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Social Studies Teachers' Digital Literacy Levels

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Abstract
In this study, which was conducted to determine the digital literacy levels of social studies teachers, explanatory sequential design, which is one of the mixed pattern methods, was used. 543 Social Studies teachers working in secondary schools across Turkey participated in the study in the 2019-2020 academic year. 543 social studies teachers participated in the quantitative part of the study and 32 social studies teachers participated in the qualitative part. The sample of the study was chosen as an easy and accessible sample. The data of the study were collected through the personal information form developed by the researcher, the interview form and the digital literacy scale developed by Sulak, (2019). Quantitative data obtained in the study were analyzed with a statistical program. As a result of the research, it was determined that the digital literacy levels of social studies teachers were at the "I agree" level. Significant differences were found between the digital literacy levels of teachers and the variables of gender, use of technology in the lesson, and in-service training. With the data obtained as a result of the interviews, it was revealed that the teachers themselves have a perception that their digital literacy skill level is below the digital literacy level of today's Z generation. As a result of the findings, suggestions were made to carry out various studies to increase the digital literacy level of social studies teachers and to gain digital literacy skills through in-service/pre-service training.

Keywords: Digital Literacy, Technology, Social Studies, Social Studies Teacher

1. Introduction

With the "globalization" that took place in the 21st century, in which the information age is lived, the need for individuals who can use information, not only use it correctly, but also produce information and solve their own problems has increased. Therefore, with the change of people's priorities, there have been changes in state policies. The concept of digital literacy has become more and more important for states (Koca, 2014). In addition to the high-level skill required to use digital tools, digital literacy is the correct use and analysis of resources, the ability to obtain new information based on the information obtained, and the ability to act more confidently in the digital world (Martin, 2008). The world of the generation, called the Z generation and born into technology, unlike the Y generation, passes almost entirely within the digital platforms. This situation has increased the use of technology in education and made it necessary to integrate technology into education. Selber and Stuart (2004) stated that it

is not possible for students who do not have digital literacy skills to fully adapt to today's technology. When the teaching profession is considered from this point of view, it is seen that teachers who will train the Z generation have important duties and that teachers should have digital skills related to their own work areas (Çelik, 2020). It is very important for teachers to educate their students as individuals who use technology in accordance with the requirements of the modern age. In this context, the Ministry of National Education has sought to increase the technological equipment and opportunities of schools with the "Movement to Increase Opportunities and Improve Technology (FATIH)" project in Turkey. The main components of the Fatih project determined by the Ministry of National Education are as follows (MoNE, 2020).

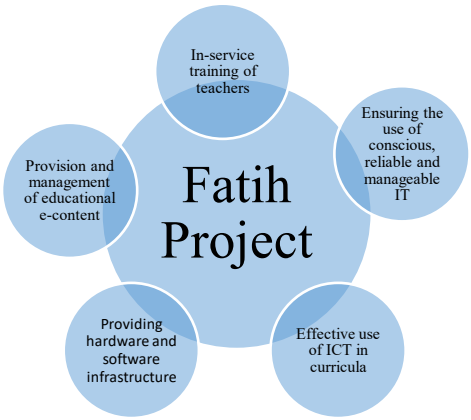

Figure 1: Main Components of Fatih Project (MoNE, 2020).

When the main components of the Fatih project are examined, it is seen that teachers have important duties. Students' using computer technologies as needed depends on the presence of teachers who can use digital technologies, analyze them correctly and adapt them to the classroom environment. Education-related developments are closely related to teachers who take on important duties in the educational environment. In particular, there is a need for teachers who follow new developments, research and actively apply them in their classrooms (Ay, Aydoğdu, 2016). The Ministry of National Education, in its article on teacher qualifications, mentions that a rapidly changing world will be dominated by a cyber-physical and internet-based change (MoNE, 2017). In this context, it is very important to include the concept of "digital literacy" in the professional competencies of teachers so that the younger generations can keep up with the mentioned change.

One of the most important aims of the social studies course is to raise “competent citizens”. The concept of competent citizen is understood as individuals who are curious about social developments in the world and who can find and analyze correct information from within the globalizing information network. In addition to all these, it can be said that technology can help teachers in gaining the skills of critical thinking and space perception included in the social studies curriculum and the values in the same curriculum (Kaya, 2008; MoNE, 2018). Digital literacy skills were added to the social studies curriculum in 2017, and the course was aimed to provide students with digital literacy skills. Science technology and society learning area are explained as “It should be ensured that students acquire skills such as self-control and digital literacy, as well as values such as honesty, industriousness and science ethics. In this learning area, students are expected to know that innovative, critical and scientific thinking is the basis of developments in science and technology. In addition, they are expected to gain the ability to use technology to reach information by understanding the development process of science and technology and its effects on social life. On the other hand, while learning to what extent technologies are related to daily life, he discusses the harms of some technological products to nature. He takes into account the principles of academic honesty, realizing that scientific works are protected by law” (MoNE,2018). It is seen that the learning area described above is directly related to digital literacy skills. In this context, it is seen that social studies teachers should have this skill. Looking at the results of the study conducted by Tepe (2019) to determine the digital literacy skills of pre-service teachers and the results of the study by Yaman (2019) with pre-service teachers, it is seen that

the digital literacy skills of pre-service teachers are not at a sufficient level. Considering the results obtained, it is seen that it is important to determine the digital literacy skills of social studies teachers.

In the study, it was aimed to evaluate the digital literacy levels of social studies teachers in terms of various variables. For this purpose, answers to the following questions have been sought.
1. What is the digital literacy level of social studies teachers?
2. Do the digital literacy levels of social studies teachers differ according to the gender variable?
3. Do social studies teachers' digital literacy levels differ according to the variable of using educational technologies in the lesson?
4. Do the digital literacy levels of social studies teachers differ according to the variable of receiving in-service training?
5. What are the social studies teachers' views on the concept of digital literacy?

2. Method

The research was designed with a mixed method in which quantitative and qualitative findings will be used together. First, the quantitative aspect of the research was carried out. Then, based on the quantitative data, the qualitative aspect of the research was carried out. 543 social studies teachers participated in the quantitative part of our research, and 32 social studies teachers participated in the qualitative part. While creating the sample of the research, the easily accessible/convenient sampling method was chosen. Easily accessible or convenient sampling is based entirely on items that are available, quick and easy to reach (Malhotra, 2004: 321).

The reason for choosing the mixed method in this research is to deal with the problems that are the subject of the research in a multidimensional and comprehensive way. Because the events and phenomena we encounter may not be simple enough to be considered singularly (Yıldırım & Şimşek, 2016). In addition to the quantitative data since it will be supported by the views of social studies teachers on digital literacy, the explanatory sequential design, which is one of the mixed method types, was used in the research. The exploratory design is a mixed-method design in which the researcher begins by conducting a quantitative phase and seeks specific results with a second phase. The second stage, the qualitative stage, is carried out to explain the related results more deeply (Morgan, 1998 cited in: Creswell, Clark, p.89).

2.1 Study Group

The sample of the research will be 543 social studies teachers working in public and private institutions. 543 social studies teachers participated in the quantitative part of our research and 32 social studies teachers participated in the qualitative part. In the research, "Digital Literacy Scale" developed by Sulak (2019) and semi-structured interview form created by the researcher were used as data collection tools.

Table 1: Distribution of Participants

Gender	**f**	**%**
Men	317	58,37
Women	226	41,62
Professıonal Senıorıty	f	%
0-9	331	60,96
10-19	152	27,99
20 and above	60	11,05

2.2 Data collection tool

Personal information form
The personal information form was prepared and used to determine the demographic characteristics of the teachers participating in the research, such as gender and seniority.
Digital Literacy Scale

The digital literacy scale was developed by Sulak (2019). The digital literacy scale consists of three factors: instructional technologies, information and communication, and technique. All of the items of the scale, which consists of 44 items in total, are positive statements, and there is no reverse coded item in the scale.

The items of the scale are 5-point Likert type and they are in the form of very good, good, medium, poor and bad. It was observed that the first factor included a total of 18 items and the factor loads of these items were between 0.367 and 0.803, the second factor included a total of 15 items and the factor loads of these items were between 0.482 and 0.675, and the third factor had a total of 11 items and the factor loads of these items varied between 0.509 and 0.742. The Cronbach's Alpha coefficient in the first factor was 0.92; the second factor is 0.90; the third factor was determined as 0.91 and a high internal consistency was obtained (Sulak, 2019). Distribution of the items in the scale according to the factors: Instructional Technologies: Between 1 and 18, Information Communication: Between 19-33, Technique: Between 34-44.

Interview form

A semi-structured interview form was used in the qualitative aspect of the research. During the interview process, the questions should be prepared by the researcher. In addition to the questions prepared during the interview, the researcher has the freedom to ask different questions in order to obtain more detailed information (Yıldırım & Şimşek, 2013). While preparing the form, firstly the literature was scanned and then the item pool was created. The interview form was formed in the form of 12 questions. While preparing the form, the opinions of 3 experts were taken and various changes were made on the questions. The number of questions in the interview form has been reduced to 10. It was applied to 32 social studies teachers on a voluntary basis and then analyzed by transcribing.

2.3 Analysis of Data

In the study, in the analysis of quantitative data, it was examined whether the data showed a normal distribution by using more than one technique in order to make objective decisions about the normal distribution. As a result of the analysis, parametric tests were performed on the data determined to have normal distribution. The t-test was used to compare quantitative continuous data between two independent groups, and the One-way Anova test was used to compare quantitative continuous data between more than two independent groups. Content analysis was carried out on the qualitative data obtained within the scope of the research. The data transferred to the text in the computer environment has been printed out. The data were read at least twice before starting to encode. Then the data was coded. During the coding process, the answers given for each question were read line by line, and the pieces of information that were in the nature of answering the research questions were given a label and coded. The codes obtained after the coding process were classified and themes were created. The themes obtained were presented to expert opinion. In line with expert opinions, after necessary corrections were made on the themes, the data were presented in tables. The interviews with the teachers were expressed using code names. In the last stage, the findings presented in tables were interpreted.

3. Findings

In this part of the research, which examines the digital literacy levels of social studies teachers, the findings and comments obtained as a result of the analyzes of the sub-problems are included.

In the first sub-problem of the study, the answer to the question “How are the scores of social studies teachers from the digital literacy scale and its sub-dimensions distributed?” has been sought. The mean scores and standard deviations that determine the digital literacy levels of teachers are given in Table 2.

Table 2: Analysis Results of Social Studies Teachers' General Scale and Sub-Aspects

	$\bar{X}$	SS	Min.	Max.
Instructional Technologies	2.77	.69	1.11	5.00
Information Communication	4.36	.59	2.33	5.0
Technique	4.28	.84	1.64	5.0

Overall Scale Total	3.69	.59	1.86	5.0

When the average scores given in Table 2 are examined, it is seen that the total average scores of the teachers' digital literacy scale are (X =3.69). According to the result, it is seen that the digital literacy of the teachers is at the level of "I agree", that is, at the medium level. In terms of sub-aspects, while teachers' Instructional Technologies (X =2.77) describe themselves as "undecided", in the Information Communication (X=4.36) aspect and in the Technical (X =4.28) aspect, "totally agree" level result has emerged.

In the second sub-problem of the study, an answer to the question “Do the scores of social studies teachers from the digital literacy scale and its sub-aspects differ significantly according to the gender variable?”has been sought. T-test results for independent samples made to determine whether the digital literacy levels of teachers differ according to the gender variable are given in Table 3.

Table 3: Digital Literacy Scale Aspects and Evaluation of the Overall Scale by Gender Variable

Aspects	Gender	N	$\bar{X}$	SS	sd	t	p	n^2
Instructional Technologies	Women	226	2.62	.84	541	-3,40	.00*	-0,29
	Men	317	2.87	.82				
Information Communication	Women	226	4.35	.56	541	-,25	.00*	-0,02
	Men	317	4.37	.61				
Technique	Women	226	4.19	.72	541	-2.59	.00*	-0,41
	Men	317	4.35	.66				
Overall Scale	Women	226	3.61	.59	541	-2,79	.01	-0,61
	Men	317	3.75	.59				

*p<.05

The results of the analysis in terms of the gender of the teachers are given in Table 3. When the mean scores of the scale are examined, it is seen that the mean score of male teachers ($\bar{X}$=3.75) is higher than the average score of female teachers ($\bar{X}$=3.61). The difference between the group averages was found statistically significant as a result of the t-test, which was conducted to determine whether the digital literacy levels of the teachers participating in the study differed significantly in the overall scale and in its sub-aspects, according to the gender variable. ($p<0.05$) In other words, the digital literacy levels of social studies teachers differ according to gender.

In the third sub-problem of the study, an answer was sought for the question "Do the scores of social studies teachers' digital literacy scale and sub-aspects differ significantly according to the variable of using educational technologies in the course?" T-test results for independent samples made to determine whether the digital literacy levels of teachers differ according to the variable of using educational technologies in the course are given in Table 4.

Table 4: Evaluation of Digital Literacy Scale Aspects and Overall Scale According to the Variable of Use of Educational Technologies in the Course

Aspects	Use of Technology in the Lesson	N	$\bar{X}$	SS	sd	t	P	n^2
Instructional Technologies	Yes	377	2.94	.81	541	7.71	.00	0,71
	No	166	2.37	.75				
Information Communication	Yes	377	4.40	.57	541	2.50	.01	0,23
	No	166	3.42	.62				
Technique	Yes	377	4.34	.66	541	3.01	.00	0,28
	No	166	3.15	.73				
Overall Scale	Yes	377	3.79	.59	541	6.12	.00	0,57

	No	166	3.46	.59

The results of the analysis in terms of the variable of teachers' use of educational technologies in the lesson are given in Table 4. When the mean scores of the overall scale are examined, it is seen that the mean score of the teachers who answered yes ($\bar{X}$=3.79) is higher than the mean score of the teachers who answered no ($\bar{X}$=3.46). The difference between the group averages was found statistically significant as a result of the t-test, which was conducted to determine whether the average scores of the digital literacy levels of the teachers participating in the study in the overall scale and in its sub-aspects, according to the variable of using educational technologies in the lesson. In other words the digital literacy levels of social studies teachers differ according to their use of educational technologies in the course.

In the fourth sub-problem of the study, an answer was sought for the question "Do the scores of social studies teachers' digital literacy scale and sub-aspects differ significantly according to the variable of receiving in-service training?". T-test results for independent samples made to determine whether the digital literacy levels of teachers differ according to the variable of receiving in-service training are given in Table 5.

Table 5: The Aspects of the Digital Literacy Scale and the Evaluation of the Scale in General According to the Variable of Receiving In-Service Training on Educational Technologies

Aspects	In-service Training	N	$\bar{X}$	SS	sd	t	p	n^2
Instructional Technologies	Yes	153	3.26	.82	541	9.18	.00	0,87
	No	390	2.57	.76				
Information Communication	Yes	153	4.42	.56	541	1.45	.14	0,13
	No	390	4.34	.59				
Technique	Yes	153	4.39	.60	541	2.20	.02	0,20
	No	390	4.24	.72				
Overall Scale	Yes	153	3.94	.56	541	6.27	.00	0,59
	No	390	3.59	.58				

The results of the analysis in terms of teachers' in-service training variable are given in Table 5. When the mean scores of the overall scale are examined, it is seen that the mean score of the teachers who answered yes ($\bar{X}$=3.94) is higher than the mean score of the teachers who answered no ($\bar{X}$=3.59). The difference between the group averages was found statistically significant as a result of the t-test conducted to determine whether the average scores of the digital literacy levels of the teachers participating in the study in the overall scale and in the instructional technologies and technical sub-dimensions according to the variable of receiving in-service training. ($p<0.05$) In the information communication sub-dimension, the difference between the group averages was not statistically significant. ($p>0.05$)

Social Studies teachers' views on the concept of digital literacy are given in Table 6.

Table 6: Social Studies teachers' views on the concept of digital literacy

Access to Information	Reproducing knowledge
	Access to information
	Distinguishing true information from false information
Effective use of technology	Effective use of IT tools
	Reflecting the developments in technology to education
	Importance in terms of 21st century skills
Academic Contribution	Concretizing the lesson
	Ease of handling gains

As seen in Table 6, the views of social studies teachers on the concept of digital literacy are grouped under three themes: access to information, effective use of technology, and academic contribution.

Teachers expressed their views under the theme of access to information as reproducing information, reaching information and distinguishing true information from false information. The opinions of some of the participants are given below.

"Digital literacy is to research, question, criticize, analyze and produce new information by using information technologies effectively. There is a connection between education and this concept. Education is important in terms of permanent learning change and knowledge generation of the individual. Therefore, digital literacy plays an important role in accessing and reproducing information in today's education process."

"It is accessing information via phone, tablet, computer and sharing information in these environments. In this way, students, teachers and parents can easily access information and use technology in education."

Teachers expressed their views under the theme of effective use of technology as using information tools and equipment effectively, reflecting the developments in technology to education, and importance in terms of 21st century skills. The opinions of some of the participants are given below.

"Digital literacy can be defined as learning and transferring information with information tools. I think that increasing the resources in the education process and following the developments are beneficial in terms of providing a critical view. It is important for teachers to be digitally literate in any educational activity that needs updating. Evaluation of issues from different perspectives and accessibility to partners can be considered as other positive aspects."

"Digital Literacy" is one of the basic skills of the social studies curriculum. In recent years, depending on the developments in digital technology, new situations related to citizenship rights and responsibilities (digital citizenship, e-Government, virtual commerce, social media, etc.) and some problems (digital division, identity theft, privacy of personal information, cyber fraud, cyber bullying, etc.) .) appeared. It is a concept that finds its spirit in the program in order to improve students' digital citizenship competencies."

Teachers expressed their views under the theme of academic contribution as convenience in concretizing the lesson and handling the achievements. The opinions of some of the participants are given below.

"Digital literacy plays an important role in today's education process in terms of accessing information, reproducing information and concretizing the lesson".

"It refers to the ability to find, understand, analyze, produce and share information through network devices such as smartphones, tablets, laptops and desktop computers."

The views of Social Studies teachers on digital literacy self-efficacy are given in Table 7.

Table 7: Opinions and Rationales of Social Studies Teachers on Digital Literacy Self-Efficacy

Bottom	Need for help.
	Failure to catch up with Generation Z.
	I don't think it is enough.
	We cannot keep up with the next generation.
	Being behind technology skills of the X generation.
	Generation Y is more active.
	The speed of technological developments.
Middle	Being the Y generation.
	Being digitally literate inevitably with the spread of technology.
	Not being as digitally literate as generation Z.
Top	Getting to know technology early.
	Having more digitally literate individuals in the social environment.
	Active use as the Y generation.
	Education on educational technologies.

As seen in Table 7, the views of social studies teachers on digital literacy self-efficacy are grouped under three themes: bottom, middle and top.

The teachers have stated their opinions under the bottom theme as needing help, not being able to catch up with the Z generation, I do not find it sufficient, we cannot keep up with the new generation, being behind the technology as the X generation, the Y generation being more active, and the speed of technological developments. The opinions of some of the participants are given below.

"I don't see enough. Today, information changes quickly. It is getting harder and harder to catch up with the younger generation. New, young teachers are needed in this regard. For this, in-service training should be provided. It should be taught as a lesson in schools. Digital literacy skills can be taught to students."

Teachers expressed their views under the middle theme as being the Y generation, becoming digitally literate inevitably with the widespread use of technology, and not being digitally literate as much as the Z generation. The opinions of some of the participants are given below.

"After the widespread use of smart phones and the internet, and thus the rapid access to information, I think that we are digitally literate individuals. But in order to use it in education, we need to receive training."

Teachers stated their views under the top theme as meeting technology early, being more digitally literate individuals in the social environment, using it actively as the Y generation, and training on educational technologies. The opinions of some of the participants are given below.

"My branch is Social Studies, but I also work as an Information Technologies Counselor (Formerly a formatter teacher). In other words, I think I am sufficient in digital literacy."

Opinions of Social Studies Teachers on Using Digital Tools and Contents in Classes are given in Table 8.

Table 8: Opinions of Social Studies Teachers on Using Digital Tools and Contents in Classes

Purposes of using digital tools and contents	Concretizing the lesson Ease of handling gains
Technological hardware and digital content used	Smart board Interactive educational software (EBA, Morpa, Campus, Vitamin, Web 2.0 Tools, Storyjumper, Kahoot, Artsteps, Prezi, Canva, Google Eeart, Google Maps, Clamavalbee, PowerPoint, Word) Projection soundrecording Computer
Achievements handled using digital tools/contents	SB.5.3.5. Explains the effects of natural disasters on social life with examples. SB.6.4.3. Conducts research using scientific research steps. SB.7.2.2. Analyzes the conquest policy of the Ottoman state through examples S.B. 6.3.2 6th grade social studies course examines Turkey's basic physical geography features, landforms, climatic features and vegetation on the relevant maps. SB.5.2.1. Realizes the important contributions of Anatolian and Mesopotamian civilizations to the history of humanity, based on their concrete remains. SB.7.3.3. Discusses the causes and consequences of migration through case studies.

As can be seen in Table 8, the views of social studies teachers on the purposes of using digital tools and contents in lessons are grouped under 3 themes: the purposes of using digital tools and contents, the technological equipment and digital contents used, and the achievements handled by using digital tools/contents.
Teachers expressed their views under the theme of the purpose of using digital tools and contents in lessons as concretization of the lesson and ease of handling the achievements. The opinions of some of the participants are given below.

"For presentation: prezi, powerpoint, for infographic: powerpoint, canva, for worksheet: word, powerpoint, for mapping: google earth, google maps, for game: clam, kahoot, for student opinion: google form, for concept maps: bubble.us site for optical testing practice: the use of evalbee apps increase permanent learning and concretization."

"Because there are history and geography subjects in our lesson, and the history lesson is boring for many students, it is much more interesting to watch a video, an animation or do an interactive activity on the interactive board instead of explaining the lesson in a monotonous way. In particular, concretization provides great convenience for gains. It enhances student learning."

Teachers' opinions under the theme of technological hardware and digital content used are smart boards, interactive educational software (EBA, Morpa, Campus, Vitamin, Web 2.0 Tools, Storyjumper, Kahoot, Artsteps, Prezi, Canva, Google Eeart, Google Maps, Clamavalbee, PowerPoint, Word).), projection, sound recording, computer. The opinions of some of the participants are given below.

"I am using the smart board. With the smart board, learning information can become more concrete. Audio, video, image and other application-based activities are included in the learning process. But because the curriculum is too intense, sometimes it does not catch up."

"I used the computer and the projector. Because there are no other technological tools in the institution."

Teachers' opinions under the theme of technological equipment and digital contents used and achievements handled by using digital tools/contents are as follows: SB.5.3.5. Explains the effects of natural disasters on social life with examples, SB.6.4.3. Conducts research using scientific research steps, SB.7.2.2. Analyzes the conquest policy of the Ottoman state through examples, S.B. 6.3.2 6th grade social studies course examines Turkey's basic physical geography features, landforms, climatic features and vegetation on the relevant maps, SB.5.2.1. Realizes the important contributions of Anatolian and Mesopotamian civilizations to the history of humanity, based on their concrete remains, SB.7.3.3. Discusses the causes and consequences of migration through case studies. The opinions of some of the participants are given below.

"Folk dances can be used in the 5th grade 1st learning area, and the Civilizations in the 2nd learning area, natural disasters in the 3rd learning area".

"6. Classroom Social Studies course can be used for the acquisition of "Turkey's basic physical geography features, landforms, climatic features and vegetation on the relevant maps. (S.B. 6.3.2)"

The Opinions of Social Studies Teachers on the Status of Receiving Digital Tools Usage In-Service Training are given in Table 9.

Table 9: Opinions on the Status of Receiving In-Service Training in Using Digital Tools

Type of In-Service Training	MEB in-service training MEB infrastructure works
Purpose of In-Service Training	Increasing the permanence of lessons Ease of use in the relevant field Active use of technology in the lesson Fatih Project

As can be seen in Table 9, the opinions of social studies teachers regarding the use of digital tools and the status of receiving in-service training are grouped under two themes: the type of in-service training and the purpose of in-service training.

Teachers expressed their views under the theme of the type of in-service training as MEB in-service training and MEB infrastructure studies. The opinions of some of the participants are given below.

"Yes, I received a training on the FATIH Project given by the ministry. I have acquired important skills in using smart boards. In this way, I actively use the smart board in every lesson while carrying out my educational activities. I think it would be better if face-to-face trainings increased".

"Yes, I received in-service training. It made the understanding and permanence of the course easier, especially in distance education, but I personally would prefer the training to be practical".

The teachers stated their views under the theme of the purpose of in-service training as increasing the permanence of the lessons, ease of use in the relevant field, active use of technology in the lesson, and the Fatih project. The opinions of some of the participants are given below.

"I received a training on the FATIH Project. I have acquired important skills in using smart boards. In this way, I actively use the smart board in every lesson while carrying out my educational activities".

"The technological infrastructure of our school is quite good. In this way, I can use technology. Our internet speed is sufficient, we have smart boards in every classroom and teachers' room, and we also have a computer lab."

4. Conclusion Discussion and Suggestions

According to the findings of the study, it has been seen that the digital literacy total score averages of social studies teachers (X=3.69) were at a moderate level. The findings are in line with the results obtained by Buzkurt (2021), Arslan (2019). In the qualitative part of the study, contrary to the findings obtained in the quantitative part, it was seen that the teachers who saw themselves as low and middle level were more than the teachers who described themselves as high. Teachers who find themselves competent state that they use technology effectively and correctly in their lessons and in their normal lives, while teachers who find themselves insufficient in digital literacy have the opinion that "teachers with high seniority have difficulties in this regard, we have difficulty in reaching the new generation".

According to the research findings, the digital literacy levels of social studies teachers differ in favor of men when it comes to gender. This result is similar to some research results (Kıyıcı, 2008; Çetin, 2016). In addition, there are studies in the literature in which there is no significant difference in the context of the gender variable (Öçal, 2017; Kaya & Yazıcı, 2019). The reason why female teachers have a lower level of technological skills than male teachers can be shown that technology is seen as a field for men in the past and today. The fact that more men are active in the business areas that can be associated with technology and therefore the perception of inadequacy in women may have led to such a result (Savcı, 1999).

As a result of the analysis, a significant difference was found between the use of technology in the lesson and digital literacy of social studies teachers. This difference was in favor of the teachers who use technology in their lessons. However, the majority of the teachers interviewed in the qualitative aspect of the study stated that they were unfamiliar with the knowledge level of Z generation students, the applications and games they used, and sometimes they could not catch up with them in the lessons. It has been observed that teachers who say they use technology in the lesson generally prefer to use it in the learning areas of Culture and Heritage, People, Places and Environments, and Science, Technology and Society. Likewise, Karamustafaoğlu (2006) reached a similar conclusion in his study called Science and Technology teachers' level of use of teaching materials.

As a result of the analysis, a significant difference has been observed in favor of the teachers who received in-service training in the variable of social studies teachers' in-service training on educational technologies. In the study conducted by Kaya (2019), it has been concluded that the teachers who received information technology education had high self-efficacy in using smart boards. In the thesis study conducted by Korkmaz (2020), it was concluded that the digital literacy levels of classroom teachers who received technology education were high. In the study, it was stated that as the number of technological tools used by teachers increased, their digital literacy also increased. In the qualitative aspect of the research, it has been shown that in-service training is effective in the effective use of technology in the lessons of teachers' education and in ensuring permanence.

In line with the results obtained in the research, the following suggestions have been developed:

1. Explaining the content of concepts such as digital literacy and digitalization to teachers in detail by the Ministry of National Education will help to increase the digital literacy level of teachers.
2. In the in-service training given to social studies teachers, putting the training into practice as well as theoretical knowledge will increase the digital literacy of the teachers.
3. The increase in digital content courses such as Web 2.0 given to social studies teachers will help increase the permanence and efficiency of the social studies course.
4. Correcting the problems such as infrastructure inadequacies of schools, lack of digital materials, lack of technical knowledge will increase the use of technology in education.

References

Apay, A & Özbaşı, D. (2008). Investigating Teacher Attitudes Towards Computers. *Educational Administration: Theory and Practice, 55*,339-362.

Arslan, S. (2019). *Investigation of digital literacy levels of teachers working in primary and secondary schools in terms of various variables.* (Unpublished Master's thesis). Sakarya University. Sakarya.

Ay,T.S & Aydoğdu, B. (2016). The views of classroom teachers about parental involvement. *Adıyaman University Journal of Social Sciences 8*(23), 562-590.

Buzkurt, L (2021). *Investigation of the Relationship Between Preschool Teachers' Lifelong LearningTendencies and Digital Literacy Levels.* (Unpublished Master's thesis). Dicle University, Dicle.

Creswell, J., & Plano C, V. L. (2011). *Designing and conducting mixed method research* (2nd ed). Thousand Oaks, CA: Sage.

Çakmak, Z. & Taşkıran, C. (2014). Examination in terms of various variables of the attitudes of teacher candidates social studies towards computer assisted training. *Turkish Studies, 9*(5), 529-537.

Çelik, T. (2020). Training teachers of social studies in the digital age: an action study. *Pamukkale University Journal of Social Sciences Institute, 38,* 211-229. DOI: 10.30794/pausbed.541913.

Çetin, O. (2016). Examining the digital literacy levels of undergraduate science education and pedagogical formation programme preservice teachers. *Erzincan University Journal of Educational 18(2),* 658-685.

Gür-E. D., Güngören, Ö., Hamutoğlu, N. B., Kaya U. G., Demirtas Tolaman, T. (2019). The Relationship between Lifelong Learning Trends, Digital Literacy Levels and Usage of Web 2.0 Tools with Social Entrepreneurship Characteristics. *Croatian Journal of Education: 21*(1), 45−76. https://doi.org/10.15516/cje.v21i1.2989.

Karamustafaoğlu, O. (2006*).* Fen ve teknoloji öğretmenlerinin öğretim materyallerini kullanma düzeyleri: Amasya ili örneği. *Atatürk University Bayburt Journal of Educational 1*(1), 90-101.

Kaya, B. (2008). The using of technology in the social studies classroom. *Gazi University Gazi Journal of Educational, 28*(3), 189–205.

Kaya, M. T. (2019). *Investigation of technopedagogical education competencies and smart board self-efficacy of social studies teachers: Afyonkarahisar sample.* (Unpublished doctoral thesis), Afyon Kocatepe University, Afyonkarahisar.

Kaya, M. T. & Yazıcı, H. (2019). A view of the social studies teachers' on technopedagogical education competencies, *ETU Journal of Social Sciences Institute 9*, 105-136.

Kıyıcı, M. (2008). *Identifying digital literacy level of teacher's candidates.* (Unpublished doctoral thesis), Anadolu University, Eskişehir.

Koca, M. K. (2014). *Applicability of fieldwork-based teaching activities to social studies course* (Unpublished doctoral thesis), Gazi University. Ankara.

Korkmaz, M. (2020). *Determining digital literacy levels of primary school teachers*. (Unpublished Master's thesis). Eskişehir Osman Gazi University. Eskişehir.

Malhotra, N.K. (2004). *Marketing research an applied orientation*, 4. Edition, Pearson Prentice Hall, New Jersey.

Martin, A. (2008). Digital literacy and the digital society. C. Lankshear, M. Knobel (Ed.), Digital literacies:Concepts, Policies and Practices (s.151- 174). New York: Peter Lang.

Menşan, N.Ö. (2019). *Primary school teachers' perception of digital culture.* (Unpublished Master's thesis). Eskişehir Osmangazi University. Eskişehir.

Ministry of National Education. (2018). *Social studies curriculum*. https://mufredat.meb.gov.tr/Dosyalar/201812103847686 SOSYAL%20B%C4%B0LG%C4%B0LER%20%C3%96%C4%9ERET%C4%B0M%20PROGRAMI%20.pd (Date of access : 6.11.2020).

Ministry of National Education. (2020). *Fatih project*. http://fatihprojesi.meb.gov.tr/about.html. (Date of access: 10.10.2020.)

Öçal, F. N. (2017). *Perceptions of digital literacy competence related to primary school teacher and parents themselves with their children* (Unpublished Master's thesis). Gazi University, Ankara

Özer, Ü & Albayrak, Özer, E. (2017). Social studies and computer and ınstructional technologies teac her candidates' views towards web 2.0 in education. *3nd International Congress on Political, Economic and Social Studies (ICPESS),* 9-11 Nov. 2017, 106-118.

Savcı, İ (1999). Society gender and technology*, Journal of The Faculty of Political Science. 54*(1), 123-142.

Selber, S. (2004). *Multilitaracies for a dijital age*. Corbondale: Southern Ilinoıs University Press.

Sulak, S. E. (2019). Development of the digital literacy scale: validity and reliability study. *International Social Sciences Studies Journal*, *5*(31) 1329-1342.

Şimşek, S. (2016). Social studies teaching for social studies and classroom teachers. Ankara: Anı Publishing

Tatlı, A.2018). *Evaluation of teachers' digital citizenship levels in the context of information literacy and internet and computer usage self-sufficiency.* (Unpublished Master's thesis). Necmettin Erbakan University, Konya.

Tepe, U. (2019*). Opinions of social studies teacher candidates on digital literacy.* (Unpublished Master's thesis). Fırat University. Elazığ.

Yaman, C. (2019). *Examination of digital literacy levels of social studies teacher candidates (The example of Niğde Ömer Halisdemir University).* (Unpublished Master's thesis). Niğde Ömer Halisdemir University, Niğde.