



# Education Quarterly Reviews

**Taş, H., & Minaz, M. B. (2022). The Acquisition Level of 21st Century Skills in the Primary Education 4th Grade Social Studies Curriculum. *Education Quarterly Reviews*, 5(2), 600-611.**

ISSN 2621-5799

DOI: 10.31014/aior.1993.05.02.517

The online version of this article can be found at:  
<https://www.asianinstituteofresearch.org/>

Published by:  
The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.



ASIAN INSTITUTE OF RESEARCH  
Connecting Scholars Worldwide

# The Acquisition Level of 21st Century Skills in the Primary Education 4th Grade Social Studies Curriculum

Halil Taş<sup>1</sup>, Muhammet Baki Minaz<sup>2</sup>

<sup>1</sup> Inspection Board, Ministry of National Education, Ankara, Turkey

<sup>2</sup> Faculty of Education, Siirt University, Siirt, Turkey

Correspondence: Halil Taş, Inspection Board, Ministry of National Education, Ankara, Turkey.  
Tel: +905053126323, E-mail: egitimci1@hotmail.com

## Abstract

Depending on classroom teachers' views, this study determined the acquisition level of the 21st-century skills in the primary education 4th-grade social studies curriculum. Designed in an explanatory mixed-method model, it used the interpretative phenomenological method for the qualitative data and the scanning method for the quantitative data. The sample consisted of 86 classroom teachers (42 female and 44 male) selected using the cluster sampling method, one of the probabilistic sampling methods. The quantitative data were collected using a 5-point Likert-type scale and analyzed using frequency (f) and percentage (%). The qualitative data were collected using a semi-structured interview form developed by the researcher and analyzed using the content analysis method. The result revealed that the primary education 4th-grade social studies curriculum was insufficient and impractical to convey 21st-century skills. However, it was better in gaining the skills of "collaboration," "using technology for learning," and "communication." It was determined to be insufficient in gaining the skills of "self-management/self-regulation" and making "global connections" and "local connections."

**Keywords:** Social Studies Course, Social Studies Education, Curriculum, 21st-Century Skills

## 1. Introduction

Globalization, economic, environmental, and political issues, and the rapid developments in information and communication technologies are constantly changing the knowledge and skills that individuals need for success (Chu et al., 2017; Griffin, McGaw & Care, 2012; Saavedra & Opfer, 2012; Zajda, 2015). In this sense, it is evident that traditional basic skills such as reading, writing, and arithmetic are insufficient in the 21<sup>st</sup> century. Today, global life requires a different educational approach and model that goes beyond the repetition skills, basic/applied knowledge, and limited literacy skills of the 20<sup>th</sup> century (Kereluik, Mishra, Fahnoe & Terry, 2013). One should be able to find alternative solutions to complex problems, communicate effectively, produce and manage information, work as a team, and adapt to rapid changes in order to have a good job, active citizenship, and happy life in the 21<sup>st</sup> century, described as an intense period of transformation (Ananiadou & Claro, 2009). The mentioned skills are acknowledged as the 21st-century skills in the literature.

It is observed that the role expectations and qualifications have drastically changed in parallel with the social, economic, political, and technological developments in the 21<sup>st</sup> century. Those changes also affect the education systems and create an urge to make certain changes in today's knowledge, skills, and competencies. According to Harari (2020), today, the last thing that should be delivered in education is knowledge, and it is vital to make sense of and use information, distinguish between what is essential and what is not, and associate information with the world. Technological innovations, political issues, economic changes, mass media tools, globalization, and multiculturalism are among the current issues we deal with today. Thus, students are expected to interpret world events, develop original ideas and products, learn about mass media, learn to live together with different languages and cultures, and make global and local connections, which will be possible with a multidimensional adaptation of education programs, schools, and curricula.

According to Cansoy (2018), the 21<sup>st</sup> century will be characterized by more challenging problems, a boost in knowledge, changes, and instability, and more autonomous organizations and systems. It will be the era in which humans would have a central place in organizations, the country's demographics would change due to migrations, and there would be multiculturalism and new ways of working. The key to leading a good life in the 21<sup>st</sup> century is possible with the acquisition of necessary knowledge and skills. Skill refers to solving problems, performing tasks, and applying knowledge to handle challenging tasks (Ananiadou & Claro, 2009). This comprehensive definition underlines the diversity of dispositions, knowledge, and abilities a student must have to exercise a particular form of expertise.

The 21st-century skills depend on applying knowledge and daily life experiences (Bal, 2018), which implies having interdisciplinary knowledge rather than specific information in a field. It can also be argued that one would have various skills such as management knowledge, cognitive and meta-cognitive skills (e.g., critical thinking, innovative thinking, learning to learn, self-regulation), social and affective skills (e.g., empathy, self-efficacy, cooperation) and practical skills (using new information and communication technologies) (OECD, 2018).

Since acquiring 21st-century skills would be possible with efforts in the classroom, school, and system level (Nieveen & Plomp, 2018), first of all, a mental transformation must be achieved in the whole education system (Saavedra & Opfer, 2012). In this sense, integrating the mentioned skills into curricula systematically and practically, enriching course contents by adding new and up-to-date topics and attainments, and engaging in interdisciplinary studies that help students acquire the intellectual, personal and social skills necessary for more in-depth learning and restructuring schools as learning institutions can be considered paths to success in 21st-century skills (Voogt & Roblin, 2012).

While food supply and shelter were the vital concerns of ancient people, today, the ability to compete in the global market and use knowledge and technology are the most fundamental priorities (Çiftçi & Bakar, 2020). Dynamic changes in the information society have entailed specific skills such as communicating to solve complex problems, producing, using, and sharing information, adapting to new demands and changing conditions and being open to innovations (Binkley et al., 2010; Saavedra & Opfer, 2010). 2012). Additionally, the supply and demand in the global market force individuals to acquire specific skills for future occupations that do not exist yet (Dede, 2010). Those skills refer to 21st-century skills involving harmonious working relationships, flexibility, and productivity in the interdisciplinary work world that requires cooperation (Saavedra & Opfer, 2012).

Despite the variety of 21st-century skills, critical thinking, problem-solving and cooperative work skills, and creativity are the standard features. The 21st-century skills are grouped under three skill fields "learning and innovation skills," "knowledge, media and technology skills," and "life and career skills" (Kylonen & Bertling, 2014; Trilling & Fadel, 2009). Although there is no common definition (Çiftçi & Bakar, 2020), it is an inclusive concept that embraces knowledge, skills, personality, and mental characteristics that one needs to contribute to the information society (Voogt & Roblin, 2010). Collaboration, leadership, entrepreneurship, initiative, curiosity, imagination, agility, adaptability, critical thinking, problem-solving, effective communication, and information access and analysis are among the 21st-century skills (Dağhan, Nuhoğlu Kibar, Menzi Çetin, Telli & Akkoyunlu, 2017). The 21st-century skills facilitate quick access to information and practical use to solve daily problems,

expect individuals to have sophisticated skills, use technology effectively, and approach world events and phenomena from a broader perspective.

21st-century skills help raise individuals who know their rights and responsibilities as world citizens, contribute to a healthy and global society, seek sustainability, and share their ideas and know-how to propose new policies (Saavedra, 2012). In addition to acquiring civic knowledge, individuals with those skills can think critically, produce solutions to social problems, analyze events and phenomena without prejudice, and make better choices and decisions (Saavedra & Opfer, 2012).

The 21st-century individuals are expected to think critically and creatively, solve problems, cooperate and communicate with others well, access information by using technology effectively, take responsibility, have self-management, leadership, and social skills, be open to new ideas, and be productive, self-confident, flexible and adaptable. It is predicted that individuals with those skills and characteristics will be successful in education and business life (Eryılmaz & Uluyol, 2015). Today, the primary goal of education is to raise responsible and creative individuals who can adapt to changes and find solutions to problems, are open to criticism and have a flexible mindset characterized by multidimensional and critical thinking skills (Kutlu & Schreglmann, 2011). The mentioned competencies can be considered 21st-century skills.

In Turkey, 65% of teachers stated that the Turkish Education System could not adapt to the globalization process, students do not know universal values (66%), the current education system cannot solve students' problems (68.3%), and they suggested reframing the educational content, goals, and values (85.4%) (MoNE, 2011), which underlies the serious challenges in the acquisition of 21st-century skills in schools. The primary reason for this problem is the teaching programs and curricula because they are essential elements of any education system that directly affect national development and future policies and integrate traditions with contemporary values. In parallel with the trends of our age, the efforts to raise socially, culturally, and technologically better-equipped generations place curricula at the center of the education process.

A curriculum consists of four basic components: goal, content, instructional activities, and measurement and evaluation process, and it is a guide for practitioners (Yazıcı & Koca, 2008). It is a learning experience mechanism that provides learners with planned activities in and out of school (Demirel, 2021). It produces learning outcomes based on the characteristics of the age and is an instrument to educate an ideal individual (Doğanay, 2005). A social studies curriculum, which focuses on teaching concepts, values, and skills, aims to ensure that students acquire the target knowledge and skills under the guidance of teachers. According to Belet-Boyacı and Güner-Özer (2019), curricula can be considered an introductory guide to education for students.

However, 21st-century skills cannot be acquired only by student requests or teacher competencies. It is possible with radical and systematic changes and purposeful practices. Therefore, in recent years, 21st-century skills have begun to find a place in curricula (Demir & Özyurt, 2021). For example, 21st-century skills have been integrated into curricula and education programs of several institutions and organizations in most states in the USA (Gelen, 2017). Likewise, Australia, Canada, Finland, Belgium, Ireland, Italy, Norway, and New Zealand have included 21st-century skills in their curricula (Anagün, Atalay, Kılıç, & Yaşar, 2016) because the given skills are acknowledged to have great significance in modern education systems (Larson & Miller, 2011; Saavedra & Opfer, 2012). In Turkey, 21st-century skills were integrated into the revised curricula in 2017, one of which was the Social Studies Curriculum.

The social studies course curriculum can be one of the most suitable instruments for delivering 21st-century skills (Çelikkaya, 2011). It aims to train individuals who can produce and use knowledge, solve problems, think critically, communicate and empathize better and have an entrepreneurial spirit (MoNE, 2018). Social studies course prepares students for social life and provides students with particular skills to succeed in business, private, and education. Social studies course content closely intertwined with daily life offers preliminary preparations for social events, phenomena, or concepts that students may encounter and helps them become well-equipped individuals. The main objectives of the social studies course include information processing and management and

the transfer of cultural norms, values and citizenship responsibilities (Öztürk, 2010). In this sense, social studies courses can be practical in helping students adapt 21st-century skills.

This study aimed to determine the acquisition level of the 21<sup>st</sup>-century skills in the primary education 4<sup>th</sup>-grade social studies curriculum, address the relevant problems and suggest additional ways to acquire the given skills better. Although some studies focus on evaluating or delivering a limited set of 21st-century skills, there is no systematic and overall approach to those skills (Jia, Oh, Sibuma, LaBanca & Lorentson, 2016). Aiming to develop sustainable educational programs, our study would fill the gap in the literature by analyzing the available curricula from a critical perspective and uncovering the social studies course curriculum's strengths and weaknesses in reflecting 21-century skills. It is also hoped that it would be an opportunity for teachers to become familiar with 21st-century skills. We also aimed to determine the multidimensional requirements for the effective integration of 21st-century skills into social studies curricula. The fact that it is important to start teaching 21st century skills at primary school or even pre-school age (Çetin & Çetin, 2021) and the fact that the primary school period is an important period in which the foundations of personality development are laid constitute one of the reasons why this research is included in the primary school fourth grade social studies curriculum.

Depending on classroom teachers' views, this study determined the acquisition level of the 21<sup>st</sup>-century skills in the primary education 4<sup>th</sup>-grade social studies curriculum. In this sense, answers to the following questions were sought:

1. What is the acquisition level of the 21<sup>st</sup>-century skills in the primary education 4<sup>th</sup>-grade social studies curriculum?
2. What are the problems in acquiring the 21<sup>st</sup>-century skills in the primary education 4<sup>th</sup>-grade social studies curriculum?
3. What can be done to improve the acquisition of 21<sup>st</sup>-century skills in the primary education 4<sup>th</sup>-grade social studies curriculum?

## 2. Method

### 2.1. Study Model

We used the interpretative phenomenological method for the qualitative data and the scanning method for the quantitative data. This study applied an explanatory mixed-method model to determine the acquisition level of 21st-century skills according to classroom teachers' views. An explanatory mixed-method allows to carry out two research: firstly, a quantitative study is completed, and then qualitative research is planned accordingly. According to Creswell and Guetterman (2018), combining qualitative and quantitative research methods provides a better understanding of a given problem.

The quantitative data were collected using a scanning method that shows participants' opinions, attitudes, interests, and competencies about a subject or situation (Büyüköztürk, Akgün, Karadeniz, Demirel & Çakmak, 2017). Additionally, the study used the interpretative phenomenological method for the qualitative data regarding classroom teachers' opinions and experiences on acquiring mentioned skills.

### 2.2. Study Sample

The sample consisted of 86 classroom teachers (42 female and 44 male) selected using the cluster sampling method, one of the probabilistic sampling methods. Cluster sampling is preferred when all clusters in the universe have an equal chance of being selected (Karasar, 2018). Of the teachers who worked with the 4th graders, 42 (48.84%) were female, and 44 (51.16%) were male. 53 teachers stated that the primary education 4th-grade social studies curriculum was insufficient and impractical to convey 21st-century skills. We interviewed 28 of them who were selected using the snowball sampling method, one of the purposeful sampling methods (16 male and 12 female). Following Patton's (2015) questions of "Who knows the most about the issue? Whom would you recommend us to interview?"

### 2.3. Data Collection Tools

The study data were collected using the *21<sup>st</sup> Century Competencies Scale* developed by Niemi, Pehkonen, Niu, Teng, and Harju (2018) as a quantitative data collection tool. It is a 5-point Likert scale (i.e., Very inadequate, Inadequate, Moderate, Good, Perfect) with 58 items. The maximum score obtained from the scale is 290, and the minimum is 58. The Cronbach's Alpha reliability coefficient was calculated as .96. After the Turkish translation of the instrument, it was checked by two academics and two English teachers and revised based on the feedback. The qualitative data were collected using semi-structured interview forms developed by the researchers to determine the reasons for the inadequacy of the curriculum and learn about the suggestions and ways to improve it. According to Yıldırım and Şimşek (2018), semi-structured interview forms involve questions that participants can answer as they wish. Interviews were conducted after testing the interview form and scheduling the place and time of the interviews. The interview questions/items were prepared considering the study goal, sub-problems, comprehensibility, and clarity. The draft form, created by taking the opinions of two field experts, was tested on four teachers who were not included in the sample but had similar characteristics. Then, it took its final form.

### 2.4. Data Collection

The participants were informed in detail about the study goal, data collection tools, and processes. The data were collected through face-to-face interviews. Instead of real names, the participants were coded as T-1, T-2... T-86. The scale used to collect quantitative data was completed by the participants in approximately 30 minutes and under the researcher's supervision. Each interview to collect qualitative data took approximately 15 minutes, and at the schools where the teachers worked, audio recordings were made, and notes were taken with the consent of participants. The scientific research principles and publication ethics were followed in the study. Necessary permissions were obtained from the relevant institutions, the participants were informed in detail about the study, and signed an informed consent form.

### 2.5. Data Analysis

The quantitative data, including participant responses to the scale, were analyzed using frequency (f) and percentage (%). The response rates and percentages were determined and interpreted. The qualitative data obtained from the interviews were analyzed by content analysis. The participant responses were grouped by similarities, and the data were quantified (digitized) through descriptive statistics (i.e., frequency and percentage). Quantification of qualitative data involves a numerical description of the data obtained through qualitative data collection tools (e.g., interview, observation, document review) (Yıldırım & Şimşek, 2018). Direct quotations were made from the participants' statements.

## 3. Findings

### 3.1. Findings Regarding the First Sub-Problem

The data on the acquisition level of the 21<sup>st</sup>-century skills in the primary education 4<sup>th</sup>-grade social studies curriculum are shown in Table 1 below.

Table 1: The acquisition level of the 21<sup>st</sup>-century skills in the curriculum

Level	f	%
Very inadequate	17	19.77
Inadequate	36	41.86
Moderate	8	9.30
Good	15	17.44
Perfect	10	11.63

As seen in Table 1, 19.77% of the participants stated that the primary education 4<sup>th</sup>-grade social studies curriculum content was “very inadequate” to deliver the 21<sup>st</sup>-century skills, 41.86% “inadequate”, 9.30% “moderate”, 17.44%

“good”, and 11.63% “perfect”. In terms of frequency percentages, %61.63 stated that the primary education 4th-grade social studies course curriculum was “insufficient” and “very inadequate,” and %29.07 rated “good” and “perfect.” This study also examined the acquisition level of the 21st-century skills in the current curriculum. The results are presented in Table 2.

Table 2: The acquisition level of the 21st-century skills in the current curriculum

21 <sup>st</sup> Century Skills	Very inadequate		Inadequate		Moderate		Good		Perfect	
	f	%	f	%	f	%	f	%	f	%
Critical thinking	10	11,63	13	15,12	14	16,28	28	32,56	23	26,74
Collaboration	5	5,81	7	8,14	12	13,95	36	41,86	28	32,56
Communication	7	8,14	11	12,79	15	17,44	30	34,88	25	29,07
Creativity and Innovation	15	17,44	18	20,93	16	18,60	21	24,42	18	20,93
Self-regulation/self-management	15	17,44	19	22,09	17	19,77	20	23,26	17	19,77
Global connections	20	23,26	22	25,58	23	26,74	11	12,79	12	13,95
Local connections	17	19,77	21	24,42	21	24,42	14	16,28	15	17,44
Technology use	6	6,98	11	12,79	13	15,12	32	37,21	26	30,23
Teaching in digital environments	14	16,28	16	18,60	12	13,95	26	30,23	20	23,26

As we understood from the table above, the primary education 4th-grade social studies curriculum was good enough to present the skills of "collaboration" and "technology use," but it was insufficient in terms of gaining "global connections" and "local connections" skills. In terms of the frequency percentages of "good" and "perfect", the order of the skills was as follows: Collaboration (74.42%), technology use (66.44%), communication (63.95%), critical thinking (59.30%), teaching in digital environments (53.49%), creativity and innovation (45.34%), self-regulation/ self-management (43.03%), local connections (33.72%), and global connections (26.74%).

### 3.2. Findings Regarding the Second Sub-Problem

Table 3 shows the data on the obstacles related to the primary education 4<sup>th</sup>-grade social studies curriculum.

Table 3: Obstacles related to the curriculum

Obstacles	f	%
It is not student-centered.	26	92.86
It is exam-oriented.	24	85.71
Frequent changes are made in the curriculum.	23	82.14
It does not update itself.	21	75.00
It does not consider stakeholder opinions.	19	67.86
Its content is too loaded.	16	57.14
It is not developed by field experts.	13	46.43
It does not have universal content.	11	39.29
It is inflexible.	8	28.57

The reasons why the primary education 4th-grade social studies curriculum was inadequate to reflect the 21st-century skills can be listed as follow: the curriculum is not student-centered but exam-oriented; it is changed frequently; it lacks updates and improvements and does not consider the views of stakeholders or field experts; the content of the curriculum is too loaded; it is not flexible and does not include universal subjects. Some teachers' statements on the obstacles in the primary education 4th-grade social studies curriculum are given below:

- T4: The curriculum is teacher-centered and even book-centered, which is a barrier between students and us.
- T12: We completely and only focus on exams. Now we have nothing to worry about but exams. Well, who cares about 21st-century skills!
- T23: Those educational programs will not work well as long as they are developed without taking the opinions of teachers, who are the actual practitioners.

T41: Since the curriculum content is very loaded, there is no time for 21st-century skills.

T72: The curriculum is not based on scientific developments but is driven by ideological and political concerns.

### 3.3. Findings Regarding the Third Sub-Problem

Table 4 shows the data on what can be done to make the curriculum more effective and practical in teaching the mentioned skills.

Table 4: Suggestions for the curriculum

Suggestions	f	%
Exam-oriented approach should be abandoned.	25	89.29
The curriculum should be student-centered.	23	82.14
Stakeholders' views should be considered in preparing the curriculum content.	20	71.43
The curriculum should have universal content.	18	64.29
The era's trends should be considered in preparing the curriculum.	17	60.71
The curriculum content, coursebooks, and other materials should be prepared coherently.	16	57.14
The curriculum content should be reduced.	15	53.57
The curriculum should be dependent on practical experiences.	12	42.86
Modern educational tools and methods should be included in the curriculum.	11	39.29
Field experts should prepare the curriculum.	8	28.57
The curriculum should aim to present 21st-century skills.	5	17.86

As seen in Table 4, teachers recommended abandoning the exam-centered approach, developing a student-centered program, taking stakeholders' opinions, integrating universal values, trends of the era, and modern educational tools and methods into the curriculum, preparing coursebooks and other educational materials considering the curriculum content, reducing the program content, adopting an application-oriented approach and taking expert opinions in preparing a curriculum that should focus on the acquisition of 21st-century skills. Some teachers' suggestions to make the curriculum more effective in teaching the 21st-century skills are summarized below:

T9: An effective curriculum should not focus on exam performance.

T32: Students should be prioritized in preparing a curriculum.

T51: Teacher and field expert opinions should be considered when developing a curriculum.

T80: Local, political, or ideological concerns should be eliminated in preparing a curriculum characterized by universal values.

## 4. Discussion and Conclusion

The study results showed that 60.23% of the participants found the primary education 4th-grade social studies course curriculum insufficient to teach 21st-century skills, and 30.68% found it good or perfect. Similar to our findings, in a study conducted by the Turkish Ministry of National Education, the majority of the teachers stated that students could not acquire the universal values of the 21<sup>st</sup> century, the current education system did not have international standards, and the values and goals to be achieved should be renewed (MoNE, 2011). Barası and Erdamar (2021) found that the current education program partly had the 21st-century competencies and that skills such as critical thinking, learning to learn, creativity, entrepreneurship, and leadership were not adequately included in the program, which overlaps with our findings. Similarly, Sarıtaş and Yılmaz (2022) revealed that despite the efforts to update the curriculum, it still lacked most 21<sup>st</sup>-century skills. Demir and Özyurt (2021) suggested enriching the social studies course curriculum and making it inclusive, which parallels our suggestions. The findings of Kayhan, Altun, and Gürol (2019), emphasizing that the current curriculum did not adequately achieve the goal of raising individuals with 21st-century skills, align with our findings.

The inefficiency of the current curriculum in teaching 21st-century skills stems from the fact that scientific principles were not prioritized in developing it. Besides, the curriculum was not addressed as a whole with its educational goals, content, learning-teaching experiences, and measurement-evaluation dimensions, and the emphasis was unnecessarily on the content. According to Cuban, passive learning, drilling, and memorization are prevalently used in social studies curricula, and many teachers do not care about what, why, or how they teach (Russell, 2010). In Turkey, the curricula on how to gain 21st-century skills lack explicit content and assessment and measurement methodology (Bozkurt, 2021). The ambiguous place of 21st-century skills in the curriculum leads to problems in implementation (Arı & Çalıřođlu, 2021; Öztürk & Kafadar, 2020). The uneven distribution of 21st-century skills in the curriculum negatively affects the utility of those skills as well (Bal, 2018). It should be noted that the curricula in Turkey are incompatible, inconsistent, and very inadequate in terms of 21st-century skills (Gelen, 2017). Besides, teachers do not prioritize the acquisition of 21st-century skills, which makes it challenging to popularize those skills (Saavedra & Opfer, 2012b).

The given curriculum was effective in presenting collaboration skills (74.42% of the participants), technology use skills (67.44%), communication skills (63.95%), critical thinking skills (59.30%), teaching skills in digital environments (53.49%), creativity and innovation skills (45.34%), self-regulation/self-management skills (43.03%), local connections skills (33.72%), and global connections skills (26.74%). In this sense, it was concluded that the primary education 4th-grade social studies curriculum was better at gaining the skills of "collaboration," "use of technology," and "communication" but not practical in terms of "self-regulation," and "global connections" and "local connections." Similarly, in their studies, Bozkurt (2021) and Barası and Erdamar (2021) found that the social studies education undergraduate program was better in gaining cooperation and communication skills but not sufficient for gaining global and local connection and self-regulation skills, which aligns with our findings. Sarıtař and Yılmaz (2002) determined that the self-management skills were not efficiently addressed in the curriculum, and there were no relevant texts or activities in coursebooks. In the studies conducted by Bal (2018), Demir and Özyurt (2021), and Kayhan, Altun, and Gürol (2019), it was concluded that the social studies course curriculum did not cover all of the 21st-century skills, and there was no balanced distribution of those skills in the program.

The social studies course curriculum was deficient in meeting the needs to establish, improve and manage global and local connection skills. It can be suggested that the inability to think globally, interpret local and global events, and take the right attitudes and actions causes several problems. Self-regulation/self-management skill is characterized by managing goals and time, determining success criteria, balancing short and long-term goals, working independently, and being self-directed and self-disciplined (Yalçın, 2018). The deficiency in self-regulation skills prevents individuals from having a planned life, developing self-discipline, managing time, and adapting to changes. Therefore, the curriculum, which would offer the opportunity to lead a better life and become a value-creating individual, should include those skills in a balanced and consistent way.

The reason that the curriculum was better in gaining some skills but worse in others is that those skills were not sufficiently included in all aspects of the curriculum. As Binkley et al. (2016) stated, a description of 21st-century skills in a curriculum is not enough to present to learners as long as the methodology to transfer those skills is not clarified well. According to Hamarat (2019), the 21<sup>st</sup>-century skills in curricula do not cover the whole system but focus on only one dimension, preventing transfer and acquisition. In this sense, as implementers of curricula, teachers also play a role in the ineffective transfer of 21st-century skills. For instance, Sarıtař and Yılmaz (2002) found that teachers did not know the curriculum content well.

The participant teachers listed the reasons why the primary education 4th-grade social studies curriculum was inadequate to transfer the 21st-century skills as follows: the curriculum was not student-centered but exam-oriented; it was changed frequently; it lacked updates and improvements and did not consider the views of stakeholders or field experts; the content of the curriculum was too loaded; it was not flexible and did not include universal subjects. Bozkurt (2021) similarly revealed that the main obstacle in acquiring 21st-century skills is the teacher-centered instruction model and examinations centered only on cognitive skills. One participant (T4) said, "The curriculum is teacher-centered and even coursebook-centered. It prevents reaching students.". In a study by Tař and Kırdođlu (2018), it was concluded that the content of the primary education 4th-grade social studies

curriculum was too loaded, and individual differences were not taken into account in the measurement-evaluation process. One participant (T41) said, "As the curriculum content is so loaded, there is no time to teach 21st-century skills." In the studies by İltter (2017) and Russell (2010), teachers' using passive learning and lecturing techniques and the textbooks as the primary source of information are among the obstacles to gaining 21st-century skills. Similarly, Barası and Erdamar (2021) underlined the unnecessarily overlapping and out-of-date knowledge, uninteresting learning content in curricula, the lack of physical infrastructure, material, and time, and the exam system that cannot measure skills as the most frequently encountered problems.

Time is changing, which requires individuals to be equipped with various skills than ever before. The increasing complexity of life entails the need for people with advanced skills in several fields (Mutluer, 2013). The failure to integrate the mentioned skills into curricula, which have become more critical in knowledge-based economies, may make it difficult to succeed in the 21<sup>st</sup> century (Rotherham & Willingham, 2009). This indicates a need for reforms in schools and education systems to meet students' and society's social and economic needs in the 21<sup>st</sup> century (Larson & Miller, 2011) and suggests that curricula should be updated accordingly.

For an effective transfer of 21st-century skills, the teachers recommended abandoning the exam-centered approach, developing a student-centered program, taking stakeholders' opinions, integrating universal values, trends of the era, and modern educational tools and methods into the curriculum, preparing coursebooks and other educational materials considering the curriculum content, reducing the program content, adopting an application-oriented approach and taking expert opinions in preparing a curriculum that should focus on the acquisition of 21st-century skills. It has been seen that they recommend that experts in the field prepare the program and that the program aims to gain 21st-century skills. The participants (T9, T32, T50, T80) said, "For a good curriculum, exams should be put aside, but students should be taken to the center. In preparing a curriculum, the opinions of teachers and experts should be sought; local, political or ideological concerns should be left aside, and universal values should be considered instead". They are meaningful findings that support our quantitative findings. Barası and Erdamar (2021) suggest increasing the curriculum's applicability by reducing the number of educational attainments, abandoning the exam-oriented approach, and using alternative assessment and evaluation techniques to measure 21st-century skills, which overlap with our findings. Demir and Özyurt (2021) found that the social studies curriculum should be enriched to be inclusive and develop students' 21st-century skills, supporting our results.

As reported in the social studies course curriculum, the main purpose of the education system is to raise individuals with knowledge, skills, and behaviors integrated with values and competencies (MoNE, 2018). According to Saavedra and Opfer (2012), for students to acquire 21st-century skills, a mental transformation strategy should be applied to the entire education system, teachers should be trained to convey these skills, and cooperation in schools should be increased. According to Taş and Kıroğlu (2018), the active participation of teachers in the curriculum development process should be ensured, the curriculum content should be reduced, and an appropriate measurement-evaluation method should be adopted. Voogt and Roblin (2012) indicate that the course content should be enriched with new topics, and more emphasis should be placed on interdisciplinary studies in the curriculum. According to Arı and Çalışoğlu (2021), the curriculum should be renewed and updated, an acquisition-skill relationship should be considered, and modern methods and techniques should be preferred for the transfer of skills.

## 5. Recommendations

1. The social studies course curriculum should be revised; the 21<sup>st</sup>-century skills should be equally integrated into objectives, achievements, learning-teaching situations, content, and measurement-evaluation techniques, and the delivery of these skills should be exciting, purposeful, and reinforced with activities and practices.
2. Raising individuals who are well-equipped with social, cultural, scientific, and technological skills should be at the core. The curriculum should be prepared to meet the requirements of the age and the changing needs of people and society and reflect the modern education theories and approaches.

3. The whole education system, especially the curricula, should undergo a mental change and transformation, and developed countries' education systems and curricula should be considered role models.
4. Teachers' rush to transfer academic information and students' efforts to memorize should end, the education system should stop focusing only on test scores, and a student-centered approach that reveals the hidden potential should be adopted.
5. Up-to-date information, skills, values, and habits should be pursued to develop a consistent, balanced, inclusive, and rich curriculum that reflects 21st-century skills.
6. Since teachers play vital roles in implementing the curricula, the active participation of teachers in the curriculum development/revision process should be ensured. Cooperation should be made with several national and international institutions and organizations, and field experts' and scientists' opinions and suggestions should be carefully considered at every stage of education program development.

## References

- Anagün, Ş. S., Atalay, N., Kılıç, Z., & Yaşar, S. (2016). The development of a 21st century skills and competences scale directed at teaching candidates: Validity and reliability study. *Pamukkale University Journal of Education*, 40(40), 160-175. <https://doi.org/10.9779/PUJE768>
- Ananiadou, K., & Claro, M. (2009). 21st century skills and competencies for new millennium learners in OECD countries. *OECD Education Working Papers*, <http://dx.doi.org/10.1787/218525261154>
- Arı, S., & Çalışoğlu, M. (2021). 21st century skills and grade 4th class social studies curriculum. *TURAN-CSR: TURAN Center for Strategic Researches* 13(52), 276-282. <http://dx.doi.org/10.15189/1308-8041>;
- Bal, M. (2018). Investigation on the 21st century skills of Turkish language course. *Turkish Studies*, 13(4), 49-64. <http://dx.doi.org/10.7827/TurkishStudies.12922>
- Barası, M. & Erdamar, G. (2021). Analysis of 2018 secondary school Turkish course program in terms of 21st century skills: Teacher opinions. *Bolu Abant İzzet Baysal University Journal of Education*, 21(1), 222-242. <https://dx.doi.org/10.17240/aibuefd.2021.21.60703-851474>
- Belet-Boyacı, Ş. D., & Güner-Özer, M. (2019). The future of learning: Turkish language course curricula from the perspective of 21st century skills. *Anadolu Journal of Educational Sciences International*, 9(2), 708-738. <https://doi.org/10.18039/ajesi.578170>
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). Defining twenty-first century skills. In P. Griffin, B. McGaw & E. Care (Eds.), *Assessment and teaching of 21st century skills* (pp. 17- 66). Springer.
- Bozkurt, F. (2021). Evaluation of social studies teaching undergraduate program in terms of 21st century skills. *Pamukkale University Journal of Education (PUJE)*, 51, 34-64. doi:10.9779/pauefd.688622
- Büyüköztürk, Ş., Akgün, Ö. E., Karadeniz, Ş., Demirel, F. & Çakmak, E. K. (2017). *Scientific research methods*. Pegem Academy Publishing
- Cansoy, R. (2018). 21st century skills according to international frameworks and building them in the education system. *Journal of the Human and Social Sciences Researches*, 7(4), 3112-3134.
- Chu, S. K. W., Reynolds, R. B., Tavares, N. J., Notari, M., & Lee, C. W. Y. (2017). Twenty-first century skills and global education roadmaps. In *21st Century Skills Development Through Inquiry-Based Learning* (pp. 17-32). Springer.
- Creswell, J. W., & Guetterman, T.C. (2018). *Educational research planning, conducting and evaluating quantitative and qualitative research*. Pearson.
- Çelikkaya, T. (2011). Transmission level of skills in the social studies curriculum: Teachers' opinions. *Kastamonu Education Journal*, 19(3), 969-990.
- Çetin, M., & Çetin, G. (2021). A critical outlook on MoNE early childhood education curriculum in terms of 21st century skills. *Journal of Education for Life*, 35(1), 235-255. <http://dx.doi.org/10.33308/26674874.2021351258>
- Çiftçi, B., & Bakar, MHD. (2020). Investigation of social studies teacher candidates' 21st century skills competence perceptions. *Cappadocia Education Journal*, 1(2), 44-60
- Dağhan, G., Nuhoglu-Kibar, P., Menzi-Çetin, N., Telli, E., & Akkoyunlu, B. (2017). 21st century learners' and teachers' characteristics from ICT preservice teachers' perspectives. *Educational Technology Theory and Practice*, 7(2), 215-235.
- Dede, C. (2010). Comparing frameworks for 21st century skills. In J. Bellanca & R. Brandt (Eds.), *21st century skills* (pp. 51-76). Solution Tree Press.

- Demir, AY, & Özyurt, M. (2021). Investigation of social studies curriculum and coursebooks in the context of 21st century skills, *Inonu University Journal of the Faculty of Education*, 22(2), 1254-1290. <http://dx.doi.org/10.17679/inuefd.867905>
- Demirel, Ö. (2021). *Curriculum development in Education: From theory to practice*. Pegem Academy Publishing.
- Doğanay, A. (2005). Social studies teaching. In C. Öztürk & D. Dilek (Eds.). *Life Studies and Social Studies Teaching*. Pegem Academy Publishing
- Eryılmaz, S., & Uluyol, Ç. (2015). Evaluation of FATİH Project in the consideration of 21st century skills. *Journal of Gazi Education Faculty*, 35(2), 209-229.
- Gelen, İ. (2017). P21- 21st century skill frameworks in curriculum and instruction (USA practices). *Journal of Interdisciplinary Educational Research*, 1(2), 15-29.
- Griffin, P., McGaw, B., & Care, E. (2012). *Assessment and teaching of 21st century skills*. Springer.
- Hamarat, E. (2019). *Turkey's education policies focused on 21st century skills*. SETA Publications, <https://setav.org/assets/uploads/2019/04/272A.pdf>
- Harari, Y. N. (2020). *21 lessons for the 21st century*. Random House.
- İlter, İ. (2017). An evaluation on teachers' teaching methods and practices in social studies lessons. *Journal of Theoretical Educational Science*, 11(1), 1-29.
- Jia, Y., Oh, J.Y., Sibuma, B., LaBanca, F., & Lorentson, M. (2016). Measuring twenty-first century skills: Development and validation of a scale for in-service and pre-service teachers. *Teacher Development*, 20(2), 229-252.
- Kayhan, E., Altun, S., & Gürol, M. (2019). Evaluation of eighth grade Turkish curriculum (2018) in terms of century skills. *Adnan Menderes University Journal of Educational Sciences*, 10(2), 20-35.
- Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What knowledge is of most worth. *Journal of Digital Learning in Teacher Education*, 29(4), 127-140.
- Kutlu, M., & Schreglmann, S. (2011). Examining the critical thinking dispositions of academics working at universities according to their faculties and titles. *Cukurova University Faculty of Education Journal*, 40(3), 116-121.
- Kylonen, P. C., & Bertling, J. P. (2014). Innovative questionnaire assessment methods to increase cross-country comparability. In L. Rutkowski, M. Von Davier, & D. Rutkowski (Eds.), *Handbook of international large-scale assessment: Background, technical issues, and methods of data analysis* (pp.277-285). CRC Press.
- Larson, C. L., & Miller, N. T. (2011). 21st century skills: Prepare students for the future. *Kappa Delta Pi Record*, 47(3), 121-123.
- MEB. (2011). *MEB 21st century student profile*. [https://www.meb.gov.tr/earged/earged/21.%20yy\\_og\\_pro.pdf](https://www.meb.gov.tr/earged/earged/21.%20yy_og_pro.pdf)
- MEB. (2018). *Social studies curriculum (Primary and Secondary School 4th, 5th, 6th and 7th Grades)*. MEB Publications.
- Mutluer, C. (2013). The views of social studies teachers about the skills contained in social studies (The example of İzmir Menemen). *Turkish Studies*, 8(7), 355-362. <http://dx.doi.org/10.7827/TurkishStudies.5236>
- Niemi, H., Pehkonen, L., Niu, J., Teng, J., & Harju, V. (2018). *How do teacher education programs guide student teachers to gain the 21st century skills?* [Unpublished doctoral dissertation]. University of Helsinki.
- OECD. (2018). *The future of education and skills: Education 2030*. [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)
- Öztürk, C., & Kafadar, T. (2020). Evaluation of the 2018 social studies curriculum. *Trakya Journal of Education*, 10(1), 112-126. <http://dx.doi.org/10.24315/tred.550508>
- Öztürk, D. (2010). *The effectiveness of creative thinking skill on student achievement in primary school 6th grade social studies course*. [Unpublished master's thesis]. Marmara University
- Patton, M. Q. (2015). *Qualitative research and evaluation methods*. Sage Publication, Inc.
- Rotherham, A., & Willingham, D. (2009). 21st century skills: The challenges ahead. *Educational Leadership*, 67(1), 16-21.
- Russell, B. W. (2010). Teaching social studies in the 21st century: A research study of secondary social studies teachers' instructional methods and practices. *Action in Teacher Education*, 32(1), 65-72.
- Saavedra, A. R. (2012). Dry to dynamic civic education curricula. In D. Campbell, M. Levinson & F. Hess (Eds.). *Making civics count: Citizenship education for a new generation* (pp. 135-159). Harvard Education Press.
- Saavedra, A. R., & Opfer, V. D. (2012). Learning 21st-century skills requires 21st-century teaching. *Phi Delta Kappan*, 94(2), 8-13. <https://doi.org/10.1177/003172171209400203>
- Sartaş, B., & Yılmaz, A. (2022). An analysis of secondary education Turkish language and literature course with regards to the 21st century skills. *National Education*, 51(234), 1137-1160
- Taş, H., & Kiroğlu, K. (2018). Assessment of the 2017 primary school social studies curriculum according to teachers' views. *Elementary Education Online*, 17(2), 697-716
- Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. Jossey-Bass.
- Tuğluk, M.N. & Özkan, B. (2019). Analysis of MoNE 2013 preschool education program in terms of 21st century skills. *Journal of Primary Education*, 1(4), 29-38

- Voogt, J., & Roblin, N.P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of curriculum studies*, 44(3), 299-321.
- Yalçın, S. (2018). 21st century skills and tools and approaches that are used to measure these skills. *Ankara University Journal of Faculty of Educational Sciences*, 51(1), 183-201. <http://dx.doi.org/10.30964/auebfd.405860>
- Yazıcı, H., & Koca, K. (2008). Social studies curriculum. In B. Tay & A. Öcal (Eds.). *Social Studies Teaching with Special Teaching Methods*. Pegem Academy Publishing
- Yıldırım, A., & Şimşek, H. (2018). *Qualitative research methods in the social sciences*. Seçkin Publications.
- Zajda, J. (2015). Globalisation and its impact on education and policy. In J. Zajda (Ed.). *Second international handbook on globalisation, education and policy research* (pp. 105-125). Springer.