easily. I saw that there could be solutions in a shorter way. (...) we thought and discussed the issues, we developed our creativity and our horizons. (...) It made the English lesson more fun. What we taught about creative problem solving helped students"*

English teachers asked, "Did you encounter a problem situation? How would you go about using the following items? The themes of "I find the solution, I find the complexity, I identify the real problem and the reasons (7)", "I find the solution, I determine the solutions, I find the appropriate acceptance (3)" were formed regarding their views on the question "Please list". ET8 explained the theme "I find the solution, I find the complexity, I identify the real problem and causes" as follows:

*"Creative problem solving activities should be in the order I find the solution, find the complexity, identify the real problem and the causes."*

ET10 explained the theme of "I find the solution, I find the complexity, I identify the real problem and the reasons"

*"I find the solution, I find the complexity, I identify the real problem and the reasons in order is more effective for problem solving in English class."*

### Conclusion, Discussion and Recommendations

English teachers working in public schools encountered creative problem solving in pre-service training. This finding can be interpreted as English teachers gaining knowledge and skills related to creative problem solving before they start teaching and can use them effectively in education. English teachers in public schools find creative problem solving useful and fun. This finding can be interpreted as English teachers' adopting the use of creative problem solving in education and making students enjoy the lesson. English teachers in public schools want to include creative problem solving more often. This finding can be interpreted as English teachers want to develop the creativity of students' potential through creative problem solving.

English teachers working in public schools are of the opinion that creative problem solving provides a positive development in their professional development. This finding can be interpreted as English teachers' creative problem solving can open new horizons for their professional development. English teachers working in public schools think that they use creative problem solving effectively in solving the problem(s) they encounter while doing their job. This finding can be interpreted as English teachers are competent in using creative problem solving while solving their professional problems.

Considering the research findings, according to the English teachers in the study group, creative problem-solving activities improve students' scientific process skills and success and make the lessons more effective and enjoyable. Creative problem-solving awareness and skills are gained to students through theoretical and practical training in English class. In addition, extra more time should be given to creative problem-solving activities as they positively affect students' attitudes towards the English lesson. These findings are consistent with the findings of Shack (1993), Özkök (2005), Önel (2013), and Yılmaz & Çelik (2020).

According to the results of the research, the English teachers in the study group encountered creative problem solving while they were studying at the university. She finds creative problem solving useful as it makes her English lesson fun and thought-provoking. He agrees that creative problem-solving activities should be included more frequently as they enable students to produce original solutions to problems in the English lesson and make the lesson fun. Based on the research findings, it can be suggested that English lessons should be based on creative problem-solving activities and more creative problem-solving techniques should be included.

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