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# The Study on Competencies of Prospective Teachers of Social Studies to Use Controversial Issues in Teaching

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#### **Abstract**

This study examines prospective social studies teachers' competencies to use controversial issues in social studies. 45 prospective social studies teachers participated in the study using convergent parallel design. The data were collected through a competence scale developed by the researcher and the lesson plans prepared by the prospective teachers. The quantitative data were analysed through descriptive statistics such as frequency, percentage, and arithmetic average, as well as the independent samples t-test. The thematic analysis was used for the analysis of qualitative data. It was found that the prospective teachers think that they are competent at intermediate levels for teaching controversial issues in social studies classes. The results based on the analysis of the lesson plans reveal that prospective teachers can identify a wide range of learning outcomes and controversial topics in compliance with the curriculum; however, they address these subjects with a contentbased approach. It was further determined that a limited number of prospective teachers create contexts in which different opinions are expressed by building scenarios that contain dilemmas for the students; that the questions they make use of, are insufficient in terms of quality, although they include the questions regarding argumentation processes in their lesson plans and that most of the participants failed to develop a net assessment and evaluation strategy for the assessment of teaching of controversial issues. The study results reveal that prospective teachers' competencies must be improved, especially regarding the teaching process of controversial issues.

**Keywords:** Social studies, prospective teachers, controversial issues.

#### Introduction

Today, one of the most fundamental tasks of schools is to educate students as active, participatory and enquiring individuals about the problems they may encounter in real life (Oxfam, 2006; Yazıcı & Seçgin, 2010). In this sense, social studies education aims to develop individuals' abilities to make informed and logical decisions as active citizens (National Council for Social Studies [NCSS], 1994). This is because effective citizens should be able to face social problems that are becoming increasingly complex and have different dimensions, negotiate them and make the right decisions (Oulton et al., 2004). These problems, which often concern large social masses, cause people in society to disagree, and individuals make explanations and produce solutions according to their own value judgements (Stradling, 1984). Therefore, using these controversial or conflictual issues in social studies teaching is necessary to gain effective citizenship competencies (Ersoy, 2010, 2013; Hess, 2002).

Controversial issues include issues that are based on different views, interests and beliefs in economic, religious, political, moral, and social areas that concern the whole society (Oulton et al., 2004). They are issues that are suitable for individuals to form opposite points of view and cover logical disagreements (Levinson, 2008). A controversial issue can be considered controversial if logical, but different ideas can be put forward about a topic and cannot be resolved based on evidence (Dearden, 1981; Wellington, 1986). Unlike normal daily discussions, controversial issues are about recognised uncertainty and disagreement (Nicholls & Nelson, 1992). They have disagreeing advocates, opposing sides (Bailey, 1975) and answers that may not be clear or specific. Although whether a issue is controversial or not varies largely contextually (Chikoko et al., 2011), issues such as nuclear energy, euthanasia, wars, arms policies, population control, women's rights, genetically modified crops, cloning, migration, refugees, freedom of the press, terrorism, global warming (Baki Pala, 2019; Dube, 2009; Hess, 2004; Kuş and Öztürk, 2019), as well as socio-scientific issues and some historical issues in the past of each society (Baki Pala, 2019) can be considered controversial. Teachers can include these controversial

topics in their classes within the framework of the structure and content of the courses and the outcomes in the curricula.

While selecting the relevant topics in the teaching process of controversial issues, it need to pay attention to the interests and readiness levels of the students and that the argumentative topic matches up with the content of the curriculum. On the other hand, it is generally essential to identify the discussion rules beforehand, inform the students and ensure that they have knowledge about the same. Moreover, with respect to the issue, it is required to focus on the topic rather than the persons and establish a democratic classroom environment. The data and scientific responses used in the discussion are reliable and proven, which is also extremely important (Oulton et al., 2004; Payne & Gainey, 2000). As a concrete strategy, informal reasoning, frequently used for teaching controversial and socioscientific issues, may be pressed into service (Sadler, 2003; Sadler & Zeidler, 2005). The efficient use of the steps and stages based on argumentation processes enables students' reasoning skills to develop.

One of the most important reasons for using controversial topics in lessons can be explained by their contribution to developing critical thinking skills (Harwood & Hahn, 1990; Ikuenobe, 2001) based on reasoning and discussion. Controversial issues develop students' information-processing skills by enabling them to collect, sort, classify, classify, compare and make connections between information. It supports students' reasoning skills by allowing them to justify their views, make inferences, and use evidence to support their decisions. It develops students' reasoning skills as it enables them to evaluate what they read, learn to examine and compare the opinions of others and their own, not accept the information presented as it is and trust their own judgements (Oxfam, 2006). It also has benefits such as developing a culture of discussion, cooperation and problem-solving skills, communication skills with society and the environment, and creating a real-life-based and meaningful learning environment (Berg et al., 2003).

Controversial issues are essential in citizenship education (NCSS, 1992) because they prepare students for the roles of democratic and effective citizen with the skills and values they provide (Ersoy, 2013; Gereluk, 2012; Harwood & Hahn, 1990; Noddings & Brooks, 2017). Effective citizens are expected to have critical thinking skills, prepare for their democratic social roles, form interests and attitudes towards being effective citizens, and learn how to become democratic individuals (Asimeng Boahene, 2007; Harwood & Hahn, 1990). Also, the characteristics of today's democratic citizens can be listed as active, responsible, egalitarian, social justice, aware of their responsibilities and sensitive to differences (Gözübüyük Tamer, 2011; Hablemitoğlu & Özmete, 2012; Pharcharuen, 2019). In this context, the controversial issues enable the development of important democratic values such as respect for differences and equality through moral reasoning (Berg et al., 2003; Harwood & Hahn, 1990). Moreover, today, citizens must bring qualified opinions and solutions to global developments and national or international political, social and cultural problems. Controversial issues enable students to develop these competencies through experiences (Seçgin, 2009; Walsh, 1998). Therefore, controversial issues have started to have an essential place in educational environments and educational research.

There is an increasing interest in controversial issues at the international level. Similarly, although there has been an increasing interest in Türkiye in recent years, studies on controversial issues are limited. It can be said that the related studies are mostly carried out within the framework of the concept of socioscientific issues in science education. Socioscientific problems are controversial current problems that arise as a result of developments in the field of science and technology, have individual,

social, political, economic, ethical and moral dimensions, and on which no consensus has been reached (Sadler, 2004). Due to its science and technology dimension, it is separated from general controversial issues and is associated with science courses. However, some controversial issues have the characteristics of socio-scientific issues. Controversial issues are more associated with social studies. In this context, researchers often present studies that determine the knowledge, attitudes and opinions of teachers and prospective teachers about socioscientific issues, improve the teaching of the related issues in science classes, understand the relationship between socioscientific issues and cognitive skills, and reasoning processes in socioscientific issues (i.e. Cebesoy & Dönmez Sahin, 2013; Evren Yapıcıoğlu & Kaptan, 2017; Gülhan, 2013; Gürbüzkol & Bakırcı, 2020; Özkul, 2022; Topçu, 2008; Topçu et al., 2011). The related studies are more in science education because socioscientific issues have taken place a concrete place in science education curricula, especially with the 2013 curriculum (Tatar & Adıgüzel, 2019). The studies in the field of social studies education, mostly aimed at determining the perceptions, attitudes and opinions of prospective teachers of social studies and history (Alagöz, 2014; Aynuz, 2020; Baloğlu Uğurlu & Doğan, 2016; Çepni & Geçit, 2020; Seçgin, 2019; Özüdoğru, 2022), teachers (Çopur, 2015; Günal & Kaya, 2016; Öztürk, 2017; Tuncer, 2018), and students (Arslan, 2019; Öztürk, 2022) regarding the controversial issues and the teaching of these topics. There are also some limited studies examining controversial issues in curricula (Tatar, 2018) and textbooks (Kirkit, 2021) and aiming to develop teacher competencies related to controversial issues (Avaroğulları, 2015). Studies on improving the use of controversial topics in social studies (Baki Pala, 2020; Özcan, 2021) are new and limited.

In the literature, there are studies conducted with prospective social studies teachers regarding the teaching of controversial issues (e.g. Aynuz & Memisoğlu, 2022; Baloğlu Uğurlu & Doğan, 2016; Çepni & Geçit, 2020; Ersoy, 2010, 2013; Sarı, 2019). As mentioned before, the studies mostly include attitudes and opinions towards the teaching of controversial isues. Research results have shown that prospective teachers have high levels of positive attitudes towards the inclusion of controversial issues in lessons (Çepni, 2019; Özü Doğru, 2022; Sarı, 2019; Seçgin, 2009). Similarly, it was determined that prospective social studies teachers have positive views on the inclusion of controversial issues in the educational environment (Aynuzu & Memişoğlu, 2022; Baloğlu Uğurlu & Doğan, 2016; Seçgin, 2009; Tuncer, 2018; Yazıcı & Seçgin, 2010). According to prospective teachers, controversial issues provide students with different perspectives, a wide range of skills and values (e.g. critical thinking, selfexpression, problem solving, respect for different ideas, sensitivity and tolerance). In addition, controversial issues are important for effective citizenship competencies. The using in classes increases the permanence of knowledge (Aynuzu & Memişoğlu, 2022; Baloğlu Uğurlu & Doğan, 2016; Yazıcı & Seçgin, 2010). In some studies conducted with prospective social studies teachers, controversial topics were tried to be determined. Accordingly, some topics such as economy, Armenian issue, education system, rights and freedoms, animal rights, freedom of the press, media, military service, Ottoman Empire and sultans are listed as important controversial issues (Aynuzu & Memişoğlu, 2022; Tuncer, 2018). In some studies, the problems and principles for teaching controversial issues were determined. In this context, according to prospective social studies teachers, a democratic environment, rules and impartiality, clear and understandable information, attracting the student's attention and encouraging discussion are important in teaching controversial issues (Aynuzu & Memişoğlu, 2022; Baloğlu Uğurlu & Doğan, 2016; Yazıcı & Seçgin, 2010). However, there are some important problems in teaching controversial issues. According to prospective teachers, exam-oriented education system, lack of time, family, society and administrator reaction, student-related problems are the main problems (Baloğlu Uğurlu & Doğan, 2016; Yazıcı & Seçkin, 2010). As can be seen, studies conducted with prospective social studies teachers are limited to the opinions. There is no study examining the competencies of prospective social studies teachers. Limited data has been obtained in studies on teachers and prospective teachers in different branches (e.g. Alaçam Akşit, 2011; Çepni & Geçit, 2020; Kuş, 2015). Research examining the competencies of social studies teachers or prospective teachers on controversial issues has been neglected. It is especially important to determine the competencies of prospective teachers in this regard. Because, studies can be conducted with prospective teachers according to their level of competence and teaching practices can be carried out on how they will use these subjects when they become teachers. In short, the deficiencies of pre-service teachers on this subject can be eliminated.

In Türkiye, it can be argued that there occurred an opportunity and obligation about the use of controversial issues in teaching social studies thanks to the Social Studies Teaching Curriculum implemented in 2018 by (Ministry of National Education [MoNE], 2018). In the program, it is emphasised that "the current and controversial issues regarding the acquisitions should be transferred to the classroom by making use of the different discussion technics, and associating the same with problem-solving, critical thinking, use of evidence, decision-making and study skills" (MoNE, 2018, p.10). In the studies conducted thereof, it is emphasised that the students state that their delivery of opinions about the controversial issues in social studies motivate them and thus, the lessons become more dynamic (Singer, 2003), and that the students tend to acquire much more information and experience thanks to controversial issues and develop cognitively to solve the uncertainties (Johnson et al., 2000). Furthermore, the students who are familiar with the controversial issues, are more likely to deliver their opinions as effective citizens when they encounter a controversial issue in society (Hess, 2002). The fundamental reason for the failure of many innovative projects is that the teachers implement the program in compliance with the developers' intentions of such programs. It is further concluded that many reform efforts in the recent past generally failed because the teachers disagreed due to their current knowledge, beliefs, and attitudes (Gray & Bryce, 2006). Therefore, the analysis of competencies of prospective social studies teachers, who will introduce this discussion process to the students, and examination of their pedagogical practices in controversial issues may be one of the ways of accomplishing effective discussion processes in social studies classrooms. One of the prerequisites of the successful implementation of a citizenship program is in close relation to how prepared the teachers are for teaching controversial issues (Oulton et al., 2004) For this reason, the study aims to examine the competencies of prospective teachers of social studies regarding the use of controversial issues in social studies classes. The following research questions are tried to be answered:

- 1. What are the competence perceptions of prospective social studies teachers with respect to the teaching of controversial issues?
- 2. Do the competence perceptions of prospective social studies teachers regarding the teaching of controversial issues differ significantly based on gender, academic success, and the success of social studies teaching?
- 3. What are the characteristics of the lesson plans prepared by the prospective social studies teachers about teaching controversial issues?

#### Method

#### **Research Design**

The study used a convergent parallel design among the mixed-method approaches. The objective of this design is to collect data which are different but that are complementary to each other regarding the research problem. Qualitative and quantitative data are collected simultaneously and analysed independently, and then the results are combined. It is useful when researchers want to verify, support or compare through quantitative and qualitative findings. The convergent parallel design gives equal priority to the qualitative and quantitative methods, separates these stages during the analysis and then combines the results while making generalisations (Creswell & Plano Clark, 2020).

#### **Study Group**

The study group of the research consists of 45 prospective teachers registered in Social Studies Teaching 2 lesson, who have training in the third grade in social studies teaching undergraduate program of a state university located in the west of Türkiye. 17 of the participants are male, and 38 of them are female. In the selection of the participants, criterion sampling (Yıldırım and Şimşek, 2018) is used, and the study is carried out with the prospective teachers who receive the lessons of Social Studies Teaching. In these lessons carried out by the researcher, the prospective teachers are informed about controversial issues and teaching of the same.

#### **Data Collection**

The quantitative data of the study were collected with the "Competence Scale for Teaching Controversial Issues". The response options to be given to the scale prepared in a 5-point Likert-type format are "I completely agree", "I agree", "I agree", "I am undecided", "I disagree", and "I strongly disagree". In the development process, the draft scale consisting of 25 items prepared in line with the literature review and expert opinions was applied to 250 prospective social studies teachers studying at different universities, and exploratory factor analysis was performed for construct validity. In this context, the Kaiser Meyer Olkin (KMO) coefficient was first calculated, and Barlett's sphericity test was performed. The results obtained (KMO=,92; X2=2266,365, sd=136, p=,000) showed that the data were suitable for factor analysis. As a result of the scree plot, the scale was considered to have a three-factor structure. The following criteria were used to determine the factor structure: (1) the scale items should not be overlapping, (2) item factor loadings should be .32 or above, and (3) the difference between item factor loadings should be at least 0.1 (Büyüköztürk, 2012). Within the framework of these criteria, the exploratory factor analysis was repeated by limiting the number of factors to three, and items that did not meet the criteria were removed from the scale. (Büyüköztürk, 2010). Exploratory factor analysis was repeated by limiting the number of factors to three, and items that did not meet the criteria were removed from the scale. The factor pattern obtained at the end of the analysis and the factor loading values of the items are given in Table 1.

As is seen in Table 1, the scale consists of three factors that stand for 44% of the total variance and 17 items in total. The loading values of the items vary between .47 and .85. Factor 1 (items 3,4,10,11,12,15,16) "teaching process", factor 2 (items 1,2,9,12,13,14,17) "field/content knowledge", and factor 3 (items 5,6,7,8) was called as "negative competence". It was concluded that the correlation coefficients between the total scores obtained from the scale and the sub-dimensions of the scale have a high level of positive relationship (r=.921, .925, .752; p<0.01). Furthermore, the relationship of the factors among themselves is also at a high level (r=.735, .614, .613; p<0.01). The absolute value of

correlation between 0.70-1.00, 0.69-0.30, and 0.29-0.00 is considered a high, medium, and low level of relationship, respectively. Finally, the internal consistency coefficient is calculated as .892, .873 and .756, respectively, for the first, second and third factors, and the internal consistency coefficient for the entire scale is calculated as .929. The values obtained indicate that this scale is a reliable assessment instrument.

Table 1. Factor design of competence scale for teaching controversial issues

Item No.	Factor 1	Factor 2	Factor 3	
10	.800			
11	.780			
4	.768			
12	.754			
3	.619			
16	.588			
15	.556			
14		.787		
1		.749		
9		.735		
17		.665		
2		.615		
13		.474		
7			.852	
5			.810	
8			.593	
6			.560	

The qualitative data were collected based on the lesson plans prepared by the prospective teachers. Following the training, the participants were asked to examine the 2018 Social Studies Curriculum, determine any learning outcome likely to be related to the controversial issues and prepare a lesson plan accordingly. Three of the lesson plans prepared by 45 prospective teachers who took part in the study were not included since they were not considered valid and reliable for making an analysis. As a result, 42 lesson plans were analysed.

#### **Data Analysis**

Initially, the Cronbach alfa coefficient was calculated for the analysis of the quantitative data about whether reliable data were collected for the sample group of the study. The reliability coefficient of the data gathered was identified as .89. Then, it was analysed to determine whether the scores displayed a normal distribution characteristic by calculating skewness and kurtosis values and through normality tests. It was observed that the skewness and kurtosis values calculated are between -1 and +1, and the values were considered acceptable. In addition, the compliance of the obtained scores with normality was tested with normality tests, and the Shapiro-Wilks test was used since the group size is smaller than 50. Since the calculated p-value (p=.53) was bigger than .05, it was agreed that the scores display normal distribution characteristics (Büyüköztürk, 2010), and it was determined that parametric statistical techniques could be used. In conclusion, the data were analysed by making use of arithmetic average, standard deviation, and independent samples t-tests in accordance with the objectives of the study. All statistical analyses were conducted using SPSS 15.0 packaged software, and the significance level was accepted as .05. The scores between 17-36 were considered "low", 36-59 were considered "medium" and 60-85 were considered "high."

A thematic analysis was conducted for the analysis of qualitative data (Braun & Clarke, 2006). Thematic analysis refers to the performance of the analysis process based on the similarities,

differences, and relations in a data set (Gibson & Brown, 2009; Willig, 2013). The following proceedings were monitored in the thematic analysis process: (i) identification of the data, (ii) formation of the initial codes, (iii) review and association of the codes, (iv) formation and review of the themes, (v) description of the themes, and (vi)writing the findings (Braun & Clarke, 2006; Saldaña, 2009). It was paid attention to the fact that the research process is objective and neutral so that credibility regarding the qualitative phase could be ensured, the sufficiency of the resources was tried to be ensured; the opinions of two experts were received for data analysis, the study was tried to be described in detail, and direct quotes regarding the themes were included frequently (Yıldırım & Şimşek, 2018).

#### **Ethical Permits of Research**

In this study, all the rules specified to be followed within the scope of "Higher Education Institutions Scientific Research and Publication Ethics Directive" were complied with. None of the actions specified under the heading "Actions Contrary to Scientific Research and Publication Ethics", which is the second part of the directive, have been taken.

#### **Ethics Committee Permission Information:**

Name of the committee that made the ethical evaluation = Kütahya Dumlupınar University Social Sciences Human Research Ethics Committee.

Date of ethical review decision = 02.06.2022

Ethics assessment document issue number= 117467

#### **Findings**

In this section of the study, the data obtained from the prospective teachers were presented in the context of qualitative and quantitative findings, and then they were interpreted in the discussion section by addressing the obtained findings together.

## **Prospective Teachers' Competence Perceptions on Teaching Controversial Issues** in Social Studies

As part of the sub-problems of the study, initially, the arithmetic mean and standard deviation were calculated regarding the scores which were obtained from the scale that was applied to determine the level of competence perceptions of the prospective teachers for the use of controversial issues in social studies teaching. The results are included in Table 2.

Table 2. The scale scores of the prospective teachers

N	Minimum Score	Maximum Score	$ar{\mathbf{X}}$	SS
45	38	72	57.05	6.89

As is seen in Table 2, the lowest score obtained from the scale by the prospective teachers is 38, and the highest score is 72. The standard deviation of the scores is 6.89, and the arithmetic average is 57.05. Based on this finding, it can be said that prospective teachers think they a medium level of competence in using controversial issues in social studies.

#### **Prospective Teachers' Competence Perceptions Regarding Variables**

In the study, it was analysed in compliance with the sub-goals whether the competence perceptions of the prospective teachers differ significantly based on gender, academic success, and

grade point average in the "Social Studies Teaching" course. The results of the independent samples t-test for gender variable are included in Table 3.

Table 3. *T-test results of the score of prospective teachers by gender* 

Gender	n	Χ̈	S	sd	t	р
Male	27	61.70	7.18	43	2.66	.01
Female	18	55.44	6.12			

The analysis results in Table 2 indicate that there is a significant difference between the scores of the prospective teachers based on gender, t(43)=2.66, \*p<.05. The competence perception of female prospective teachers is (61.70) higher than that of the male prospective teachers (55.44). Accordingly, it can be said that female prospective teachers feel themselves more competent than the males. The results of the independent samples t-test for the academic success variable are included in Table 4.

Table 4. T-test results of the score of prospective teachers by academic success

Academic Success	n	Χ̄	S	sd	t	р
2.99 and below	20	55.85	7.05	42	6.1	
3.00 and above	25	57.39	7.01	43	.64	.52

According to Table 4, the competence perception scores of prospective teachers with a general grade point average of 3.00 and above are slightly higher. However, this difference is not statistically significant, t(43)=.64, p>.05. In other words, academic success does not significantly impact the competence perception of prospective teachers to to teach of controversial issues in social studies. The results of the independent samples t-test for the variable regarding the grade point average in the "Social Studies Teaching" course are included in Table 5.

Table 5. T-test results of the score of prospective teachers by grade average point of the Social Studies Teaching course

Grade Average Point	N	$\bar{\mathbf{X}}$	S	Sd	t	р
69 and below	22	56.66	7.33	43	21	75
70 and above	23	57.38	6.65	43	.31	./5

According to Table 5, the competence perception scores of the prospective teachers with a grade average point of 70 and above are a little bit higher. However, this difference is not statistically significant, t(43)=.31, p>.05. In other words, the grade average point of the Social Studies Teaching course does not significantly impact the competence perception of the prospective teachers to teach of controversial issues in social studies.

#### **Characteristics of The Prospective Teachers' Lesson Plans**

As part of the sub-goals of the study, the lesson plans prepared by the prospective teachers were reviewed in terms of teaching controversial issues to obtain the qualitative findings of the study. The relevant findings are addressed under the following two themes, i.e., "learning outcomes in the lesson plans", "controversial topics in the lesson plans", "teaching process in the lesson plans", and "evulation in the lesson plans".

#### Learning Outcomes in the Lesson Plans

In the study, the learning outcomes chosen by prospective teachers in the lesson plans they prepared for teaching controversial issues were examined. The results are shown in Table 6.

Table 6. The learning outcomes chosen by the prospective teachers in the lesson plans and the learning domains

Grade	Learning Domain	Learning Outcomes	f	
4	Individual and Society	SB.4.1.4. Places himself/herself into the shoes of individuals with different traits.		
Grade 4	Production, Distribution and Consumption	SB.4.5.3. Displays conscious consumer acts as a responsible individual.	1	
	Science, Technology, and Society	SB.4.4.2. Compares the past and present use of the technological products.	2	
	Individual and Society	SB.5.2.2. Introduces the natural assets and the historical places, objects and works around.	3	
	Culture and Heritage	SB.5.2.4. Analyses the role of the cultural items in the co-existence of the people.	2	
ī.	People, Places and Environments	SB. 5.5.2. Gives examples of the impacts of humanitarian and natural characteristics in their locations and surroundings on population and settlement.	1	
Grade 5	Science, Technology, and Society	SB.5.4.1. Discusses the impact of the use of technology on socialisation and social relations.	5	
	Production, Distribution, and Consumption	SB.5.5.3. Analyses the impact of economic activities on the social lives of the people.	1	
	Effective Citizenship	SB.5.6.4. Appreciates the symbols of national sovereignty and independence, such as the Turkish Flag and the National Anthem.	2	
	Global Connections	SB.6.7.4. Questions the impacts of popular culture on our culture. SB.7.7.1. Gives examples about the international organisations of which Türkiye is a member.	2	
	Individual and Society	SB.6.1.5. Advocates that the solutions to a problem should be based on the rights, responsibilities, and freedoms.	1	
	People, Places and Environments	SB.6.3.4. Makes inferences about the climatic characteristics considering the human lives in different natural environments in the world.	1	
Grade 6	Science, Technology and Society	SB.6.4.2. Brings forward ideas about the impacts of scientific and technological developments on life in the future.	2	
Gra	Production, Distribution and Consumption	SB.6.5.4. Supports the necessity and importance of paying taxes in terms of citizenship responsibility and contribution to the economy of the country.	1	
	and consumption	SB.6.5.2. Analyses the impacts of unconscious consumption of the resources on life of the living creatures.	3	
		SB 6.6.4. Explains the importance of democracy in social life.	1	
	Effective Citizenship	SB.6.6.6. Realises the value attached to woman in social life considering the Turkish history and the current samples.	1	
	Individual and Society	SB.7.1.3. Discusses the role of media in social change and interaction.	7	
Grade 7	Culture and Heritage	SB.7.2.1. Explains the existence process of the Ottoman Empire as a political power and the factors that influence this process.	1	
9	People, Places and Environments	SB.7.3.3. Discusses the reasons and results of migration with sample studies.	2	

As is seen in Table 6, it is found that prospective teachers selected different learning outcomes from each grade and learning domain. Accordingly, it can be said that prospective teachers associate many outcomes in the curriculum with the teaching of controversial issues. On the other hand, the learning outcome chosen by most of the prospective teachers is the following: "Discusses the reasons and results of migration with sample studies." (f=7) included in the Individual and Society learning area of Grade 7. Another outcome mostly provided in the plans is the following: "Discusses the impact of the use of technology on socialisation and social relations" (f=5) that belongs to the Science, Technology and Society learning area of Grade 5. According to these findings, it can be stated that prospective teachers mostly consider media and technology topics as controversial issues in the curriculum of social studies.

#### Controversial Topics in The Lesson Plans

All controversial topics in the lesson plans of the prospective teachers are included in Table 7.

Table 7. Controversial topics in the lesson plans

Contr	oversial topics	Participants	f
1.	Media	P13, P18, P24, P25, P29, P35, P37, P39	8
2.	Use of technology	P5, P9, P27, P28, P31, P34	6
3.	Opening Hagia Sophia for worship	P10, P26, P33	3
4.	Nuclear energy	P11, P23	2
5.	Hydroelectrical plants	P12, P32	2
6.	Artificial intelligence	P1, P20	2
7.	Mines	P3, P30	2
8.	Removal of school oath	P17, P36	2
9.	İstanbul agreement	P2	1
10.	Organ donation	P8	1
11.	Thermic power plants	P7	1
12.	Protection of Natural Areas	P2	1
13.	Unplanned urbanisation	P22	1
14.	Early retirement	P40	1
15.	Privatisation policies	P21	1
16.	Earthquake regulation	P4	1
17.	Popular culture	P15	1
18.	Education in Mother Tongue	P19	1
19.	Climate change	P22	1
20.	Democracy	P6	1
21.	Migration	P14	1
22.	Conquest of Istanbul	P16	1
23.	NATO membership	P38	1
24.	Membership to the European Union	P41	1
25.	Genetically modified organisms	P42	1

As is seen in Table 7, the prospective teachers include a wide range of topics in their lesson plans. The use of media and technology is the mostly referred topic. The prospective teachers created controversial issue scenarios and discussions with a wide perspective especially about the impact of media on social life and human relations. Another topic, which is included much more in the lesson plans, is technology. The prospective teachers once again created controversial issue scenarios or questions in different perspectives such as the intensive use and the effects of technology, general web addiction, and the impacts of technology on the nature. The other remarkable topics included by the prospective teachers are listed as opening Hagia Sophia for worship, nuclear energy, hydroelectrical power plants, artificial intelligence, mines, and removal of school oath. Moreover, in the lesson plans prepared by the participants included topics such as Istanbul Agreement, protection of natural areas, unplanned urbanization, early retirement, privatization policies, earthquake, popular culture, education in Mother Tongue, climate change, democracy, migration (migrants), Conquest of Istanbul, NATO membership, membership to European Union, genetically modified organisms.

#### Teaching Process in the Lesson Plans

This theme includes the teaching methods and strategies adopted by prospective teachers while teaching controversial issues. Following the analysis, three sub-themes were created from the findings: "controversial issues as a means of content transfer", "controversial issues in context" and "facilitating argument formation".

Controversial issues as the content transfer instrument: It can be stated that majority of the participants consider controversial issues as an instrument to teach the content specific to the subject addressed in teaching social studies. In other words, the participants address the controversial issues with a content-based approach. Among the participants who prepared a lesson plan about the Syrian migrants under the migration topic, P14 identified migration as follows: "The change of place carried out by the people from where they are located to another place due to different reasons is called migration. There are many reasons for the migrations experienced in the world, and all countries migrate and allow immigrants (...) The people migrate for several reasons such as life standards, health, business opportunities, and civil war," and provided information about the reasons for the migration. Addressing the School Oath in the lesson plan as part of the national sovereignty and independence symbols, P36 made the following explanation in the scenario text: "The student oath or Our Oath/Pledge is a loyalty oath which was read by the students every morning with a ceremony at the elementary schools in Türkiye between 1933-2013 (...) The text of the Oath was written in 1933 by Reşit Galip, the Minister of National Education in that period. In 2013, the practice of reading Oath at the schools in Türkiye was terminated."

Another remarkable example is seen in the lesson plan prepared by P32 about hydroelectric power plants. In the relevant lesson plan, the participant initially explained the conceptual meaning of the hydroelectric power plant, supported the utilisation features of the same in the world and Türkiye with several statistical data and then listed with a didactic approach what the positive and negative aspects of such power plants are. Likewise, P41, who prepared a plan regarding membership to the European Union as part of the topic regarding the international organisations to which Türkiye is a member, identified international organisations concept and presented all global and regional organisations in a table and then made explanations by visualising all symbols to which Türkiye is a member. Finally, the participant provided information about the relations between the European Union and Türkiye and asked, "Should Türkiye be a member of the EU?"

As is seen, some of the participants attached more importance to content than others. Therefore, they failed to create scenario cases in which they would be able to identify the dilemmas in the decision-making process and make projections in the lesson plans prepared. Instead, they focused on the issues which are potentially suitable for making social and ethical discussions included in the curriculum of social studies; however, the addressed topics were planned with a didactic approach to carry out teaching.

Controversial issues in context: Only a few participants used controversial issues contextually in the lesson plans. Creating scenarios which contain controversial, disagreed issues and dilemmas for the students, the relevant participants created contexts in which different opinions can be delivered. In the lesson plans prepared with this perspective, it was observed that it is intended to make the students realise the disputes and dilemmas inherent to the controversial issues instead of teaching the subject matter content. For instance, P11 created the following scenario in the lesson plan prepared about renewable and nonrenewable energy sources: "Electric energy is very important for all countries in the world. Because most of the equipment used in workplaces, homes, schools, hospitals, and factories in our daily life works with electricity. However, it is hard work to generate electricity. Today, electric energy is generated from renewable sources of energy (sun, wind, hydroelectric, geothermal, etc.), fossil fuels (petrol and petrol products, coal, and natural gas etc.) and nuclear power plants. Moreover, our country wants to meet the demand for electricity by establishing nuclear power plants." In this scenario, instead of giving

information about the content by defining the concepts such as renewable/nonrenewable sources of energy or explaining the operation principles in detail by telling what these sources are, as habitual in the classes, an interesting context was created for the students. Moreover, it can be said that the scenarios containing these features would enable the students to recognise different opinions and have discussions.

In the controversial issues scenario titled "Fascinating Strawberries" created by P42, it can be stated that the students can realise the existence of multiple perspectives. In this scenario, a character called Zeynep brought strawberries for feeding time. The strawberries have beautiful colours and sizes to attract the attention of the other students in the classroom. Another student, whose name is Ayşe, tells her mother about the strawberries brought to the classroom by Zeynep and asks her mother to buy the same one for her. Nevertheless, her mother tells Ayşe that the current season is not suitable for strawberries and that such strawberries are genetically modified and harmful. The scenario ends with the following question: "Is Ayşe's mother right not to buy the strawberries?" It can be stated that the relevant scenario is an efficient context in terms of enabling the students to apply what they learn in the classes regarding the conscious consumption to the controversial issue delivered to them, ensuring the use of the concepts learnt in the classes and realisation of more meaningful learning processes.

Planning a short introduction accompanied by the questions intending to raise awareness about the disadvantaged groups as part of the following acquisition, i.e., "Places himself/herself in shoes of the individuals with different traits", P8 chose organ donation as a controversial topic likely to be addressed in the relevant acquisition. The participant structured his scenario with the following sentences: "The two-year-old Ayşe and her mother have an accident during a bus trip. While the mother is slightly injured in the accident, Ayşe has a brain haemorrhage since she hit her head. They are taken to the hospital, and Ayşe is placed in intensive care. After a few hours, the doctor explains to her family that cerebral death has taken place. She stated that her heart would not endure for a long time in such a case, 'If you want, you can save the lives of other children who are waiting for organs by donating her organs,' says the doctor. As it is seen, the students are left in a moral dilemma in the scenario prepared by the participant. In this sense, the students can study for the solution of the problem in accordance with the moral characteristics created individually about organ donation. However, the students may not want to focus on moral properties during problem-solving, although this scenario contains moral dilemmas.

Instead of written scenarios, some participants introduced the students to the contexts that will enable them to discuss through the cartoons and photographs that will fulfil this task. For instance, P37, who prepared a lesson plan about technology addiction, presented several related visuals and cartoons which indicate the different aspects of technology use in daily life. Furthermore, some other participants created ecological and economic dilemmas. P30, who created a controversial topics scenario in this respect, created a scenario regarding the use of a natural park, which is rich in terms of mines, for prospecting activities. P7 focused on the dilemma in which the headman of a village where people with economic problems live, would or would not approve the plant that is established in the village. In both cases, it can be said that the students are expected to create arguments considering the ecological and economic priorities.

**Facilitating formation of argumentation:** The theme of facilitating argumentation means that prospective teachers use questions to support students' reasoning processes for them to be able to form arguments for claiming, justifying, determining possible counterclaims, and refuting arguments when

they encounter a controversial issue. In the study, participants who approached controversial issues both as a means of transferring the content of the social studies course and as a context used questions to help students form argumentation. However, it was observed that the questions used to facilitate argumentation showed two main features. Firstly, after presenting the scenario situation to the students, some participants asked questions about whether the students needed additional information and explanations at the conceptual level. Secondly, and more commonly, discussion questions to enable students to make argumentation were tried to be used by the participants in their lesson plans.

Among the participants, P42 asked the students if there was anything they did not understand in the text, and whether there were any concepts they wanted to be clarified once the scenario had been written regarding the genetically modified organisms. Once again, P22, who prepared a lesson plan about the climate change topic, wanted to find out whether the students need any additional information contextually or if there are any unclear issues with the following question: "Do you need any additional information about the content of the scenario?" Having prepared a lesson plan about the use of forest areas to open settlement areas as part of the protection of natural areas, P2 made the following explanation as the other participants: "Once the text of the controversial topic is presented to the students, it is asked if there is anything they did not understand." Likewise, in the lesson plan prepared regarding organ donation, P8 asked, "Is there anything you do not understand in the scenario?". In the lesson plan regarding popular culture, P15 asked, "Is there anything you do not understand?" and included questions in the lesson plans for removing the missing information or the deficiencies regarding the scenario cases. On the other hand, there are also participants (f=18), who did not ask questions to find out if the students need additional information or explanations once they have presented the scenario case to the students.

The participants also included discussion questions in the lesson plans they prepared for controversial issues to ensure that students could make arguments. In this context, question forms were used to ensure that students could create arguments for their own allegations regarding the controversial issue, state justifications regarding the claim created, and determine the potential counterclaims and confute the same. However, the stages of such argumentation process, which contain four stages, were not used by all participants. Most of the participants (n=30) ignored a minimum of one of the questions that will enable the students to create allegations and justifications and determine and confute counterclaims. For instance, in her lesson plan about genetically modified organisms, Nimet planned in which she requested the students only to state the allegations. She included the following question in her plan: "If you were a farmer, would you use seeds with GMO?" As part of the following acquisition: "Introduces the natural assets and historical places, objects and works around," P26, who used Opening of Hagia Sophia for worship as a controversial topic, used the following questions in the lesson plan with respect to the formation of the claims and justifications by the students: "What do you think about opening Hagia Sophia for worship; Do you think it is a true decision to open it for worship? Why? What kind of a defence would you make against any party who disagrees with you?" And P8, who prepared a plan regarding organ donation, did not include the question for confuting the counterclaims. In this context, this participant included the following questions: "Would you let donate Ayşe's organs if you were in the shoes of her family? How would you convince somebody who thinks differently than you about your opinions? What can be the counterarguments against your arguments?" Likewise, P23, who prepared a lesson plan about nuclear weapon technology, did not include the question for refuting counterclaims either. In the lesson plan, P23 included the questions whereby students can state their allegations and create justifications and tried to determine the counterclaims with the following question: "What can be the counterarguments against your arguments?"

The questions asked to students to identify possible opposing claims and to produce arguments to refute the opposing claims were used by a limited number of participants (n=8). One of these participants, P7, explained how to carry out the argumentation process on the controversial topic of thermal power plants in the lesson plan as follows: "... students are asked the question 'What is your claim about this topic? After the students' ideas are taken, the question, 'Well, what can you say to support this claim?' is asked. In this way, it is helped to ensure that the student supports his/her answer. To move on to the 3rd stage, students are asked 'what other claims can be against your claim? Thus, they are made to think about the opposing claims. For the last stage, refuting with evidence, the question 'Which data can you refute the opposing claims based on?" is asked." P15, who prepared a plan about popular culture, prepared a rebuttal question: "If another student says that the effects of popular culture on our national culture are acceptable, how would you respond to him/her?".

Having prepared a lesson plan about membership to the European Union, P41 listed the questions which enable the students to make argumentation as follows: "1. What is your claim for the given situation? 2. How can you support your claims? 3. What can be the counterclaims for your claim? 4. Based on which data can you confute the counterclaims?" All the same, the questions used by Şeyma for reasoning were written rather mechanically, in other words, like a magical formula. She failed to make a connection between the questions for the students to make arguments and the controversial issue she addressed. Once again, P11, who prepared a lesson plan about nuclear power plants, managed to associate the questions that would help the students to make arguments with the scenario more efficiently. In this regard, the following questions are used by P11: "2. Do you think it is useful or harmful to establish nuclear power plants? 3. Please, justify your opinions. 4. Please state what can be the counterclaims of your arguments. 5. Please confute the counterclaims by stating the reasons."

As is seen, a limited number of participants asked the students to determine counterarguments and guess what kind of explanations can be made to support the arguments of someone who develops counterarguments and think about how to respond to the parties who have similar arguments. However, not every student may anticipate what the counterarguments will be and, therefore, how to respond to them. Hence, such reasoning is a level which every student may not achieve, but they are expected to achieve. Therefore, a counterargument, which was structured by the teacher, may be readily presented to the students if the students fail to respond. It was observed that among the participants, P1 and P14 offered counterarguments for the students in their lesson plans. However, these participants failed to make use of the questions regarding claims, reasons, counterclaims, and counterarguments even though they included the ready counterarguments in the lesson plans. For instance, P1 failed to include any questions about what the counterviews can be in the lesson plan prepared with respect to artificial intelligence. In addition, this participant utilised the following counter-argument structure, i.e., "Some people state that unemployment will increase due to widespread use of artificial intelligence. Why do you think about this issue?" However, it is seen that the question structure used by P1 is unidirectional. This can be used as a ready counterclaim for a student, who delivers his/her argument in the initial questions as follows: "Yes, artificial intelligence technology must be used." However, P1 failed to plan counterclaims for any student who will deliver his/her argument as follows: "No, artificial intelligence technology must not be used." In the lesson plan for the migrants, P14's question to identify the claims and reasons of the students is not clear and insufficient. The relevant questions are as follows: "What are your opinions about the migrants in our country according to the scenario?" and "Which reasons did you defend while delivering your opinions?" Despite all this, P14 envisioned helping the reasoning process of the students, thereby using ready counterarguments that contain moral and ethical features about the migrants in the lesson plan.

#### **Evulation in The Lesson Plans**

The majority of the participants who prepared the lesson plans based on controversial issues (n=28), failed to make explanations in the plans about how to make such assessments. On the other hand, it is observed that the other participants focus on one of the two characteristics, i.e., evaluation of the level of reasoning and evaluation of the knowledge of content.

Six participants planned the assessment process to determine the level of reasoning of the students. Among these participants, P11 stated that he/she would make a "process assessment by observing the skills of the students to generate ideas, make decisions, and persuade..." expressing that the assessment process should be based on observations. It is understood that the assessment process anticipated by P11 would include the skills of the students to create arguments and deliver reasons in the argument formation process. P15 states this in the lesson plan as follows: "... feedback is given according to the stage of the students, and it is tried to fulfil the missing parts." However, it is not clear which missing parts would be accomplished regarding the students. P8 emphasises the fact that controversial issues are topics that do not have one single true answer. Further stating that the correct or wrong answer will differ in the context of controversial issues according to the individuals, this participant made the following explanation: "In the assessment stage, we should mainly consider how close the students are to the 4th level."

Likewise, Koru describes the structure of the assessment process with the following statements: "It is expected that the teacher should contribute to the students to reach the 4<sup>th</sup> level clearly, thereby checking the answers provided by the students (...). If they have difficulty reaching the 4<sup>th</sup> level, the teacher should help them to overcome this." P42's statements are as follows: "The teacher controls the answers of the students and determines at which level they are able to deliver their opinions." According to these assessments, it can be concluded that a teaching-learning process based on controversial subjects should bear characteristics to improve the qualification of the reasoning of the students. P28 points out that the assessment process should focus on the reasoning patterns of the students. According to this participant, the teacher should determine which logical, emotional, or intuitive reasoning patterns the students use in the problem-solving process regarding contoversial issues. However, P28 failed to explain why it is necessary to determine the reasoning patterns of the students.

Nevertheless, 6 participants described the importance of evaluating content knowledge in the assessment process in their lesson plans. Among these participants, P41 stated that he/she will check in the assessment process whether the discussion of the students regarding controversial issues is a discussion based on information or not and he/she will focus on whether the students associate their knowledge with the argumentation. P21, who prepared a lesson plan about privatisation policies and P1, who prepared a lesson plan about artificial intelligence, expect the students to study the positive and negative aspects of the issues they address. Moreover, P4 defines the characteristics of the assessment process as follows: "(....) a topic evaluation survey is applied to the students who learn the topic better. (...)

#### **Discussion and Conclusion**

This study aims to examine the competence of prospective social studies teachers to use controversial issues in social studies from different perspectives. In the first phase of the study, the competence levels of prospective teachers in general were analysed through a scale developed by the researcher. It was concluded that prospective teachers perceive themselves as competent at a medium level regarding the teaching of controversial issues in social studies. This result can be interpreted as social studies teacher candidates not having full confidence in teaching controversial issues. In the literature, no studies on this issue determine competence using a quantitative scale. However, several questions regarding the competencies they have were addressed in some studies that focus on the attitudes, opinions and applications of the teachers and prospective teachers about controversial or socioscientific issues. For instance, in the study carried out by Alaçam Akşit (2011), it was revealed that the teachers consider themselves insufficient in terms of knowledge, techniques, and methods that are required to teach the socio-scientific issues that can be considered within the scope of controversial issues.

On the other hand, the studies in international literature, where more comprehensive studies are available, have also found that teachers feel inadequate. In the relevant study by Oulton et al (2004), only 12% of teachers reported feeling prepared to teach controversial issues. The educators reported inadequate training in teaching controversial issues and that the curriculum should provide clearer suggestions on how to deal with controversial issues. Prospective social studies teachers recognize the significance of socio-scientific issues in social studies, yet they feel ineffective in teaching them, as discovered by Çepni and Geçit's (2020) research. Also, in the study conducted by Kuş (2015), which identifies the practices and positioning of social studies and science teachers in terms of controversial issues, teachers stated that they prefer the 4th and 3rd positions. According to teachers, they support in-class discussions, they do not express their personal opinions but encourage students to share their personal opinions, or they express their opinions or positions on the issue but encourage students to explain their own positions. However, the observations showed that the teachers mainly give their opinion on the discussed topic, they try to give their perspective to the students and sometimes they only give their own position on some of the topics (the second position). These results obtained by Kuş indicate the weak competencies of the teachers regarding teaching controversial issues.

The lack of full belief in the competence of prospective teachers, both in this study and in the negative results of the other studies, can be interpreted as a lack of full competence in the controversial issues related to the teacher education they have received. Thus, it can be argued that there is no concrete place for the teaching of controversial issues when a bachelor's program for the teaching of social studies is reviewed. Within the strategies, principles, approaches, methods and techniques to be used as part of the teaching-learning processes in social studies, these issues may be included at the initiative of the teacher or they may be used as part of the teacher's own teaching-learning processes. In many previous studies, results have been obtained regarding the need for pre-service or in-service training on controversial or sensitive issues, or the inadequacy of the teacher training received in this regard (Alaçam Akşit; 2011; Akman & Bastik, 2016; Demircioğlu, 2016; Günal & Kaya, 2016; Oulton et al., 2004). Therefore, it is important to include the controversial issues in teacher training and enhance the professional competencies of prospective teachers both in terms of their own citizenship competencies and citizenship education (Ersoy, 2013). On the other hand, the reason why teachers and

prospective teachers do not feel fully competent cannot be explained only by the training they received. As stated by Hess (1998), in addition to the insufficiencies of teacher training, there are many factors, such as the difficulty of having an argument on these issues, not knowing how to involve the students in the argument, and the fear of losing control of the classroom, which plays a significant role in the case of teachers who feel incompetent.

Although intensive research findings in the literature indicate that the competence perception of prospective teachers is not high, the results are essential regarding the attitudes towards controversial and socio-scientific issues and teaching. Contrary to the results obtained about the competencies in many studies conducted in this respect (Copur, 2015; Yazıcı and Seçgin, 2010), it was found that prospective teachers of social studies, science and elementary schools have positive attitudes and opinions regarding the teaching of controversial and socioscientific issues. The existence of positive attitudes and opinions towards these issues may increase the tendency and inclination of teachers and prospective teachers towards the relevant teaching practices. Therefore, this is important as a driving source of motivation in terms of the competencies of teachers and prospective teachers. However, the reservations of teachers and trainee teachers to include controversial issues in the teaching environment are often reported in the literature. The studies (Aynuz and Memişoğlu, 2022; Hess, 2004; Günal and Kaya, 2016; Oulton et al., 2004; Yazıcı and Seçgin, 2010; Soley, 1996) indicate that teachers avoid including controversial issues due to the following reasons: the examination-oriented training system, lack of time, the reactions of the family, society and managers, the manners and customs of the environment, the concerns regarding investigation by the competent authorities, the students' taking the discussion to other aspects than what is desired, their exaggeration and taking the discussion outside the classroom, accountability to the administrators, and the fear of losing their jobs. Interestingly, teachers' concerns about their own teaching skills, such as inability to manage the discussion and lack of knowledge about the controversial issues, remain in the background. It is quite remarkable that even the teachers and prospective teachers who apply to the current teaching curricula (Aynuz and Memişoğlu, 2022; Günal and Kaya, 2016) express similar concerns. As is known, the use of current, controversial, and socio-scientific issues in the classes is emphasised much more with the revisions in the curriculum in 2005 and thereafter. For example, as mentioned above, in the 2018 curriculum for social studies, the use of relevant topics is included in the principles to be considered when implementing the curriculum. Similar emphasis is also given to the teaching of science and history. These results can be seen as an indication that the desired changes in educational policy have not been achieved. Therefore, the following expectations should be fulfilled: the inclusion of controversial issues in the curriculum and the guidelines for the more concrete teaching of such issues, the provision of legal security and support for the school management, as well as the revision of the textbooks.

In the study, it was analysed whether the perceptions of prospective teachers regarding their competencies differ significantly based on gender, academic success, and the grade point average of social studies teaching lessons. It was concluded that only gender significantly impacted the perception of the prospective teachers, and the male students felt more competent than the female students. This result may give rise to the thought that female prospective teachers will allocate more space and time for controversial issues in social studies lessons in comparison to male prospective teachers and that they will be more successful. However, variable results have been obtained in the literature for the effect of gender. In the study conducted by Özüdoğru (2022), it was determined that females have positive perceptions regarding controversial issues, whereas male participants have a positive perception of the

same in the study carried out by Yazıcı and Seçgin (2010). In some studies (Cebesoy and Dönmez Şahin, 2013; Çepni and Geçit, 2020; Tuncer, 2018; Yolagiden, 2017), it was observed that gender is not a variable that creates a significant effect. On the other hand, unlike this study, it was concluded in the study by Çepni and Geçit (2020) that prospective teachers with academic success have much more positive attitudes.

In the second phase of the study, the lesson plans prepared by the prospective teachers for their competencies were reviewed. It was concluded that there is a variety regarding the outcomes and controversial topics chosen by the prospective teachers in the lesson plan. Accordingly, it can be pointed out that prospective teachers are successful in terms of determining the potentially controversial issues included in the curriculum. On the other hand, this may be considered as evidence of the fact that the curriculum of social studies contains many controversial issues due to its nature. Hence, in the study carried out by Tatar (2018), it is pointed out that maximum outcomes regarding controversial issues are available in social studies among all other courses. This course is followed by science and religious culture. Therefore, it can be stated that curricula have sufficient potential in terms of including controversial issues and that both the teachers and the prospective teachers should not have difficulty in terms of including controversial issues in social studies lessons. However, as stated earlier, the studies in the literature indicate that the reason why the controversial issues are not included in the teaching environments stems from different reasons rather than the insufficiency of the curricula. On the other hand, as emphasised by the teachers in the study carried out by Oulton et al. (2004), it may be more suitable if the curriculum provides clearer suggestions about overcoming the argumentative cases.

In this study, media and the use of technology were the titles for which the prospective teachers prepared the highest number of plans. Furthermore, the other topics included in the plans by the prospective teachers are listed as Opening Hagia Sophia for Worship, Nuclear Energy, Hydroelectrical Power Plants, Artificial Intelligence, Mines, Removal of School Oath, Istanbul Agreement, Protection of Natural Areas, Unplanned Urbanisation, Early Retirement, Privatization Policies, Earthquake, Popular Culture, Education in Mother Tongue, Climate Change, Democracy, Migration (Migrants), Conquest of Istanbul, NATO Membership, Membership to European Union, Genetically Modified Organisms. These results overlap with the studies in the literature regarding controversial issues considered necessary to be included in the teaching environments. For instance, in the study carried out by Aynuz and Memişoğlu (2022), the topics which are considered most controversial by the prospective teachers are listed as the economy, Armenian issue, training system, rights and freedoms, media, Ottoman Empire and the Sultans. In the study by Copur (2015) carried out with social studies teachers, it was concluded that natural disasters, democracy, environmental pollution, unplanned urbanisation, traffic, brain drain, violence, TV broadcasts, freedom of the press and multiculturalism are the topics that are mostly requested to be included in the classroom environments. Likewise, in the study by Yazıcı and Seçgin (2010), it was observed that the teachers of social studies consider that human rights, training system, environmental pollution, examination systems, democracy, global warming, cultural corruption, the council of higher education (YÖK), public personnel selection examination (KPSS) and globalisation topics should be included in the classroom environments. As for the study by Kuş (2015), it was determined that violence against women, the educational system, terror and nationalism are the leading controversial topics for both the teachers of social studies and science and, what is more, with respect to their own subjects, the teachers of social studies consider that the issues such as Kemalism, democracy, military coups, shadow government which are associated with the recent history of Türkiye

are among the essential controversial topics. In terms of the students who receive social studies classes, the critical, controversial topics in this lesson are human rights, animal rights, multiculturalism, press freedom, election system, traffic, TV broadcasts, media, and military service (Arslan, 2019; Öztürk, 2022). It is for sure that the other studies in the literature determined controversial issues which are independent of the curriculum and that are mainly based on getting opinions. Therefore, this caused the identification of the controversial issues with a wider perspective than the study itself. As for this study, the liability of the students to determine the controversial issues based on the content and learning outcomes of the curriculum should not be forgotten.

When the foregoing study results regarding the competence to determine outcome and controversial issues are addressed together, it can be said that the instincts and competencies of prospective teachers are high in terms of determining what the controversial issues are and bringing the same to the classroom thereby associating them with the learning outcomes of the curriculum. On the other hand, the studies in the literature emphasise the importance of the use of argumentationbased teaching for teaching controversial and socio-scientific issues (Atabey & Topçu, 2017; Driver et al., 2000; Evren Yapıcıoğlu & Kaptan, 2018; Öztürk & Doğanay, 2019; Sampson & Clark, 2008; Torun & Şahin, 2016). When considered from this point of view, the result of the study indicates that the prospective teachers' competencies are weak in this respect. At the end of the study, it was observed that prospective teachers generally failed to address any controversial issue, dilemma or any cases that require making an ethical decision in their teaching designs regarding controversial issues. Instead of this, they were found to have a more apparent tendency towards teaching only the content of social studies. The content-based approach of the prospective teachers may be explained by the belief of the teachers about the importance and necessity of absolute content knowledge in the reasoning processes regarding controversial issues. With this aspect, to ensure reasoning on controversial issues remains in the background of the lesson content. It can be considered that according to the prospective teachers, the inclusion of controversial issues to teach social studies is an instrument for teaching the topics included in the social studies curriculum rather than being an instrument to develop the students' judgement, argumentation formation and reasoning skills. On the other hand, the reason for this approach of the prospective teachers may be explained with the following reasons: the concern for delivering the current curriculum content and the fact that the teaching of controversial issues and the skills acquired thereof have no place in the national exams available in the educational system that is more exam oriented. As stated earlier, some studies in the literature (Aynuz and Memişoğlu, 2022; Hess, 2004; Günal and Kaya, 2016; Oulton et al., 2004; Yazıcı and Seçgin, 2010; Soley, 1996) reveal the reasons in this manner why the teachers generally avoid including controversial issues in the classroom and prefer the content-based education.

In parallel to the foregoing result, the study found that a limited number of participants structured the controversial issue scenarios in the form of learning contexts in which the students could express their opinions according to ethical, moral, social, economic, and ecological perspectives. However, the controversial issue scenarios structured in this way may enable the formation of real-life cases where the students can apply or use the information they learned and acquire thinking skills, which can be considered from now on as a life experience today. With these scenarios, it is possible to create interesting contexts for the students and ensure that they realise the relation of science issues with real life. On the other hand, it was seen that the participants tried to include the questions in their lesson plans for the argumentation processes of the students. However, the questions used are

insufficient in terms of quality. It was determined that an especially limited number of participants used the questions together to determine the claims, justify the claims, identify the counterclaims, and suggest counterarguments regarding the counterclaims. It was seen that most of the participants failed to include the questions in their lesson plans for a minimum of one of the components of the four-stage argumentation process. Once more, one of the interesting findings of the study is that none of the participants included the four-stage argumentation process and the ready counterarguments together in their lesson plans. Finally, it was found that most of the participants failed to develop an assessment and evaluation strategy for the evaluation of teaching controversial issues.

#### Recommendations

When all these findings are considered generally, it can be said that prospective teachers failed to be adequately effective in the planning for the process despite their success in determining acquisition and controversial issues. Therefore, it can be concluded that prospective teachers should be engaged much more in the practices and activities regarding the teaching of controversial issues in prospective training, and they should gain experience in such practices. This study has several limitions. First and foremost, the research data were collected only from the students at a university who receive education in the relevant teacher training program. Therefore, the findings obtained may stem from the context and characteristics of the relevant university. This is why repeating similar studies with different samples is important. On the other hand, the analyses were conducted based on a single lesson plan prepared by the prospective teachers. Thus, it may be possible to reveal results based on the analysis of the products of more than one student, thanks to studies based on repeated practices and experiences. Furthermore, it will likely have more profound results for the competencies of the prospective teachers thanks to the data collection procedures regarding the identification of the problems they encounter and their attention in the preparation process of the plans.

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## **BIOGRAPHICAL NOTES**

#### **Contribution Rate of Researchers**

Author 1: 100%

#### **Conflict Statement**

There is no conflict of interest that the authors will declare in the research.

## Genişletilmiş Türkçe Özet



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## Sosyal Bilgiler Öğretmen Adaylarının Tartışmalı Konuları Öğretimde Kullanma Yeterliklerinin İncelenmesi

#### Giriş

Sosyal bilgiler eğitimi etkin birer vatandaş olarak bireylerin bilgiye dayalı ve mantıklı kararlar alabilme yeteneklerin geliştirmeyi amaçlar (National Council for the Social Studies [NCSS], 1994). Çünkü etkin vatandaşların gün geçtikçe karmaşıklaşan, farklı boyutları olan sosyal sorunlarla karşı karşıya gelebilmeleri, bunları müzakere edebilmeleri ve doğru kararları verebilmeleri gerekir (Oulton, Day, Dillon, & Grace, 2004). Bu nedenle tartışmalı veya çatışmalı olarak adlandırılan bu konuların sosyal bilgiler öğretiminde kullanılması etkin vatandaşlık yeterliklerinin kazandırılması (Ersoy, 2010, 2013; Hess, 2002) açısından önemli görülmektedir.

Tartışmalı konular bireylerin zıt bakış açıları oluşturmasına uygun, mantıklı anlaşmazlıkları kapsayan konulardır (Levinson, 2008). Bir konu ile ilgili mantıklı, ancak birbirinden farklı fikirler öne sürülebiliyor ve kanıta dayalı olarak çözüme kavuşturulamıyorsa ilgili konu tartışmalı olarak kabul edilebilir (Dearden, 1981; Wellington, 1986). Nükleer enerji, ötenazi, savaşlar, silah politikaları, nüfus kontrolü, kadın hakları, GDO'lu ürünler, klonlama, göç, mülteciler, basın özgürlüğü, terörizm, küresel ısınma gibi (Baki, 2019; Dube, 2009; Hess, 2004; Öztürk ve Kuş, 2019) aynı zamanda sosyo-bilimsel olarak değerlendirilen konular ve her toplumun geçmişindeki kimi tarihsel konular (Baki Pala, 2019) tartışmalı konu olarak kabul edilebilir. Derslerde tartışmalı konuların kullanımının en önemli nedenlerinden birisi akıl yürütmeye ve tartışmaya dayanan eleştirel düşünme becerilerinin (Harwood ve Hahn, 1990; Ikuenobe, 2001) gelişimine sağladığı katkı ile açıklanabilir. Ayrıca tartışma kültürünü, iş birliği ve problem çözme becerilerini, toplumla ve çevreyle iletişim becerilerini geliştirme, gerçek yaşam temelli ve anlamlı öğrenme ortamı oluşturma (Berg, Graeffe ve Holden, 2003) gibi yararlara sahiptir.

Uluslararası düzeyde tartışmalı konulara artan bir ilgiyle pek çok araştırma yapılmaktadır. Türkiye'de de son yıllarda artan bir ilgi görülmekle birlikte tartışmalı konular hakkında yapılmış çalışmalar sınırlıdır. İlgili çalışmaların ise çoğunlukla fen eğitiminde sosyo-bilimsel konu kavramı

çerçevesinde ve farklı boyutlarda gerçekleştirildiği söylenebilir (Örn. Cebesoy & Dönmez Şahin, 2013; Evren Yapıcıoğlu & Kaptan, 2017; Gülhan, 2013; Gürbüzkol & Bakırcı, 2020; Özkul, 2022; Topçu, 2008; Topçu vd., 2011). Sosyal bilgiler eğitimi alanında yapılan çalışmalar ise daha çok sosyal bilgiler ve tarih öğretmen adaylarının (Alagöz, 2014; Aynuz, 2020; Baloğlu Uğurlu ve Doğan, 2016; Çepni ve Geçit, 2020; Seçgin, 2019; Özüdoğru, 2022), öğretmenlerinin (Çopur, 2015; Günal ve Kaya, 2016; Öztürk, 2017; Tuncer, 2018), ve öğrencilerin (Arslan, 2019; Öztürk, 2022) tartışmalı konuların neler olduğuna ve bu konuların öğretimine ilişkin algı, tutum ve görüşlerini belirlemeye dönüktür. Sosyal bilgiler derslerinde tartışmalı konuların kullanımını geliştirmeye dönük uygulamalı araştırmalar ise (Baki Pala, 2020; Özcan, 2021) çok yeni ve sınırlıdır. Sosyal bilgiler öğretmenleri veya öğretmen adaylarının tartışmalı konular ile ilgili yeterliklerini inceleyen araştırmalar ise ihmal edilmiştir.

Yakın geçmişteki pek çok reform çabasının genellikle öğretmenlerin mevcut bilgi, inanç ve tutumlarını kabul etmedikleri için başarısız oldukları sonucuna varılmıştır (Gray & Bryce, 2006). Dolayısıyla sosyal bilgiler sınıflarında etkin tartışma süreçlerini başarmanın yollarından biri öğrencileri bu tartışma süreci ile tanıştıracak sosyal bilgiler öğretmeni adaylarının tartışmalı konulardaki pedagojik uygulamalarını yeterliklerini incelemek olabilir. Bu nedenle araştırmada sosyal bilgiler öğretmen adaylarının sosyal bilgiler dersinde tartışmalı konuları kullanma yeterliklerini incelemek amaçlanmıştır. Bu amaç doğrultusunda aşağıdaki araştırma sorularına yanıt aranmıştır:

- 1. Sosyal Bilgiler öğretmen adaylarının tartışmalı konuların öğretimine dönük yeterlik algıları nedir?
- 2. Sosyal Bilgiler öğretmen adaylarının tartışmalı konuların öğretimine dönük yeterlik algıları cinsiyete, akademik başarıya ve sosyal bilgiler öğretimi dersi başarısına göre istatistiksel olarak anlamlı farklılık göstermekte midir?
- 3. Sosyal Bilgiler öğretmen adaylarının tartışmalı konuların öğretimine dönük hazırladıkları ders planlarının özellikleri nedir?

#### Yöntem

Araştırmada karma yöntem yaklaşımlarından yakınsayan paralel desen kullanılmıştır. Bu desenin amacı araştırma problemine ilişkin farklı ama birbirini tamamlayıcı veri toplamaktır. Yakınsayan paralel desen nicel ve nitel yöntemlere eşit öncelik verir, çözümleme sırasında bu aşamaları birbirinden ayrı tutar ve daha sonra genel yorumlama yaparken sonuçları birleştirir (Creswell & Plano Clark, 2020).

Araştırmanın çalışma grubunu Türkiye'nin batısında yer alan bir Devlet Üniversite'nin sosyal bilgiler öğretmenliği lisans programında üçüncü sınıfta öğrenim gören Sosyal Bilgiler Öğretimi 2 dersine kayıtlı 45 öğretmen adayı oluşturmuştur. Araştırmanın nicel verileri, geliştirilen "Tartışmalı Konuların Öğretimine Yönelik Yeterlik Ölçeği" ile toplanmıştır. Geliştirilme sürecinde alan yazın taraması ve uzman görüşlerine doğrultusunda hazırlanan 25 maddeden oluşan taslak ölçek farklı üniversitelerde öğrenim gören 250 sosyal bilgiler öğretmen adayına uygulanmış ve yapı geçerliği için açımlayıcı faktör analizi yapılmıştır. Ölçek toplam varyansın %44'ünü açıklayan üç faktörden ve toplam 17 maddeden oluşmaktadır. Maddelerin yük değerleri .47 ile .85 arasında değişmektedir. Ölçeğin tamamına ait iç tutarlık kat sayısı için ise .929 bulunmuştur.

Nitel veriler öğretmen adaylarının hazırladıkları ders planlarına dayalı olarak toplanmıştır. Derslerde verilen eğitimler sonrası katılımcılardan 2018 Sosyal Bilgiler Dersi Öğretim Programı'nı inceleyerek tartışmalı konularla ilişkili olabilecek bir kazanım belirlemeleri ve buna göre bir ders planı

hazırlamaları istenmiştir. Araştırmaya katılan 45 öğretmen adayının hazırladığı ders planlarının 3'ü analiz yapabilmek için geçerli ve güvenilir bulunmayarak kapsam dışında bırakılmıştır.

Nicel verilerin analizi kapsamında toplanan verilerin güvenirlik katsayısı .89 olarak belirlenmiştir. Ardından Normallik sınamaları için, grup büyüklüğü 50'den küçük olduğu için Shapiro-Wilks testi kullanılmıştır. Hesaplanan p değerine (p=.53) göre puanların normal dağılım özellikleri gösterdiği (Büyüköztürk, 2010) kabul edilmiştir. Veriler aritmetik ortalama, standart sapma ve ilişkisiz örneklemler t testi kullanılarak analiz edilmiştir. Öğrencilerin ölçekten aldıkları puanlar 17-36 puanları arası "düşük", 36-59 puanları arası "orta", 60-85 puanları arası ise "yüksek" olarak yorumlanmıştır. Nitel verilerin analizinde ise tematik analiz (Braun & Clarke, 2006) kullanılmıştır. Tematik analiz, bir veri setindeki benzerlik, farklılık ve ilişkilere göre analiz sürecinin gerçekleştirilmesidir. Nitel aşamaya yönelik inandırıcılığın sağlanması için araştırma sürecinin yansız ve objektif olmasına özen gösterilmiş, kaynakça yeterliliği sağlanmaya çalışılmış; veri analizi için iki uzmanın görüşü alınmış, araştırma ayrıntılı betimlenmeye çalışılmış, temalara ait sık sık doğrudan alıntılara yer verilmiştir (Yıldırım ve Şimşek, 2006).

#### Bulgular

Öğretmen adaylarının uygulanan ölçekten aldıkları puanların aritmetik ortalaması 57.05'tir. Bu bulguya dayalı olarak öğretmen adaylarının tartışmalı konuları sosyal bilgiler eğitiminde kullanmaya dönük orta düzeyde yeterlik oldukları algısına sahip oldukları söylenebilir. Araştırmada alt amaçlara uygun olarak öğretmen adaylarının yeterlik algılarının cinsiyete, akademik başarıya ve bir önceki sosyal bilgiler öğretimi dersi not ortalamasına göre anlamlı bir farklılık gösterip göstermediği incelenmiştir. Analiz sonuçları öğretmen adaylarının ölçek puanları arasında cinsiyete göre anlamlı bir fark olduğunu göstermiştir, t(43)=2.66, \*p<.05. Kadın öğretmen adaylarının yeterlik algıları (61.70), erkek öğretmen adaylarına (55.44) göre daha yüksektir. Öte yandan akademik başarı [t(43)=.64, p>.05] ve bir önceki sosyal bilgiler öğretimi dersi not ortalaması değişkenlerine göre [t(43)=.31, p>.05] istatiksel açıdan anlamlı farklılık bulunmamaktadır.

Öğretmen adaylarının hazırladıkları ders planların tartışmalı konuların öğretimi açısından sahip olduğu özellikler "ders planlarında yer verilen kazanımlar", "ders planlarında yer alan tartışmalı konular", "ders planlarında tartışmalı konuların öğreitm süreci" ve "ders planlarında değerlenme" biçimindeki dört tema altında ele alınmıştır.

Öğretmen adayları programdaki pek çok kazanımı tartışmalı konuların öğretimiyle ilişkilendirmişir. Öte yandan öğretmen adayları tarafından en fazla yedinci sınıf Birey ve Toplum öğrenme alanında yer alan "Medyanın sosyal değişim ve etkileşimdeki rolünü tartışır." (f=7) kazanımı seçilmiştir. Planlarda daha sık seçilen bir diğer kazanımın ise beşinci sınıf Bilim, Teknoloji ve Toplum öğrenme alanına ait "Teknoloji kullanımının sosyalleşme ve toplumsal ilişkiler üzerindeki etkisini tartışır." (f=5) olduğu görülmüştür. Ayrıca öğretmen adayları ders planlarında çok çeşitli tartışmalı konulara yer vermişlerdir. En fazla yer verilen tartışmalı konu başlıkları medya ve teknoloji kullanımı olmuştur. Öğretmen adaylarının yer verdikleri diğer dikkat çekici konu başlıkları Ayasofya'nın ibadete açılması, nükleer enerji, hidroelektrik santraller, yapay zekâ, madenler, Okul Andı'nın kaldırılması olarak sıralanmıştır. Ayrıca İstanbul Sözleşmesi, doğal alanların korunması, çarpık kentleşme, erken emeklilik, özelleştirme politikaları, deprem, popüler kültür, anadilde eğitim, iklim değişikliği, demokrasi, göç (mülteciler), İstanbul'un fethi, NATO üyeliği, Avrupa Birliği'ne üyelik, genetiği değiştirilmiş organizmalar konuları da katılımcıların hazırladıkları ders planlarında yer almıştır.

Öğretmen adaylarının hazırladıkları ders planların tartışmalı konuların öğretimi süreci açısından sahip olduğu özellikler "içeriğin aktarım aracı olarak tartışmalı konular", "bağlam olarak tartışmalı konular" ve "argümantasyon oluşturmayı kolaylaştırma" biçimindeki üç alt tema altında ele alınmıştır. Katılımcıların büyük çoğunluğu tartışmalı konuları içerik merkezli yaklaşımla ele almışlardır. Örneğin göç konusu ekseninde Suriyeli mülteciler ile ilgili ders planı hazırlayan katılımcılardan K14 "İnsanların bulunduğu yerden başka bir yere farklı sebeplerden dolayı gerçekleştirdikleri değişikliğe göç denir. Dünya'da yaşanan göçlerin birçok sebebi vardır ve tüm ülkeler göç alıp vermektedir (...) İnsanlar yaşam standartları, sağlık, iş imkanları, iç savaş gibi çeşitli nedenlerden göç etmektedir" cümleleriyle göçün tanımını ve nedenlerine ilişkin bilgi vermiştir. Daha çarpıcı bir örnek ise K32'nin hazırladığı hidroelektrik santralleri konu eden ders planında görülmüştür. İlgili ders planında katılımcı öncelikle hidroelektrik santralin kavramsal olarak anlamını açıklamış, Dünya'da Türkiye'de kullanım özelliklerini kimi istatistiki verilerle desteklemiş ve son olarak konu ettiği santrallerin olumlu ve olumsuz yönlerinin ne olduğunu didaktik bir yaklaşımla listelemiştir. Görüldüğü gibi kimi katılımcılar bilimsel içeriğe daha çok önem vermişlerdir. Bu nedenle hazırlanan ders planlarında karar alma sürecindeki ikilemleri belirleyebilecekleri ve yansıtma yapabilecekleri senaryo durumları oluşturamamışlardır. Bunun yerine sosyal bilgiler dersi öğretim programında yer alan sosyal ve etik tartışmalar yapılmasına potansiyel olarak elverişli olan konulara odaklanılmış; ancak ele alınan konular didaktik bir yaklaşımla öğretim gerçekleştirmek üzere planlanmıştır.

Az sayıda katılımcı hazırladıkları ders planlarında tartışmalı konuları bağlam olarak kullanmışlardır. İlgili katılımcılar, öğrenciler için çelişkili, üzerinde uzlaşılamamış ve ikilemler içeren senaryolar oluşturarak farklı görüşlerin ifade edilebileceği bağlamlar oluşturmuşlardır. Bu bakış açısıyla hazırlanan ders planlarında konu alanı içeriğin öğretimi yerine öğrencilerin tartışmalı konuların doğasında var olan anlaşmazlık ve ikilemleri fark etmelerinin amaçlandığı görülmüştür. Örneğin K11, yenilenebilir ve yenilenemez enerji kaynakları kapsamında hazırladığı ders planında "Dünyadaki tüm ülkeler için elektrik enerjisi çok önemlidir. Çünkü günlük hayatımızda iş yerlerinde, ev, okul, hastane ve fabrikalarda kullanılan araç gereçlerin birçoğu elektrikle çalışır. Ancak elektriği üretmek de zor iştir. Günümüzde elektrik enerjisi yenilenebilir enerji kaynaklarından (güneş, rüzgâr, hidroelektrik, jeotermal vb.), fosil yakıtlardan (petrol ve petrol ürünleri, kömür ve doğalgaz vb.) ve nükleer santrallerden üretilmektedir. Ülkemiz ise elektrik ihtiyacını nükleer santraller kurarak karşılamak istiyor." senaryosunu oluşturmuştur. İlgili senaryoda derslerde alışılageldiği gibi enerji ve yenilenebilir/yenilenemeyen kaynak gibi kayramları tanımlama, bunların neler olduğunu söyleyerek çalışma prensiplerini ayrıntılı anlatma gibi içerik bilgisi vermek yerine öğrencileri için ilgi çekici bir bağlam oluşturulmuştur. "Kendisini farklı özellikleri olan bireylerin yerine koyar." kazanımı çerçevesinde dezavantajlı gruplar hakkında farkındalık kazandırmaya dönük sorular eşliğinde bir kısa giriş planlayan K8, ilgili kazanımda ele alınabilecek tartısmalı bir konu olarak organ bağısını seçmiştir. Planındaki tartısmalı konu senaryosu "İki yaşında olan Ayşe ile annesi bir otobüs yolculuğu sırasında kaza geçirir. Kazada anne hafif yaralanırken Ayşe kafasının çarpmasının etkisiyle beyin kanaması geçirir. Hastaneye götürülürler ve Ayşe yoğun bakıma alınır. Birkaç saat sonra doktor ailesine Ayşe'nin beyin ölümünün gerçekleştiğini açıklar. Bu durumda kalbinin de çok dayanamayacağını söyleyerek 'Eğer isterseniz onun organlarını bağışlayarak organ bekleyen başka çocukların hayatlarını kurtarabilirsiniz' der." cümleleriyle yapılandırılmıştır. Görüldüğü gibi katılımcının hazırladığı senaryoda, öğrenciler ahlaki bir ikilem içerisinde bırakılmaktadır. Kimi katılımcılar ise yazılı senaryoların yerine bu görevi yerine getirecek karikatür ve fotoğraflar aracılığıyla öğrencileri tartışmalarını sağlayacak bağlamlarla karşılaştırmıştır.

Araştırmada, tartışmalı konuları gerek sosyal bilgiler dersi içeriğini aktarma aracı olarak gerek bağlam olarak yaklaşan katılımcılar öğrencilerin argümantasyon oluşturmalarına yardımcı olacak sorular kullanmışlardır. Bu kapsamda öğrencilerin ilgili tartışmalı konuya ilişkin kendi iddiasını oluşturma, oluşturduğu iddiaya ilişkin gerekçeler belirtme, olası karşıt iddiaların ne olacağını belirleme ve çürütmeye dönük argümanlar oluşturabilmelerini sağlayacak soru yapıları kullanılmıştır. Ne var ki dört aşamayı içeren söz konusu argümantasyon sürecinin aşamaları bütün katılımcılar tarafından kullanılamamıştır. Katılımcıların çoğunluğu (n=30) öğrencilerin iddia, gerekçe oluşturma, karşıt iddiaları belirleme ve çürütme yapmasını sağlayacak sorulardan en az birini göz ardı etmişlerdir.

Tartışmalı konulara göre ders planı hazırlayan katılımcıların büyük çoğunluğu (n=28) planlarında değerlendirmenin nasıl yapılacağına ilişkin açıklamalarda bulunmamışlardır. Öte yandan diğer katılımcıların ise akıl yürütmenin düzeyini değerlendirme ve içerik bilgisini değerlendirme olmak üzere iki özellikten birine odaklandıkları görülmüştür. Bu katılımcılardan biri olan K11 değerlendirme sürecinin gözlem temelli olması gerektiğini vurgulayarak "Öğrencilerin fikirlerini oluşturma, karar verme, ikna etme gibi becerilerini gözlemleyerek süreç değerlendirmesi ..." yapacağını belirtmiştir. Benzer şekilde K15 de değerlendirme sürecinde öğrencilerin akıl yürütme düzeyine odaklanılmasını önermektedir. K15 bu durumu planında "... öğrencilerin hangi aşamada kaldıklarına göre geribildirim sağlanır ve öğrencilerin eksik yönleri giderilmeye çalışılır." biçiminde ifade etmiştir. Sadece 6 katılımcı, değerlendirme sürecinde içerik bilgisi değerlendirmenin önemine yönelik açıklamalara ders planlarında yer vermişlerdir. Bu katılımcılardan biri olan K41 değerlendirme sürecinde öğrencilerin tartışmalı konulara ilişkin tartışmalarının bilgiye dayalı bir tartışma olup olmadığını kontrol edeceğini ve öğrencilerin bilgilerini tartışma ile ilişkilendirip ilişkilendiremediklerine odaklanacağını belirtmiştir.

#### Tartışma ve Sonuç

Araştırmada sosyal bilgiler öğretmen adaylarının derslerde tartışmalı konuların öğretimine ilişkin kendilerini orta düzeyde yeterli olarak algıladıkları sonucuna ulaşılmıştır. Bu sonuç sosyal bilgiler öğretmen adaylarının tartışmalı konuların öğretimine ilişkin kendilerine yönelik tam bir inanca sahip olmadıkları biçiminde de yorumlanabilir. Alanyazında nicel bir ölçek yardımıyla yeterlik belirleyen çalışmalar bulunmamaktadır. Ancak ilgili çalışmalar da (Alaçam Akşit, 2011; Çepni ve Geçit, 2020; Kuş, 2015; Oulton vd., 2004) öğretmenlerin tartışmalı konuların öğretimine ilişkin yeterliklerinin az olduğuna inandıklarına yönelik bulgular elde edilmiştir. Hem bu araştırmada öğretmen adaylarının yeterliklerine ilişkin tam bir inanç göstermemesi hem de diğer araştırmaların olumsuz sonuçları, aldıkları öğretmen eğitiminin tartışmalı konulara yönelik tam bir yeterliğe sahip olmamasıyla da yorumlanabilir. Daha önce yapılan pek çok araştırmada tartışmalı ve hassas konulara yönelik hizmet öncesi veya hizmet içi eğitim alma ihtiyacı veya alınan öğretmen eğitiminin yeterince etkili olmadığına yönelik sonuçlar elde edilmiştir (Alaçam Akşit; 2011; Akman & Bastik, 2016; Demircioğlu, 2016; Günal & Kaya, 2016; Oulton vd., 2004).

Alanyazında bazı araştırmalarda (Çopur, 2015; Yazıcı ve Seçgin, 2010) yeterlikler hakkında elde edilen sonuçlardan farklı olarak sosyal bilgiler, fen ve sınıf öğretmen adaylarının tartışmalı ve sosyobilimsel konuların öğretimine ilişkin olumlu tutum ve görüşlere sahip olduğu belirlenmiştir. Bu konulara yönelik olumlu tutum ve görüşlerin varlığı öğretmen ve öğretmen adaylarının ilgili öğretim uygulamalarına eğilim ve yatkınlığını arttırabilir. Ancak alanyazında öğretmen ve öğretmen adaylarının eğitim ortamlarında tartışmalı konulara yer vermeye yönelik çekinceleri sıklıkla ifade edilmektedir. Araştırmalar (Aynuz, 2020; Hess, 2004; Günal ve Kaya, 2016; Oulton vd., 2004; Yazıcı ve Seçgin, 2010;

Soley, 1996) sınav odaklı eğitim sistemi, zaman eksikliği, aile, toplum ve yönetici tepkisi, yaşanılan çevrenin örf ve afetleri, soruşturma geçirme endişesi, öğrencilerin tartışmayı istenilenden farklı boyutlara çekmesi, abartması ve sınıf dışına çıkarması, yöneticilere hesap verme ve işini kaybetme korkusu gibi nedenlerle tartışmalı konulara yer verilmekten kaçınıldığını göstermektedir. Öğretmenin tartışmayı yönetememe, tartışmalı konu hakkındaki bilgi yetersizliği gibi kendi öğretim yeterliklerine ilişkin endişeleri ise ilginç biçimde daha geri plandadır.

Araştırmada sadece cinsiyetin öğretmen adaylarının yeterlik algıları üzerinde anlamlı bir etkisi olduğu ve erkek öğrencilerin kız göre kendilerini daha yeterli hissettikleri sonucuna ulaşılmıştır. Ancak alanyazında cinsiyetin etkisine ilişkin değişken sonuçlara ulaşılmıştır (Çepni, 2019; Cebesoy ve Dönmez Şahin, 2013; Çepni ve Geçit, 2020; Özüdoğru, 2022; Seçgin, 2009; Tuncer, 2018; Yolagiden, 2017) cinsiyetin anlamlı etki yaratan bir değişken olmadığı görülmüştür. Öte yandan Çepni ve Geçit'in (2020) çalışmasında bu araştırmadan farklı olarak akademik başarısı olan öğretmen adaylarının daha olumlu tutumlara sahip olduğu sonucuna ulaşılmıştır.

Araştırmada öğretmen adaylarının ders planlarında seçtiği kazanım ve tartışmalı konularda bir çeşitliliğin sağlandığı sonucuna ulaşılmıştır. Bu sonuçlar öğretmen adaylarının programda yer alan olası tartışmalı konuları belirleme açısından başarılı olduğu ya da sosyal bilgiler öğretim programının yapısı gereği pek çok tartışmalı konuyu barındırdığına ilişkin bir kanıt olarak da düşünülebilir. Nitekim Tatar (2019) tarafından yapılan araştırmada tüm dersler arasında tartışmalı konularla ilgili en fazla kazanımın sosyal bilgiler dersine ait olduğu belirtilmiştir. Öte yandan Oulton vd. (2004) tarafından yapılan ilgili çalışmada öğretmenlerin vurguladığı gibi programın tartışmalı durumlarla nasıl başa çıkılacağı konusunda daha net tavsiyeler vermesi uygun olabilir.

Bu araştırmada öğretmen adayları tarafından en fazla ilgili plan hazırlanan tartışmalı konu başlıkları medya ve teknoloji kullanımı olmuştur. Bu bulgulara göre öğretmen adaylarının daha çok sosyal bilgiler öğretim programında yer alan medya ve teknoloji konularını tartışmalı olarak gördükleri söylenebilir. Öğretmen adaylarının yer verdikleri diğer konu başlıklarının ise Ayasofya'nın ibadete açılması, nükleer enerji, hidroelektrik santraller, yapay zekâ, madenler, Okul Andı'nın kaldırılması, İstanbul Sözleşmesi, doğal alanların korunması, çarpık kentleşme, erken emeklilik, özelleştirme politikaları, deprem, popüler kültür, anadilde eğitim, iklim değişikliği, demokrasi, göç (mülteciler), İstanbul'un fethi, NATO üyeliği, Avrupa Birliği'ne üyelik, genetiği değiştirilmiş organizmalar olarak sıralandığı belirlenmiştir. Bu sonuçlar alanyazında yer alan ve eğitim ortamlarında yer verilmesi gerektiği düşünülen tartışmalı konu başlıkları ile örtüşmektedir (Arslan, 2019; Aynuz & Memişoğlu, 2022; Çopur, 2015; Kuş, 2015; Seçgin, 2009; Öztürk, 2022).

Alanyazında tartışmalı konu öğretiminde dikkat edilecek genel hususlar yanında bazı somut ve işlevsel stratejiler belirlenmiştir. Somut bir strateji olarak tartışmalı konuların öğretiminde sosyobilimsel konuların öğretiminde sıklıkla kullanılan informal akıl yürütme adı verilen bir yaklaşım (Sadler, 2003; Sadler ve Zeidler, 2005) işe koşulabilir. Özellikle argümantasyon süreçlerine dayalı adım ve aşamaların etkili kullanımı öğrencilerin akıl yürütme becerilerinin gelişimini sağlamaktadır. Alanyazındaki araştırmalar tartışmalı ve sosyo-bilimsel konuların öğretiminde argümantasyon temelli öğretimin kullanımını önermektedir (Atabey & Topçu, 2017; Driver, Newton, & Osborne, 2000; Evren Yapıcıoğlu & Kaptan, 2018; Öztürk & Doğanay, 2019; Sampson & Clark, 2008; Torun & Şahin 2016). Bu araştırmanın sonuçları öğretmen adaylarının ilgili yetkinliklerinin zayıf olduğunu göstermiştir. Çünkü araştırma sonucunda genel olarak, öğretmen adaylarının tartışmalı konulara ilişkin öğretim tasarımlarında tartışmalı bir sorunun, ikilemin ya da ahlaki açıdan karar vermeyi gerektiren bir

durumun ele alınmadığı görülmüştür. Bunun yerine salt sosyal bilgiler içeriğini öğretmeye dönük olarak daha belirgin bir eğilimde oldukları bulunmuştur. Öğretmen adaylarının bu yaklaşımının nedeni daha sınav odaklı eğitim sisteminde yer alan ulusal sınavlarda tartışmalı konuların öğretimi ve kazandırdığı becerilerin yer bulmaması, var olan program içeriğini verebilme kaygısı gibi nedenlerle de açıklanabilir. Daha öncede verildiği gibi alanyazındaki kimi araştırmalar (Aynuz, 2020; Günal ve Kaya, 2016; Hess, 2004; Oulton vd., 2004; Soley, 1996; Yazıcı ve Seçgin, 2010) öğretmenlerin de genelde tartışmalı konulara sınıfta yer vermekten kaçınmaları ve içerik odaklı eğitimi tercih etmelerinin gerekçelerini bu şekilde ortaya koymuştur.

Araştırmada sınırlı katılımcının tartışmalı konu senaryolarını öğrencilerin etik, ahlaki, sosyal, ekonomik ve ekolojik bakış açılarını göre görüşlerini ifade edecekleri öğrenme bağlamları biçiminde yapılandırdıkları belirlenmiştir. Halbuki bu yönde yapılandırılan tartışmalı konu senaryoları ile öğrencilerin öğrendikleri bilgileri uygulanabilecekleri ya da kullanabilecekleri gerçek yaşam durumları oluşturulmasına ve artık günümüzde birer yaşam becerisi olarak kabul edilebilecek düşünme becerilerinin kazandırılmasına imkân sağlayabilir. Öte yandan katılımcıların öğrencilerin argümantasyon süreçlerine dönük sorulara ders planlarında yer vermeye çalıştıkları görülmüştür. Bununla birlikte kullanılan sorular nitelik açısından yetersizdir. Özellikle az sayıda katılımcının iddia belirleme, iddiaları gerekçelendirme, karşıt iddiaları belirleme ve karşıt iddialara dönük çürütücüler önerilmesine dönük soruları birlikte kullanıldığı belirlenmiştir. Katılımcılardan çoğunluğunun ise dört aşamalı argümantasyon sürecinin en az bir bileşenine dönük sorulara ders planlarında yer vermedikleri görülmüştür. Son olarak çoğu katılımcının tartışmalı konuların öğretiminin değerlendirilmesine yönelik net ölçme-değerlendirme stratejisi geliştiremediği belirlenmiştir

### Öneriler

Araştırmanın tüm sonuçları genel olarak değerlendirildiğinde ilgi çekici biçimde öğretmen adaylarının kazanım ve tartışmalı konu belirleme konusundaki başarısına rağmen sürece yönelik planlamada yeterince etkili olamadığı söylenebilir. Dolayısıyla öğretmen adaylarının hizmet öncesi eğitimlerinde tartışmalı konuların öğretimine yönelik uygulama ve etkinliklerle daha fazla karşılaştırılması ve bu tür uygulamalar konusundan deneyim kazanmaları önerilebilir. Öte yandan bu araştırmanın sınırlılıkları kapsamında, farklı örneklemlerde benzer araştırmaların tekrarlanması, tekrarlayan uygulama ve deneyimlere dayalı araştırmalarla elde edilen birden fazla öğrenci ürününün analizine dayalı çalışmalar yapılması ve öğretmen adaylarının plan hazırlama sürecinde dikkat ettiklerini ve yaşadıkları sorunları belirlemeye dönük veri toplama süreçleriyle de öğretmen adaylarının yeterliklerinin daha derinlemesine araştırılması önerilebilir.