

Teacher Opinions on the Use of Educational Games in Social Studies Course*

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Abstract

Current developments have led teachers to use different methods and techniques in their instruction processes. When it is considered that student-centred instruction methods and techniques are more effective, it is important to include methods and techniques that will make students more active and ensure their active participation in the instruction process. One of these techniques is educational games. The objective of this study is to obtain the views of social studies teachers about using educational games. This study used a qualitative approach. The study group consisted of 15 social studies teachers working in the secondary schools of Kars, Turkey. The data were collected with a semi-structured interview form prepared by the researchers. In order to explain the collected qualitative data and to determine the relationships, the explanatory and deductive codes that emerged during the analysis were used. Based on the data obtained, it was found out that the social studies teachers thought that educational games were a technique which provided a more permanent learning environment with fun. It was also determined that the social studies teachers believed that educational games should be entertaining, instructive, and suitable for students' levels and related to class topics and that using the educational game technique was beneficial for supporting the permanence of social studies instruction processes, active student participation, and strengthening the gained knowledge. Based on these results, the researchers recommended to improve educational games by deploying them in a more effective manner and including them more frequently.

Keywords: Social Studies Course, Educational Games, Teacher.

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INTRODUCTION

Within education approaches that are constantly changing and developing, in addition to active student participation, the permanence of an activity and the development of skills, such as completing an activity, group participation, cooperating, taking responsibility, following orders, communication, problem solving, and empathy, are important. One of the techniques that can ensure active student participation in the instruction process is the educational game technique.

The Educational Game technique can be defined as a tool which improves the self-expression skills of children, strengthens their connection to life through activities requiring the use of their physical and mental skills, reinforces their knowledge and affects their behaviour positively (Mercer et al., 2017; Ozdenk, 2007; Schumann, 2004).

A set of principles must be taken into consideration for the effective use of educational games. Educational games should (Gokalp, 2016; Mindivanlı Akdoğan & Bilgili, 2016; Yıldızlar, 2013):

- Have the qualities to serve the acquisitions of the course.
- Be suitable for the age, gender and general moral principles of students.
- Be applicable in classroom environments.
- Be organized and implemented according to the plan.
- Be instructive, educational and fun for students.
- Have the qualities to support the development of students in different fields.
- Have materials prepared in advance if required.
- Have rules.
- Not take too much time.
- Be interesting for students and encourage participation.

There have been many studies on the use of the educational game technique in the teaching process. In these studies, it was stated that the use of the technique in the teaching process established an interesting and attention-grabbing learning environment for students, had a positive effect on learning (Foster, 2004; Pollanen, Cater & Kang, 2015; Shi, 2003), developed students' skills towards different fields, improved their self-confidence and imagination, evoked positive emotions in children (Read, 2013, Yawker, 1999) and contributed to the development of social skills in students.

Educational game is a technique which attracts the attention of students at different ages from pre-school to graduate level and facilitates learning by making the instruction process entertaining; it can therefore be used in various classes. One of the classes that is suitable to apply the educational game technique is social studies. Since this class has subjects from life itself, it is easy to organise educational games with some of these topics. Based on this fact, it is believed that presenting social studies teachers' views about the educational game technique in detail will help explain the position of this technique in social studies teaching.

Objective of the Study

This study was conducted to identify the use of the educational game technique by social studies teachers in the instruction process. Accordingly, answers for the following topics were investigated:

- Knowledge and awareness for the educational game technique
- Self-sufficiency perception of the educational game technique

- Attitude towards the educational game technique
- Views for the application of the educational game technique

METHOD

Model of the Study

In this study which analyses the use of the educational game technique by social studies teachers in their instruction processes, qualitative methods were used where researchers actively participated to collect data in the natural classroom environment in a realistic and holistic manner which was either non-written or in oral form (Islamoglu, 2009; Robson, 2015; Yildirim & Simsek, 2008). The pattern of this study is a phenomenological pattern focusing on the phenomenon which exists but about which we lack a deep and detailed understanding. The phenomenon can occur in an event, experience, perception, tendency, concept, and situation (Yildirim & Simsek, 2008, p. 72). In the study, the phenomenon on which detailed information is desired to be obtained is social studies teachers' perception of educational game.

Study Group

The study group of the study was formed according to the case study group technique based on the selection of the people and groups to be researched on the purposeful sampling that allows in-depth study of the situations thought to have rich information (Islamoglu, 2009; Sonmez & Alacapinar, 2014). Information regarding social studies teachers as a study group are presented in the table below.

Table 1 Study Group

Gender	Seniority				Total
	0-5 years	6-10 years	11-15 years	More than 16 years	
Female	3	2	1	1	7
Male	1	1	3	3	8
Total	4	3	4	4	15

Among the social studies teachers, 7 were female and 8 were male. In terms of seniority, in the study group formed from social studies teachers, 4 were between 0-5, 3 were between 6-10, 4 were between 11-15 and 4 was above 16 years.

Data Collection Tools and Data Analyses

In order to be suitable for the objective of the study, the interview technique, which provides in-depth information about the research, was used by collecting the feelings and thoughts of the people subject to the study on a certain subject. (Buyukozturk et al., 2010; Sonmez & Alacapinar, 2014). The data were collected with a semi-structured interview form enabling individuals to freely react (Erkus, 2009) and re-adjust questions when necessary (Sonmez & Alacapinar, 2014).

The interview questions were prepared in an open, clear, and unguided way to uncover the emotions and opinions of the social studies teachers towards the educational game technique.

Afterwards, the opinions of 2 experts regarding the content validity of the questions were referred to and necessary corrections were made accordingly. Additionally, a pilot study was conducted to determine the clarity and comprehensibility of the expressions and their suitability for the group to be interviewed. 2 Social Studies teachers working in two different secondary schools in Kars during the second semester of the 2017-2018 academic year participated in the pilot study. The teachers were asked to fill out a 13-question semi-structured draft interview form. After receiving feedback from the teachers, the semi-structured interview form was put into practice without making

any changes. The form consisted of a total of 13 questions with 8 open-ended and 5 close-ended (questions 3, 4, 6, 7 and 8) questions.

The interview questions were categorized to identify the social studies teachers' information and awareness about the educational game technique and their self-sufficiency perceptions and attitudes and to collect their views regarding the application of the technique. The sub-problems of this study formed the main categories of the interview questions. The interview questions and the main categories (sub-problems) are given in Table 2.

Table 2 Interview questions and main categories

Main Categories	Interview Questions
Knowledge and awareness about the educational game technique	What does the educational game technique mean to you?
	What are the properties of educational game?
	Have you received any education on the educational game technique during your undergraduate education?
Self-sufficiency perception of the educational game technique	Do you think you are sufficient in the educational game technique?
	Is educational game technique education necessary during undergraduate education?
	What are the qualities that teachers should have for the educational game technique to be effective?
Attitude towards the educational game technique	Can the educational game technique be used in social studies course?
	Do you include the educational game technique in the teaching process?
	What are the benefits of the educational game technique in the teaching process?
Views about the application of the educational game technique	Which educational games do you use in the teaching process?
	Which factors do you consider when you are using the educational game technique in the teaching process?
	What type of problems do you experience in the teaching process when you use the educational game technique?
	What are your recommendations to achieve expected efficiency from the educational game technique in the teaching process?

Approximately 15- and 20-minute interviews were conducted in the teachers' rooms or in the deputy principal's room. During the interviews, an appropriate atmosphere was created for the teachers to answer comfortably. The teachers' answers during the interview were recorded with a recording device.

The obtained data were transcribed and analysed. In the data analysis, the Descriptive Analysis method, which includes the frequent use of direct quotations, was used to reflect the views of the participants conspicuously (Yildirim & Simşek, 2008). After the application, the answers of the teacher candidates to the open-ended questions were examined by the researchers and an outside expert separately.

In order to explain the collected qualitative data and to find the relationships, the explanatory and deductive codes that emerged during the analysis were used. For the reliability analysis of the study, the reliability formula suggested by Miles and Huberman (1994) was used.

$$\text{Reliability} = \text{Number of Agreements} / (\text{Total Number of Agreements} + \text{Disagreements}).$$

As a result of the calculation, the reliability of the study was calculated as 82%. Reliability calculations over 70% are considered to be reliable for a research (Miles and Huberman, 1994). This result obtained here was considered to be reliable for the research. The researchers tried to express common ideas on inconsistent data sections.

The codes and findings obtained in this study were presented without any comments and by direct quotations in way to be clear for readers. The teachers were coded as T1, T2, T3, T4...

FINDINGS

1. Social studies teachers' perception of the educational game technique

The social studies teachers' perception of the educational game technique is presented in the table below.

Table 3 Table for social studies teachers' perception of the educational game technique

Social studies teachers' perception of educational games	f
Activity that ensures permanence (T1, T3, T4, T11, T15)	5
Learning with entertainment (T5, T8, T10, T13, T14)	5
Teaching with game (T2, T9, T10, T11)	4
Activity that develops talents (T3, T5, T6, T15)	4
Activity that contributes personal development (T5, T6, T15)	3
Activity that helps attract attention (T5, T12)	2
Activity that decreases learning time (T8, T15)	2
Other* (T2, T5, T7, T9, T11)	7

*: competition, game card, activity that provides new learning, activity that develops problem solving skills, activity that develops self-expression skills, drama, activity that ensures reinforcement.

Social Studies teachers were asked what the educational game technique evoked to them. As seen from the table based on obtained answers, the social studies teachers mainly emphasised permanence, providing environment for learning with entertainment, and teaching with games. The examples of the social studies teachers' views are presented below:

“Educational games are played to increase permanence and effect of learning during class” (T1).

“*Educational* games an activity that helps self- and skill development of an individual. Educational games are beneficial for solving problems, learning with entertainment and attracting attention” (T5).

“Educational games and teaching or animating with game lead to permanence of curriculum and reinforcement of learning...” (T11).

“Self-development and better skill use of individuals. Permanence of education with repetition. They enable longer learning duration to be shorter for students” (T15).

2. Social studies teachers' views about properties that educational games should have

The social studies teachers' views about the properties that should be in educational games are presented in the table below.

Table 4 Table for social studies teachers' views about properties that educational games should have

Properties of educational game	f
Relevant with topic (T1, T2, T4, T5, T6, T8, T10, T13, T15)	9
Being instructive (T2, T5, T8, T12, T14, T15)	6
Being entertaining (T1, T2, T3, T8, T14)	5
Suitable for students' level (T5, T7, T10, T11, T15)	5
Economical in terms of time (T11, T13, T14)	3
Being related with life (T3, T7, T9)	3
Being attractive (T5, T12)	2
Ensuring class participation (T1, T15)	2
Being interesting (T3, T12)	2
Ensuring motivation (T9)	1
Enabling students' self-expression (T2)	1
Enabling socialisation (T10)	1
Being simple (T8)	1

The social studies teachers were asked about the properties in educational games. According to the table based on the collected answers, the social studies teachers believed that educational games should be related to the topic, instructive, entertaining, and suitable for students' level. The examples of the social studies teachers' views are presented below:

“Teach the topic to students, entertaining students while learning, students' self-expression...” (T2).

“Being related with life, being interesting, having entertainment elements...” (T3).

“Being simple, instructive, entertaining, suitable for topic...” (T8).

“Suitable with class acquisitions and children's age” (T10).

3. Social studies teachers' education on the educational game technique during undergraduate education

The social studies teachers' education on the educational game technique during undergraduate education are presented in the table below.

Table 5 Table for social studies teachers' education on the educational game technique

Education Situation related to Educational Games	f
Received (T1, T3, T4, T7, T9, T13)	6
Not received (T2, T5, T6, T8, T10, T11, T12, T14, T15)	9

The social studies teachers were asked whether they had education on the educational game technique during undergraduate education. When the table based on the collected answers was

analysed, it was seen that the majority of the social studies teachers did not receive education on the educational game technique. The examples of the social studies teachers' views are presented below:

“We talked about this subject in method and technique class rather than educational game class” (T1).

“During my pedagogical formation education, I was informed about educational games in teaching method and principles class (T15).

“Yes, I had social studies Teaching with Educational Games class” (T3).

“No, I didn't have” (T5).

4. Social studies teachers' self-sufficiency for the educational game technique

The social studies teachers' views about self-sufficiency for the educational game technique used in the teaching process are presented in the table below.

Table 6 Table for social studies teachers' self-sufficiency for the educational game technique

Self-sufficiency in the educational game technique	f
Sufficient (T3, T4, T5, T9, T13, T14)	6
Partially sufficient (T7, T8, T12, T15)	4
Insufficient (T1, T2, T6, T10, T11)	5

The social studies teachers were asked whether they found themselves proficient at the educational game technique. Based on these answers, although the number of the social studies teachers who consider themselves sufficient, partially sufficient and not sufficient are close to each other, most of the teachers consider themselves sufficient. The examples of the social studies teachers' views are presented below:

“I am not sufficient. I don't have much time since we have limited time to teach the curriculum” (T1).

“I am partially sufficient. I think I might have shortcomings” (T8).

“I am not since I don't have related education” (T11).

“ I don't see myself as sufficient” (T14).

5. Social studies teachers' views about the necessity of the educational game technique education during undergraduate education

The social studies teachers' views about the necessity of the educational game technique education during undergraduate education are presented in the table below.

Table 7 Social studies teachers' views about the necessity of the educational game technique education during undergraduate education

Necessity of education for the educational game technique	f
Necessary (T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15)	15
Not necessary	0

The social studies teachers were asked whether the educational game technique education was necessary during undergraduate education. Based on the table created with the obtained answers, all the social studies teachers expressed that they needed educational game technique education during undergraduate education. The examples of the social studies teachers' views are presented below:

“I think we need education. In this process, students' level and physical condition of class are important” (T1).

“Yes, it is necessary” (T3).

1. Social studies teachers' views about properties that teachers should have for the educational game technique to be effective

The social studies teachers' views about the properties that teachers should have for the educational game technique to be effective in the teaching process are given in the table below.

Table 8 Social studies teachers' views about properties that teachers should have for the educational game technique to be effective

Properties teachers should have	f
Considering students' level (T3, T8, T12, T15)	4
Good command of topic (T2, T11, T13)	3
Class control (T2, T14)	2
Knowing student (T11, T15)	2
Forming empathy (T3, T8)	2
Other* (T1, T2, T9, T14)	4

*: being leader, creative, guiding, occupational sufficiency.

The social studies teachers were asked what properties teachers should have to effectively teach with educational games. The majority of the social studies teachers expressed that teachers should consider students' level, have command of the topic, and ensure class control for effective educational games. The examples of the social studies teachers' views are presented below:

“Good command of topic, have creative ideas. At the same time, teacher should control the class during games” (T2).

“Fit students' level, form empathy” (T3).

“Have command on topic, know students” (T11).

“Class control and occupational competence” (T14).

6. Views of social studies teachers about including the educational game technique in the teaching process

All the social studies teachers expressed that the educational game technique could be used in the teaching process. The social studies teachers' views about including the educational game technique are presented in the table below.

Table 9 Views of social studies teachers about including the educational game technique in the teaching process

Reasons to include educational games in social studies course	f
Suitable for some topics (T1, T2, T3, T6, T7, T11, T12, T13, T14, T15)	10
Concretising abstract concepts (T2, T11)	2
Improving problem solving skills (T6, T11)	2
Increasing efficiency (T3)	1
Ensuring reinforcement (T5).”	1
Ensuring permanence (T5).”	1

The social studies teachers were asked whether educational games should be included in the teaching process. All the social studies teachers expressed that educational games could be included in the class. The reason for that was that some topics in social studies course are suitable for using educational games. Other than that, they expressed the value of educational games for the concretisation of abstract topics and improving students’ problem-solving skills. The examples of the social studies teachers’ views are presented below:

“It can be used in some social studies topics. Especially first age, natural resources of our country, population are more open to educational games. (T1).

“Since social studies topics are suitable for educational games and there are lots of abstract concepts, I believe that it can be used. I believe that educational games will be benefited for teaching abstract concepts” (T2).

“Yes, it can be used. I believe it can be beneficial for reinforcement. It makes information more permanent.” (T5).

“It could be suitable for some topics. This way, abstract learning is concretised or problem-solving skills to overcome future problems can be developed with educational games” (T11).

7. Use of the educational game technique by social studies teachers in the teaching process

All the social studies teachers expressed that they used the educational game technique in their teaching processes. The social studies teachers’ frequency on including the educational game technique are presented in the table below.

Table 10 Social studies teachers’ frequency of including the educational game technique in the teaching process

Frequency to include the educational game technique in social studies course	f
Sometimes (T1, T2, T4, T5, T6, T7, T8, T9, T10, T12, T13, T14, T15)	13
Frequently (T3)	1
Rarely (T11)	1

The social studies teachers were asked about frequency to include the use of the educational game technique in the teaching process. The majority of the social studies teachers expressed that they sometimes used the educational game technique in their teaching processes. The examples of the social studies teachers’ views are presented below:

“I can sometimes use it. Children love puzzle games. We do these types of activities” (T1).

“I can sometimes use it. But insufficient class hours and intense topics make educational games harder” (T2).

“Actually, it changes based on currency of topic. Since social studies course is suitable and it is from life, we are frequently using.” (T3).

“To be clear, I cannot use it that much due to insufficient class hours and intense curriculum. I rarely have educational games” (T11).

8. Benefits of the educational game technique in the teaching process

The social studies teachers’ views about the benefits of the use of the educational game technique in the teaching process are given in the table below.

Table 11 Views of social studies teachers about the benefits of the educational game technique in the teaching process

Benefits of the educational game technique in the teaching process	f
Permanent learning (T2, T3, T5, T9, T11, T12, T13, T14, T15)	9
Student participation (T2, T4, T10, T14, T15)	5
Reinforcement (T3, T5, T6, T11)	4
Learning with entertainment (T1, T3, T4)	3
Being interesting (T5, T8, T12)	3
Problem solving skills (T6, T11)	2
Motivation (T7, T14)	2
Instructive (T2, T10)	2
Discovering their own talents (T1, T11)	2
Moving away from rote learning (T2, T3)	2
Faster learning (T5, T15)	2
Other* (T3, T5, T6, T8, T11, T12, T13)	8

*: innovative perspective, relating events, time management, focusing, visual learning, cooperation, positive attitude, concretising

The social studies teachers were asked about the benefits of including the educational game technique in the teaching process. As seen from the table, the majority of the social studies teachers expressed that the educational game technique ensured permanent learning, student participation, reinforcement, learning with entertainment, and being interesting. The examples of the social Studies teachers’ views are presented below:

“Permanence, reinforces learning, adds innovation to students’ perspective, makes class entertaining, moves learning away from rote learning” (T3).

“Reinforced knowledge, knowledge becomes permanent. It is interesting. Children can link events. Shortens learning durations and ensures faster learning” (T5).

“Develops students’ problem solving and time management skills”(T6)

“It positively motivates children” (T7).

9. Social studies teachers’ educational games used in the teaching process

The social studies teachers’ educational games used in the teaching process are presented in the table below.

Table 12 Social studies teachers’ educational games used in the teaching process

Educational game types in teaching process	f
Animation (T2, T3, T12, T13, T14, T15)	6
Puzzle (T3, T6, T15)	3
Competition-based games (T2, T10, T15)	3
Who is she? (T1, T4, T15)	3
Tabu (T3, T15)	2
Concept matching games (T1, T6)	2
Card games (T13, T14)	2
Puzzle (T15)	1
Name-City (categories) (T14)	1
Chinese whispers (T10)	1
Word challenge (T10)	1
Wheel of fortune (T11)	1
What does it have? (T1)	1
Hot-cold (T1)	1
Computer games (T13)	1

The social studies teachers were asked which games they included most in the teaching process. The social studies teachers expressed that they used animation, puzzles, and competition-based games. Additionally, *Taboo*, *who am I*, *what does it have*, *hot-cold*, and *Chinese whispers* were also used. The examples of the social studies teachers’ views are presented below:

“Concept matching, who am I, what does it have? game, hot-cold game” (T1).

“Knowledge contest, Chinese whispers, word challenge” (T10).

“Card games, animation games, name-city (categories) games” (T14).

“Who am I? game, puzzle, tabu, contest games” (T15).

10. Things considered when using the educational game technique in the teaching process.

The social studies teachers’ views about the things considered in the educational game technique are presented in the table below.

Table 13 Things considered when using the educational game technique in the teaching process.

Things considered when using the educational game technique	f
Time management (T2, T6, T8, T10, T12, T14, T15)	7
Ensuring class participation (T1, T2, T4, T6, T8)	5
Explaining rules (T1, T2, T13, T14, T15)	5
Assessment after process (T3, T9, T12, T15)	4
Staying within the scope (T10, T11, T12, T14)	4
Activating students (T3, T5)	2
Guiding (T3, T10)	2
Cooperation (T7)	1

The social studies teachers were asked what they cared about when including the educational game technique in the teaching process. As it can be seen from the table, the social studies teachers mainly considered the time allocated for game, class participation, explanation of game rules, assessment at the end of the process, and staying within the scope. The examples of the social studies teachers' views are presented below:

“I explain the rules of the game. I am careful about time management. I ensure active student participation” (T2).

“I try to ensure class participation” (T4).

“I link the game with the topic to stay within purpose. I use time carefully. I make assessment at the end of the game” (T12).

“I explain the rules for a healthy game process. I try to use time effectively. I make assessment in the end” (T15).

11. Problems Experienced During the use of the Educational Game Technique

The social studies teachers' views about the problems experienced during the use of the educational game technique are presented in the table below.

Table 14 Social studies teachers' problems when using the educational game technique

Problems	f
Lack of class command (T1, T2, T3, T10, T14, T15)	5
Insufficient time (T9, T11, T12, T13)	4
Lack of students' interest (T4, T8)	2
Straying from scope (T10, T14)	2
Fitting problem (T13, T15)	2
Insufficient physical conditions (T12, T13)	2

The social studies teachers were asked what problems they experienced when using the educational game technique. As seen from the table, the social studies teachers expressed problems with class command and insufficient time for educational games. Additionally, the teachers experienced problems such as lack of student interest, straying from scope, fitting problems between

group members, and insufficient class conditions. The examples of the social studies teachers' views are presented below:

“Time problems, problems between students in the same group, physical conditions and especially lack of technology” (T13).

“If we lose the topic, we can stray from purpose, class command can be a problem.” (T14).

“Some students do not want to participate since they are not interested.” (T4).

“Straying from purpose as students are carried away, class command problems.” (T10).

12. Recommendations to achieve desired efficiency from the educational game technique during the teaching process

The recommendations of the social studies teachers to achieve the desired efficiency from the educational game technique are presented in the table below.

Table 15 Recommendations of social studies teachers to achieve desired efficiency from the educational game technique during the teaching process

Recommendations	f
Increasing class hours (T1, T2, T4, T5, T9, T11, T12, T13)	8
Lighter curriculum (T1, T2, T9, T12, T13)	5
Teachers' education (T3, T6, T10)	3
Including games more (T5, T6)	2
Supporting cooperative learning (T7, T15)	2
Relevant game with topic (T7)	1
Adjustment of physical environment (T12)	1
Including educational games in book (T14)	1
Games suitable for students' level (T15)	1
Ensuring class management (T15)	1

The social studies teachers were asked what kind of recommendations they could give to achieve efficiency in the educational game technique in the teaching process. As seen from the table, the majority of the social studies teachers recommended increasing class hours and following lighter curriculum. The examples of the social studies teachers' views are presented below:

“If we had a lighter curriculum, it would be great. We need to finish all the topics because of scholarship exams and LGS (High-school entrance exam). Since we have limited class hours, we are having problems to allocate time for educational games” (T1).

“Our class hours should be increased. Physical environment should be designed in a suitable way. The curriculum needs to be lighter to fit students' levels” (T12).

“Educational game examples should be included in books” (T14).

“Students' levels should be considered. Class management should be ensured in games. We should try to prevent disorders. Students should gain cooperative learning. Students should help each other and act with cooperation and unity during game.” (T15).

RESULTS AND DISCUSSIONS

In this study conducted to determine social studies teachers' use of educational games during the teaching process, following results were found based on the obtained findings:

1. Results and discussions about knowledge and awareness of social studies teachers regarding the educational game technique in the teaching process

In the first sub-problem of this study, social studies teachers' knowledge and awareness about the educational game technique in the teaching process were analysed. The first question for this sub-problem was what the educational game technique expressed for them. The majority of the social studies teachers provided answers that met the content and benefits of the technique. Educational games were defined as games which reinforced the learned knowledge and repeated this knowledge in a more comfortable environment (Demirel, 2005), created pleasure and joy in children, developed love, respect, friendship and helping (Ya-pa seminar, 1991), and enabled children to learn with experience (Akandere, 2012). Accordingly, it can be stated that the social studies teachers had an awareness about the educational game technique.

The second question for this sub-problem was what properties were needed for effective educational games. Sonmez (2010) expressed the properties of educational games as a) having properties to gain objectives, b) compliant with age and social rules, c) venue selection based on game properties, d) good timing, e) preventing harmful behaviours in students, and f) having both instructive and entertaining aspects. Additionally, it was stated that not being parallel to the curriculum caused students' attention to stray from the topic (Altinbulak, Emir & Avci, 2006). In this sense, it is possible to say that the social studies teachers had knowledge and awareness about what properties were needed for effective educational games.

The third question for this sub-problem was whether social studies teachers had educational game technique education during undergraduate education. The majority of the social studies teachers had education on the educational game technique during undergraduate education, although social studies "Teaching with Educational Games" class was usually an elective class in the certain departments of certain education faculties. Additionally, the educational game technique was included in teaching principle and methods class and special teaching methods class. The teachers expressed that they did not receive any education about the educational game technique because using this technique was not provided as a separate class and they did not therefore learn this technique in teaching principles and methods class or could not even remember this technique even if they had education about it.

2. Results and discussions about self-awareness of social studies teachers about the educational game technique in the teaching process

In the second sub-problem of this study, the purpose was to determine the self-sufficiency perception of social studies teachers regarding the educational game technique in their teaching processes.

The first question in this sub-problem was whether social studies teachers found themselves sufficient in the educational game technique. It was found that the number of the social studies teachers with sufficient, partially sufficient, or insufficient ability with the educational game technique was similar. It is believed that reasons for the social studies teachers' sufficient, partially sufficient, and insufficient views about the educational game technique were related to not having information for the educational game technique during their undergraduate education. Within this sub-problem, the social studies teachers were asked whether they needed education for the educational game technique in undergraduate education. All the teachers stated that they needed education for the educational game technique. Tortop & Ocak (2010) analysed class teachers' views about the application of educational games and found that 56.3% of class teachers had sufficient knowledge and skill for education with games. Ozyurek & Cavus (2016) stated that teachers expressed that they were

sufficient to use games as a teaching method and needed knowledge to use this technique more effectively. Akcanca & Somen (2018) found that prospective Science and social studies teachers believed in the educational game technique-related classes they had taken during undergraduate education. It can be considered that, by providing educational game technique education during undergraduate education, prospective teachers can see themselves as more sufficient in this field.

The social studies teachers were asked what teachers should do for educational games to be more effective in the teaching process. The social studies teachers expressed that teachers should consider students' level, have a good command on subject, have class control, know students well, show empathy, and have occupational competence for the educational game technique to be more effective. Teachers' creative ideas can increase educational game versatility in the teaching process. Pehlivan (1997) expressed that teachers' watching education level and occupational streams were effective to develop information and that skills about games and occupational seniority could be effective for planning and executing game activities. Teachers can have certain roles in class to increase the effectiveness of the educational game technique. When using the educational game technique, teachers structure and organise games, act as a guide for students, serve as a referee when needed, and sustain games with order (Gozutok, 2000). Additionally, teachers must always control the game and show interest to the game (Demirel, 2015). In this sense, teachers should be guides to students in order to enjoy the process and ensure complete class participation in educational games.

3. Results and discussions about attitudes of social studies teachers towards the educational game technique in the teaching process

The third sub-problem of this study was to determine the attitudes of social studies teachers towards the educational technique application in the teaching process. Accordingly, the social studies teachers were asked whether the educational game technique could be used in social studies course. All the social studies teachers expressed that educational game technique could be used in the social studies teaching process. When the reasons were asked, the teachers expressed that some topics in social studies course were suitable for the educational game technique. Ozyurek & Cavus (2016) found that educational games should be used in teaching since these games ensure permanence and learning with entertainment and prevent students from getting bored. Social studies course has content from all aspects of life. For teachers to avoid teaching with traditional methods and to move away from rote learning, the educational game technique can be used in social studies course teaching. This way, teaching activities can be effective with various games (Pehlivan, 1997).

The second question for this sub-problem was whether social studies teachers included the educational game technique in the teaching process. All the social studies teachers expressed that they used the educational game technique in the teaching process. It is clear that the most effective and permanent learning can be ensured with participation in the teaching process (Cetinkaya & Gulmez, 2002). The educational game technique is an effective tool for students to be active in the teaching process. Additionally, using educational games in social studies teachers can reinforce and ensure permanence and concretise abstract concepts in the class. Pehlivan (1997) stated that educational games could be used in concept and principle teaching. Kirbas & Koparan Girgin (2018) expressed that all teachers stated that the educational game technique enabled students to express themselves, take responsibility, communicate, socialise and teach abstract concepts and increase success and motivation. Similarly, Ozyurek & Cavus (2016) showed that teachers included educational games in the teaching process because these games ensured permanence, class participation, and decreased boredom. The majority of the social studies teachers expressed that they used the educational game technique as frequently as "sometimes". The reasons for this were related to low class hours and the intense curriculum. Yet, using educational games in social studies course can greatly contribute to the realisation of class requirements. However, it is hard to find or design games that suit every topic in social studies course. However, there are games to reinforce, repeat, and correct incorrect learning in class (Yesilkaya, 2013).

The last question for the third sub-problem was about the benefits of the educational game technique. The obtained findings show that there are benefits such as permanent learning, student

participation, reinforcement, entertaining learning environment, being interesting, improving students' problem solving skills, motivation, instructive, self-realization of skills, less rote learning, shorter learning duration, concretization of abstract information, and development of cooperation between students. Different studies found similar results. It is believed that using the educational game technique is related to the fact that it is interesting and entertaining (Acikgoz, 2002; Altinbulak, Emir & Avci, 2006; Altunay, 2004; Foster, 2004; Ozdemir, 2006; Ozyurek & Cavus, 2016; Pollanen, Cater & Kang, 2015; Senemoglu, Gomleksiz & Ustundag, 2001; Shi, 2003). It also ensures learning social rules and acting in a cooperative way (Akandere, 2012; Coban & Nacar, 2008; Gunes, 2015; Ozdemir, 2006; Ozer, Gurkan & Ramazanoglu, 2006), students' active class participation (Altinbulak, Emir & Avci, 2006; Altunay, 2004; Gunes, 2015; Romine, 2004), permanent learning (Altunay, 2004; Ozdemir, 2006; Ozyurek & Cavus, 2016), motivation (Acikgoz, 2002; Kaya & Elgun, 2015, Read, 2013; Romine, 2004), learning with self-experience (Akandere, 2012), development of students' skills (Karabacak, 1996; Kocyigit, Tugluk & Kok, 2007), and positive effect on learning (Acikgoz, 2002; Akandere, 2012; Altinbulak, Emir & Avci, 2006; Altunay, 2004; Kaya & Elgun, 2015; Senemoglu, Gomleksiz & Ustundag, 2001). When these gains are considered, it is believed that the educational game technique enabling students' class participation in a comfortable environment and enjoyable manner should be included more in the teaching process.

4. Results and discussions about views of social studies teachers regarding the educational game technique in the teaching process

The fourth sub-problem of this study was to determine the views of social studies teachers about the educational technique application in the teaching process. Accordingly, the social studies teachers were asked which games they included most in the teaching process. The social studies teachers expressed that they included games such as animation, puzzle, competition-based games, who am I, taboo and card games. Sonmez (2010) gave educational game examples as card games, puzzles, riddles, polarisation, what do you have, recognize object by hand, and find the match games. Gozutok (2000) expressed that competition-based games should be included in educational games to help students reach learning objectives. Kirbas & Koparan Girgin (2018) stated that teachers mainly used creative drama and games that developed attention, team games and word games. In this study, it can be seen that the teachers included similar games. Since these games keep children's attention active and help them develop strategies, these games have a supportive effect on learning activities.

The second question to the social studies teachers was what they cared about when including the educational game technique use in the teaching process. The majority of the social studies teachers expressed that they cared about effective time use, class participation, explanation of game rules, assessment at the end of the process, and not straying from purpose when using the educational game techniques. Kirbas & Koparan Girgin (2018) stated that, when current opportunities and students' age level were considered, games that had affordable time and ensured participation should be selected. Ensuring participation when using the educational game technique can decrease class control problems and keep students active to create an entertaining learning environment. Class participation can be achieved by trying the game by teacher or voluntary students and sustaining this in turns (Kocyigit et al., 2007). Sel (1986) expressed that rules should be announced to students before the educational game. When rules are understood by every student, the educational game technique can be applied in a healthy manner. Assessment after the educational game technique is important to determine whether this technique serves the purpose. Guven & Ozerbas (2016) stated that discussion and evaluation could be beneficial for all students at the end of games based on purpose of the class and subject for feedback. Ilhan (2006) stated that assessment at the end of process should emphasize the game's purpose.

The third question to the social studies teachers concerned what problems they faced while using the educational game technique in the teaching process. The social studies teachers' main problems were class control and lack of time. Sel (1986) expressed the main problem in the use of the educational game technique as discipline, especially with stopping or intervening in the game with discipline when there is problem. Kirbas & Koparan Girgin (2018) found problems such as teachers not enabling complete student participation and the negative impact of students' physical or spiritual

properties on a game. Additionally, studies found problems such as crowded classes, insufficient material and activity environment, insufficient game time, and game's entertainment precluding the educational value (Can & Cava, 2018; Can & Yildirim, 2017; Lim, Nonis & Hedberg, 2006; Tuzun, 2007). It is believed that the basis for problems experienced during the application of the educational game technique are excessively hard or easy educational games, not having an entertainment element, not motivating students, unclear rules, not being interesting, and not providing interaction between students that require cooperation. To eliminate or minimize these problems, games should be planned and applied with care.

The social studies teachers were asked for recommendations that they could give to achieve efficient educational games in the teaching process. The majority of the social studies teachers recommended to increase the hours of social studies courses and to create a lighter curriculum. Social studies teachers cannot allocate sufficient time to educational games due to intense curriculum and insufficient class time. Additionally, they recommended to educate teachers on the educational game technique and how to support cooperative learning. Gunes (2015) stated that, in order to effectively benefit from educational games, teachers needed serious preparation and should select games that matched class purpose and students' levels.

SUGGESTIONS

1. It was found that the majority of the teachers did not have undergraduate education on the educational game technique. In this sense, in Social Studies Teaching departments, Social Studies Teaching with Educational Games could be an elective class.

2. Educational game teaching techniques should be included in teaching principles and methods and special teaching methods classes. Prospective teachers should have opportunities to apply these techniques and thus gain more information and experience about these techniques.

3. Within teaching application classes, prospective teachers in application schools should be asked to use the educational game technique that are different from traditional methods.

4. Teachers should have in-service education on the educational game technique.

5. To enable social studies teachers to include the educational game technique more in their teaching processes, social studies course curriculums should become lighter and weekly class hours should be increased.

6. To include educational games in social studies courses in digital environments, the Ministry of National Education should design and offer digital educational games.

7. When educational games that will be used in the teaching process are designed, game duration, physical conditions of the classroom, easy supply of materials, and matching students' levels should be considered.

8. If educational games attracts students' attention, rules are clearly and openly set, and all students can participate, this can help minimize in-class problems.

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