

Alternative literacy in the Turkish Social Studies Curriculum

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Abstract

The research aims to determine which alternative literacy types should be included in the Social Studies Curriculum used in Turkey since 2018. The data sources of the research, in which the document analysis method from the qualitative research methods was used, are the 2018 Turkish Social Studies Curriculum (for primary school and middle school 4th, 5th, 6th and 7th grades), and the studies in the relevant literature. The curriculum was accessed from the official internet website of the Republic of Türkiye Ministry of National Education Board of Education and Discipline; literature studies were accessed through databases like WoS, SCOPUS, EBSCO, ERIC, ScienceDirect, Sage, Wiley, Google Scholar, and DergiPark. The data were analyzed with the content analysis. The research results concluded that competencies are mostly related to cultural literacy, scientific literacy, technology literacy, civic (citizenship) literacy, and global literacy skills. Additionally, when the objectives were evaluated separately for each class level (4th-7th grades), it was seen that mainly geographical literacy, historical literacy, scientific literacy, cultural literacy, civic (citizenship) literacy, and global literacy could be included. Based on the results, it is recommended to assess technology literacy, natural disaster literacy, critical literacy, and visual literacy as alternative literacy types.

1 Introduction

1.1 Problem statement

In a traditional sense, literacy includes reading, writing, and counting skills, but has moved beyond this basic meaning linked to developments in information and communication technologies. Efforts by UNESCO played an important role in literacy gaining its current meaning. UNESCO, working to develop the vision of 'a literate world for all' since 1946, declared 8 September was "International Literacy Day" in 1966, while 1990 was declared the "International Year of Literacy." The organization continued activities in later years to develop literacy with various conferences, meetings, and initiatives (Behrens, 1994; UNESCO, n.d.a). Thus, this concept was seen as a tool for describing, understanding, interpreting, creating, and communicating in a rich and rapidly changing world in terms of digital information (UNESCO, n.d.b). Apart from this, definitions of literacy are associated with reasoning, criticism, communication, and lifelong development skills (Cendek, 2015; Kara, 2017; Mısırlı, 2020; Sanchez & Castillon, 2020). Based on these explanations,

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literacy may be defined as transferring knowledge and skills gained into daily life by making sense of them beyond reading and writing.

In the current information and technology age, literacy has an important place in the lives of individuals related to topics like accessing information in a short time, using the available information at hand to find and solve problems, sharing with others, and benefiting from social knowledge accumulation (Önal, 2010; Yiğit, 2011). The leading role in acquiring literacy skills, an important part of human life, belongs to education. Education includes different disciplines that develop the lifelong learning skills of the individual. In this context, while encouraging literacy, an inseparable part of lifelong learning, and the 2030 UN Sustainable Development Goals (SDGs), UNESCO adopted the following approaches for a literate world for all:

- To create strong foundations through early childhood care and education
- To provide quality basic education for all children
- To increase functional literacy levels for young people and adults who lack basic literacy skills
- To develop literate environments (UNESCO, n.d.b).

The social studies course is one of the most important courses in supporting these goals and approaches. A study by Dere and Demirci (2021) revealed that the 2030 UN Sustainable Development Goals were included in the Turkish social studies curriculum to a large extent. This situation is a good reference source to teach literacy types through social studies courses. Simultaneously, when the 2018 social studies curriculum implemented in Turkey is examined, it appears to include a variety of literacy skills (environmental literacy, digital literacy, financial literacy, map literacy, legal literacy, media literacy, and political literacy) (Ministry of National Education [MoNE], 2018a). However, social studies courses are not limited to these types of literacy.

Additionally, Dere and Ateş (2021) revealed in their systematic literature review on literacy that 40 different types of literacy skills were addressed in the social studies education articles. Based on current literature, this research aims to determine which alternative literacy types should be included in the 2018 Turkish social studies curriculum. With this primary aim, answers to the following questions are sought:

1. What alternative literacies can be associated with these competencies?
2. Which alternative literacies can the objectives be associated with?

1.2 Literature review

Many new, different, complex, and multiple literacy types have emerged depending on changing conditions, needs, and rapid developments in information and communication technologies (Aşıcı, 2009; Karakaş-Yıldırım & Yemenici, 2020; Önal, 2010). The 2018 Turkish social studies curriculum includes some of the literacy types (7). The information related to literacy types included in the curriculum is presented in Table 1.

Table 1 Literacy types in the Turkish Social Studies Surriculum

Literacies	Explanations
Environmental literacy	Environmental literacy is the capacity to understand and interpret environmental systems and to take appropriate actions to improve, protect and renew these systems (Roth, 1992).
Digital literacy	Digital literacy contains information and skills that ensure the safe and effective utilization of digital technologies to access, produce and share accurate information (Hamutoğlu, Canan-Güngören, Kaya-Uyanık & Gür-Erdoğan, 2017; Pala & Başibüyük, 2020).
Financial literacy	Financial literacy is an individual's skills in making conscious decisions about processing economic information, financial planning, accumulation of wealth, debt, and retirement pensions (Lusardi & Mitchell, 2014).
Map literacy	Map literacy represents the ability to interpret, analyze and assess by using information from maps (from colors, marks, symbols, and map legend). This

	literacy is significant for individuals to be able to make place-event connections and perceive space (Akengin, Tuncel & Cendek, 2016).
Legal literacy	Legal literacy is the skill of accurately reading, understanding, and using resources related to the law. This skill includes the dimensions of legal knowledge, attitudes, and skills (Oğuz, 2013).
Media literacy	Media literacy includes skills of access, analysis, assessment, creation, and action using all forms of communication (National Association for Media Literacy Education [NAMLE], 2022).
Political literacy	Political literacy includes the essential knowledge, skills, and values for making effective and conscious decisions during democratic participation, creating dialogue, and discussing political topics with others (Dağ & Koçer, 2019; Fyfe, 2007).

As can be seen, the basic literacy skills included in the social studies curriculum are aimed at students' knowledge, attitude, and skills in various disciplines. Apart from the literacy types stated in the curriculum, the social studies discipline includes many alternative literacy skills (Dere & Ateş, 2021). Some alternative literacy types and definitions not included in the curriculum are presented in Table 2.

Table 2 Alternative literacies types and explanations

Literacies	Explanation
Information literacy	This literacy covers the skills of accessing information from reliable sources when needed for research or a topic, defining information, analyzing data, and using it for assessment, interpretation, and solutions (Karakaş-Yıldırım & Yemenici, 2020; Sevim & Kavak, 2020; Yordamlı, 2020).
Scientific literacy	Scientific literacy is the skill of assessment of the quality of arguments presented in mass media tools by scientists and the use of evidence (Dragoş & Mih, 2015).
Geographical literacy	Geographical literacy includes skills such as the perception of the space where is lived, map reading, having a sense of direction, coding geographical messages, and solving these codes (Meydan, 2018; Thomas-Brown, 2011).
Discipline literacy	Discipline literacy consists of the skills of having information about reading, writing, speaking, and thinking habits valued and used in a particular discipline and participating in disciplinary discourse (Di Domenico, Elish-Piper, Manderino & L'Allier, 2018; Learned, 2018; McConachie, Hall, Resnick, Ravi, Bill, Bint & Taylor, 2006).
Natural disaster literacy	This literacy consists of knowledge, attitudes, and behavior about knowing the principles and limits of nature, having the necessary competence about natural disasters, knowing how to struggle against natural disasters, reacting, analyzing outcomes, assessing, taking responsibility, volunteering, and warning those around (Demirdelen & Çakıcı, 2021; Sözcü, 2019).
Critical literacy	Critical literacy encompasses the individuals' skills related to meaningful reading with more knowledge and awareness within the dimensions of identity, knowledge, and ability, their revealing implicit messages within the text by asking questions and examining the discourse (Demoigny & Ferraras-Stone, 2018; Janks, 2013; McDaniel, 2004).
Visual literacy	Visual literacy contains the skills of giving meaning, conceptualizing, organizing, and creating an image according to the message desired to be communicated, and expressing, summarizing, interpreting, and recreating the presented message (Alpay & Okur, 2021; Yüksel-Gemalmayan, 2014).
Cultural literacy	Cultural literacy is the individuals' skill in critically investigating their own culture and other cultures and acquiring information about cultures (Polistina & Leader, 2009).
Global literacy	Global literacy encompasses the skills of thinking, acting, following developments, being aware of problems, cooperating with individuals, and respecting intercultural differences on a global basis (Bulut & Öksüzöğlü, 2021).
Content knowledge literacy	Content knowledge literacy represents the comprehension and writing capacity of texts in a discipline. In this process, strategies like summarizing, note-taking,

	concept-mapping, and comparing/contrasting are used (Choi, 2009; Fang & Coatoam, 2013).
Historical literacy	Historical literacy includes the skills of having information about how historical knowledge is produced, accessing references, confirming them, associating events with each other, and making inferences (Blevins, 2015; Rantala & Khawaja, 2018).
Technology literacy	This literacy contains the skills of having basic knowledge about technology, using, managing, assessing, and understanding this knowledge effectively and in an informed way, and critically questioning technological developments (Debbağ & Fidan, 2019; Herman, Maknun, Barliana & Mardiana, 2019; Söyler, Oral, Kalpakçioğlu, Çakır & Çakır, 2018).
Citizenship literacy	Citizenship literacy includes the knowledge and skills of the individuals about knowing their rights and obligations, fulfilling their duty to the state that they are citizens of, and actively participating in civic and democratic activities (Bentahar & O'Brien, 2019; Oğuz-Haçat, 2021; Habibah, 2021).

As shown in Table 2, social studies education is associated with many alternative literacy skills. The literature review within this research identified many studies about literacy skills included in the 2018 social studies curriculum. In the framework of the social studies curriculum in these studies, legal and political literacy (Kara & Tangülü, 2017), political literacy (Görmez, 2018), legal literacy (Sönmez, İrşi, Önen & Polat, 2019), financial literacy (Yalçınkaya & Er, 2019), and digital literacy (Bayram, 2020) skills were discussed. Additionally, geographical literacy (Erol, 2016) and global literacy (Çakmak & Bulut, 2019) skills in the curriculum were evaluated. Apart from these, Duman and Tural (2019) investigated the social studies curriculum in terms of various literacy skills, while Gürdoğan-Bayır (2021) discussed the 7 literacy skills included in the social studies curriculum as well as 3 different literacy types (scientific, geographical and historical literacy). Differently, the current study aims to assess the 2018 social studies curriculum regarding alternative literacy skills. Since it is the first study regarding alternative literacies in the social studies discipline, it will bring up-to-date perspectives to literacy studies in social studies education.

2 Method

2.1 Research method

The document analysis method, one of the qualitative research methods, was used in this study since the Social Studies Curriculum, which has been in effect in Turkey since 2018, was evaluated in terms of alternative literacies. Document analysis involves the analysis of written materials containing information about the phenomenon or phenomena that have to be investigated (Yıldırım & Şimşek, 2018).

2.2 Sources of data

Data sources of the research comprise the 2018 Turkish social studies curriculum (for 4th, 5th, 6th, and 7th grades of primary and middle schools) and the relevant literature studies.

2.3 Data collection

The Turkish 2018 social studies curriculum, the main data source for the research, was downloaded from the official website of the Republic of Türkiye Ministry of National Education Board of Education and Discipline. In addition, the literature studies were accessed through databases like DergiPark, WoS, SCOPUS, EBSCO, ERIC, ScienceDirect, Sage, Wiley, and Google Scholar.

2.4 Data analysis

2018 the Turkish social studies curriculum and the literature studies were analyzed with the content analysis. The content analysis enables to gather data resembling each other within the framework of specific concepts and themes and interprets them by organizing them in a way

readers can understand (Yıldırım & Şimşek, 2018). During the content analysis, firstly, the competencies and objectives of the curriculum are associated with literacy types based on definitions given in Table 2 in the literature section.

Later, to ensure the validity and reliability of data analysis, the field experts were consulted. During data analysis, as objective or competency may be related to different literacy types at the same time, it was separately included in the frequency for the relevant literacy types. All data obtained related to alternative literacy types were summarized in the tables. When creating the tables for these findings, the total frequency of competencies and objectives associated with the alternative literacy types were considered and sorted by most to least. While explanations of alternative literacy types associated with competencies were included, as it was impossible to show details of all alternative literacy types associated with objectives, some literacy types explanations are given associated with objectives at each class level. Additionally, alternative literacy types associated with objectives were assessed independently at each class level and then assessed together in tables. Lastly, some abbreviations were used in tables as follows:

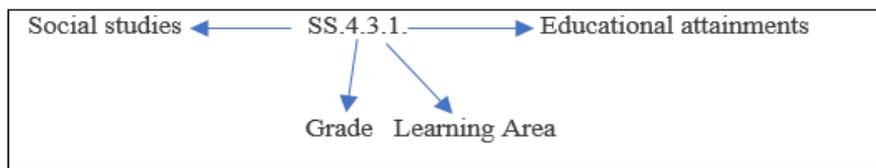


Figure 1 Abbreviations

3 Findings

The findings obtained in the direction of the research questions are given below, respectively.

3.1 Alternative literacies in program competencies

For the first research question, the place of alternative literacy types in competencies in the curriculum was investigated. The findings obtained from the investigation are given in Table 3.

Table 3 Alternative literacies in competencies

Literacies	Competencies							
	Total	Communication in the mother tongue	Communication in foreign languages	Mathematical competence and core competencies in science/technology	Digital competence	Learning to learn	Social and citizenship competencies	Cultural awareness and expression
Cultural literacy	4	1	1				1	1
Scientific literacy	2			1		1		
Technology literacy	2			1	1			
Citizenship literacy	2			1			1	
Global literacy	1		1					
Visual literacy	1	1						

As seen in Table 3, competencies were associated with 6 different alternative literacy skills. Explanations about the literacy types and associated competencies are given in Table 4.

Table 4 Alternative literacies types and competencies (MoNE, 2018a).

Literacies	Competencies and Explanations
	Communication in mother language: “Appropriate and creative expression of concepts, thoughts, opinions, feelings, and cases in all types of social and cultural environments.”

Cultural literacy	<p>Communication in a foreign language: “The individual’s expression and interpretation of concepts, thoughts, opinions, feelings, and cases in all types of social and cultural environments, in addition to their mediation and mastery of intercultural understanding.”</p> <p>Cultural awareness and expression: “Creative expression of feelings, thoughts, and experiences through music, stage arts, literature, and visual arts.”</p> <p>Social and citizenship competencies: “All behaviors ensuring active participation of individuals in society and working life within the framework of personal, interpersonal and intercultural competencies.”</p>
Scientific literacy	<p>Mathematical competency and basic competency in science/technology: “Competence in science and benefiting from the presence of knowledge to explain the universe.”</p> <p>Learning to learn: “Individual’s obtaining new knowledge and skills and adapting them to life.”</p>
Technology literacy	<p>Mathematical competency and basic competency in science/technology: “Competence in technology, application of technological knowledge and methods at the point of meeting the desires and needs of people.”</p> <p>Digital competency: “Individuals’ using information communication technologies safely and critically in life in line with their aims.”</p>
Citizenship literacy	<p>Mathematical competency and basic competency in science/technology: “Changes based on human activities, and the power of individuals to understand their responsibilities as citizens.”</p> <p>Social and citizenship competencies: “Individuals should be equipped for full participation in social and political life.”</p>
Global literacy	<p>Communication in foreign languages: “The individual’s expression and interpretation of concepts, thoughts, opinions, feelings, and cases in all social and cultural environments, in addition to their mediation and mastery of intercultural understanding.”</p>
Visual literacy	<p>Communication in mother language: “Appropriate and creative expressions of concepts, thoughts, opinions, emotions, and cases in all types of social and cultural environment.”</p>

As shown in Table 4, competencies related to cultural literacy include the individual’s skills participation in all types of social and cultural activities including music, stage arts, literature, and visual arts, and their expression skills of concepts, thoughts, opinions, experiences, feelings, and cases, in both written and verbally. Competencies related to scientific literacy mention the individual’s skills of being aware of learning needs and processes, explaining existing questions by using knowledge and methods about explaining the universe and proving outcomes. Competencies related to technology literacy contain the individuals’ competency of using technology in line with their desires and needs; competencies related to civic (citizenship) literacy include the individuals’ knowing their obligations as a citizen and their qualifications of showing active participation in democratic life, and competencies related to global literacy involve the individuals’ intercultural communication and understanding skills.

3.2 Alternative literacies in objectives (4th-7th grades)

Within the scope of the second research question, the objectives in the 4th-7th grade learning strands in the 2018 social studies curriculum were examined in terms of alternative literacy types. The researchers identified various alternative literacy types in 131 objectives targeted to be learned by students in the learning strands. According to findings obtained from objectives, firstly the alternative literacy types were separately considered at each class level and presented in tables showing which literacy types were included. However, as it was impossible to present findings in detail for all literacy types, explanations of the literacy types associated with objectives most at each class level are included.

3.3 Alternative literacies in 4th-grade objectives

Findings from the assessment within the framework of alternative literacy types are presented along with learning strands and objective numbers in Table 5.

Table 5 Alternative literacies in 4th grade objectives

Literacies	Learning strands							
	Total	Individual and society	Culture and heritage	People, places, and environments	Science, technology, and society	Production, distribution, and consumption	Effective	Global connections
Geographical literacy	7			5	1			1
Historical literacy	6	1	4		1			
Cultural literacy	5		3					2
Scientific literacy	4	1	1		1			1
Global literacy	4							4
Technology literacy	4				4			
Citizenship literacy	3						3	
Natural disaster literacy	1			1				

Table 5 demonstrates that 8 alternative literacy types were identified in the 4th-grade objectives. Among these, mainly geographical literacy (7) and historical literacy (6) came to the forefront and the learning strands and objectives associated with these literacy types are given below in Tables 6 and 7, respectively.

Table 6 Objectives related to geographical literacy

Learning strands	Objectives
People, places, and environments	“SS.4.3.1. [Students] make inferences related to the location of any place in their surroundings.”
	“SS.4.3.2. [Students] draw sketch maps of spaces used in daily life.”
	“SS.4.3.3. [Students] differentiate natural and human elements in their surroundings.”
	“SS.4.3.4. [Students] transfer findings observed from weather events occurring in their surroundings to graphs with pictures.”
	“SB.4.3.5. [Students] make inferences about the topography and population features of their place of residence and surroundings.”
Science, technology, and society	“SS.4.4.5. [Students] use technological products without harming themselves, others, or nature.”
Global connections	“SS.4.7.1. [Students] introduce various countries around the world.”

According to Table 6, literacy was mostly identified to be included in the learning strand of “people, places and environments” (5). It is understood that individuals are tried to be gained knowledge and skills about being aware of landforms in the place where they live and their environment, differentiating natural and human elements, protecting nature, learning about the climate and population structure, recognizing the regions and countries, determining location, and drawing sketch maps and graphs with these objectives.

Table 7 Objectives related to historical literacy

Learning strands	Objectives
Individual and society	“SS.4.1.2. [Students] put certain major events related to life in chronological order.”
Culture and heritage	“SS.4.2.1. [Students] do family history studies using verbal, written, visual resources and objects.”
	“SS.4.2.2. [Students] give examples by researching elements reflecting the national culture in family and surroundings.”

	<p>“[Students] organize trips to historical sites in the local surroundings like museums, mosques, mausoleums, bridges, madrasah or caravanserai or do oral history or local history studies.”</p> <p>“SS.4.2.3. [Students] compare traditional children’s games with the current ones in terms of the change and continuity.”</p> <p>“SS.4.2.4. [Students] comprehend the importance of the War of Independence based on the lives of the heroes of the War of Independence.”</p>
Science, technology, and society	“SS.4.4.2. [Students] compare the use of technological products in the past and the present day.”

According to Table 7, historical literacy was identified to mostly be included in the learning strand of “culture and heritage” (4). The relevant objectives involve the knowledge and skills such as accessing resources related to historical events and cases, examining these within the historical process, placing them in chronological order, perceiving their change and continuity, and learning about historical figures and places.

3.4 Alternative literacies in 5th grade objectives

Findings, learning strand, and the number of objectives related to assessments within the framework of alternative literacy are given in Table 8.

Table 8 Alternative literacies in 5th grade objectives

Literacies	Learning strands							
	Total	Individual and society	Culture and heritage	People, places, and environments	Science, technology, and society	Production, distribution, and consumption	Effective citizenship	Global connections
Geographical literacy	10		1	5		3		1
Scientific literacy	8	1	2		2	1	1	1
Citizenship literacy	7	2				1	4	
Cultural literacy	6		5					1
Natural disaster literacy	4			3			1	
Global literacy	4							4
Historical literacy	3		3					
Technology literacy	1				1			

As seen in Table 8, it was determined that 5th-grade objectives included 8 alternative literacy types. Since geography literacy (10) and scientific literacy (8) come to the forefront the most among these, the learning strands and learning objectives associated with these literacies are given below in Tables 9 and 10, respectively.

Table 9 Objectives related to geographical literacy

Learning strands	Objectives
Culture and heritage	“SS.5.2.2. [Students identify natural assets and historical places, objects, and pieces in their surroundings.”
	“SS.5.3.1. [Students] explain the landforms of where they live in general and surroundings on maps.”
	“SS.5.3.2. [Students] explain the effect of climate on human activities by giving examples of their daily lives.”
People, places, and environments	“SS.5.3.3. [Students] give examples of the effects of natural and human features in their place of residence and surroundings on population and settlement.”
	“SS.5.3.4. [Students] question the causes of natural disasters and environmental problems in their surroundings.”

	“SS.5.3.5. [Students] explain the impacts of natural disasters on public life with examples.”
Production, distribution, and consumption	“SS.5.5.1. [Students] analyze the economic activities of their place of residence and surroundings.”
	“SS.5.5.2. [Students] recognize occupations and economic activities in their place of residence and surroundings.”
	“SS.5.5.3. [Students] analyze the impact of economic activities in their surroundings on the social life of people.”
Global connections	“SS.5.7.1. [Students] investigate the role of their place of residence and surroundings in economic relations between our country and other countries.”

According to Table 9, geographical literacy was mostly identified to be included in the learning strands of “people, places and environments” (5) and “production, distribution, and consumption” (3). The relevant objectives included knowledge, values, and skills such as individuals’ knowing elements in their place of residence and surroundings, explaining the impacts of human activities on landforms, climate, natural and human factors, analyzing economic activities and impacts, and being aware of environmental problems.

Table 10 Objectives related to scientific literacy

Learning strands	Objectives
Individual and society	“SS.5.1.2. [Students] explain the multiple dimensions of an event based on an example experienced in their close surroundings.”
Culture and heritage	“SS.5.2.1. [Students] notice the significant contributions of Anatolian and Mesopotamian civilizations to the history of humanity based on concrete remains.”
	“SS.5.2.4. [Students] analyze the role of cultural elements in people living together.”
Science, technology, and society	“SS.5.4.4. [Students] know the common characteristics of inventors and scientists.”
	<i>“The importance of scientific thinking is emphasized.”</i>
	“SS.5.4.5. [Students] act following scientific ethics in their studies.”
Production, distribution, and consumption	“SS.5.5.5. [Students] develop new ideas based on production, distribution, and consumption through cooperation.”
	<i>“Innovative ideas are developed about meeting interests and needs by researching changing social interests and needs.”</i>
Effective citizenship	“SS.5.6.1. [Students] associate individual and social needs with institutions meeting these needs.”
	<i>“It is ensured to research the activities of public institutions, organizations, and non-governmental organizations in the students’ surroundings.”</i>
Global connections	“SS.5.7.1. [Students] research the role of their place of residence and surroundings in economic relations between our country and other countries.”

When Table 10 is reviewed, it is seen that scientific literacy was included in 6 of the 7 learning strands in the curriculum. The relevant objectives included knowledge and skills such as individual scientific thinking, multidimensional approach to events, research, review, and analysis of events and cases, proposing new ideas, and attaching importance to acting ethically while performing these. This table is also the section with the most matches between literacy and learning strands.

3.5 Alternative literacies in 6th grade objectives

Findings, learning strands, and the number of objectives related to assessments within the framework of alternative literacies are given in Table 11.

Table 11 Alternative literacies in 6th grade objectives

Literacy	Learning strands							
	Total	Individual and society	Culture and heritage	People, places, and environments	Science, technology, and society	Production, distribution, and consumption	Effective citizenship	Global connections
Cultural literacy	11	3	5					3
Citizenship literacy	11	4				1	6	
Geographical literacy	9		2	4		3		
Scientific literacy	8			1	3	1		3
Historical literacy	7	1	5				1	
Global literacy	6		1	1				4
Critical literacy	3	1					1	1
Technology literacy	3				3			

According to Table 11, 8 alternative literacy types may be included in the 6th-grade objectives. Among these, cultural literacy (11) and civic (citizenship) literacy (11) came to the forefront and the learning strands and objectives associated with these literacy types are presented below in Tables 12 and 13.

Table 12 Objectives related to cultural literacy

Learning strands	Objectives
Individual and society	<p>“SS.6.1.2. [Students] analyze the place and role of social, cultural, and historical ties in the formation of social unity.”</p> <p><i>“Elements comprising culture such as religion, language, history are discussed.”</i></p> <p>“SS.6.1.3. [Students] question prejudices about differences for society to be able live in harmony.”</p> <p>“SS.6.1.4. [Students] participate in activities supporting social assistance and solidarity in creating social unity.”</p>
Culture and heritage	<p>“SS.6.2.1. [Students] make inferences about geographical, political, economic, and cultural characteristics of the first Turkish states founded in central Asia.”</p> <p>“SS.6.2.2. [Students] interpret the emergence of Islam and the changes it brought.”</p> <p>“SS.6.2.3. [Students] aware of the changes occurring in political, social, and cultural areas with the acceptance of Islam by Turks.”</p> <p>“SS.6.2.4. [Students] analyze the process of Turks migrating to Anatolia in the 11th to 13th centuries.”</p> <p>“SS.6.2.5. [Students] explain the role of historical trade routes in political, cultural, and economic relations between societies.”</p>
Global connections	<p>“SS.6.7.1. [Students] analyze cultural, social, political, and economic relations between our country and Turkish republics and neighboring states.”</p> <p>“SS.6.7.3. [Students] analyze the role undertaken in the international arena based on political, military, economic and cultural features of our country.”</p> <p>“SS.6.7.4. [Students] question the impacts of popular culture on our culture.”</p>

According to Table 12, cultural literacy was associated with objectives in the learning strands of “culture and heritage” (5), “individual and society” (3), and “cultural connections” (3). When the objectives in this section are reviewed, they are understood to include knowledge, values, and skills about knowing elements comprising culture (like religion, language, and history), being aware of the impacts of these elements on social unity, adjustment, helping each other, solidarity

and respect for differences, and being aware of the impacts of social, political, economic and cultural activities and relationships in the past and present on a local and global basis.

Table 13 Objectives related to civic (citizenship) literacy

Learning strands	Objectives
Individual and society	“SS.6.1.1. [Students] examine the change in social roles over time.”
	“SS.6.1.3. [Students] question prejudices about differences for society to be able to live in harmony.”
	“SS.6.1.4. [Students] participate in activities supporting social assistance and solidarity in creating social unity.”
Production, distribution, and consumption	“SS.6.1.5. [Students] defend the need for solutions to a problem to be based on rights, responsibilities, and freedoms.”
	“SS.6.5.4. [Students] defend the need for and importance of paying tax in terms of the responsibility of citizenship and contribution to the country’s economy.”
Effective citizenship	“SS.6.6.1. [Students] compare different forms of government in terms of the basic principles of democracy.”
	“SS.6.6.2. [Students] explain the relationship between legislative, executive, and judicial powers in the Republic of Türkiye.”
	“SS.6.6.3. [Students] analyze elements affecting the decision-making process of the government.”
	“SS.6.6.4. [Students] explain the importance of democracy to our social life.”
	“SS.6.6.5. [Students] explain that as an active citizens of the Republic of Türkiye, their rights and responsibilities are under constitutional guarantee.”
	“SS.6.6.6. [Students] Based on Turkish history and current examples, they realize the value given to women in social life.”

According to Table 13, civic (citizenship) literacy was mostly related to the learning strands of “effective citizenship” (6) and “individual and society” (4), naturally. These objectives include knowledge, values, and skills related to living in harmony and social unity, knowing social roles, citizen rights, and responsibilities, producing solutions to problems based on rights, responsibilities, and freedoms, and knowing the importance of democracy and government forms as an effective citizen and explaining relationships between the legislative, executive and judicial powers.

3.6 Alternative literacies in 7th grade objectives

Findings, learning strands, and the number of objectives related to assessments within the framework of alternative literacy are given in Table 14.

Table 14 Alternative literacy in 7th grade objectives

Literacies	Learning strands							
	Total	Individual and Society	Culture and Heritage	People, Places, and Environments	Science, Technology, and Society	Production, distribution, and consumption	Effective Citizenship	Global Connections
Historical literacy	13		5	1	3	2	2	
Global literacy	7		1		1	1		4
Scientific literacy	6			2	3	1		
Geographical literacy	3			3				
Critical literacy	2	1						1
Cultural literacy	2		1					1
Citizenship literacy	2	1		1				

Natural disaster literacy	1	1
Technology literacy	1	1

As seen in Table 14, it was identified that 7th-grade objectives could include 9 alternative literacy types. Among these, historical literacy (13) and global literacy (7) came to the forefront mostly and the learning strands and objectives associated with these literacy types are given below in Tables 15 and 16.

Table 15 Objectives related to historical literacy

Learning strands	Objectives
Culture and heritage	<p>“SS.7.2.1. [Students] explain the emergence of the Ottoman Empire as political power and factors affecting this process.”</p> <p>“SS.7.2.2. [Students] analyze the policy of conquest in the Ottoman Empire through the examples.”</p> <p>“SS.7.2.3. [Students] comprehend the processes forcing change in the Ottoman Empire in connection with developments in Europe.”</p> <p>“SS.7.2.4. [Students] make inferences about social and economic change based on institutions emerging because of reform movements in the Ottoman Empire.”</p> <p>“SS.7.2.5. [Students] give examples of Ottoman cultural, artistic, and esthetic understanding.”</p>
People, places, and environments	<p>“SS.7.3.1. [Students] make inferences about factors affecting settlement from past to present through examples.”</p>
Science, technology, and society	<p>“SS.7.4.1. [Students] examine the change and continuity in the preservation, popularization, and transfer of knowledge.”</p> <p>“SS.7.4.2. [Students] discuss the contributions of scholars raised in Turkish-Islamic civilizations to the scientific process of development.”</p> <p>“SS.7.4.3. [Students] analyze the effect of developments experienced in Europe from the 15th-20th centuries on the current scientific knowledge accumulation.”</p>
Production, distribution, and consumption	<p>“SS.7.5.1. [Students] explain the importance of soil in production and administration from past to present with examples.”</p> <p>“SS.7.5.4. [Students] recognize the institutions playing a role in Turks acquiring occupations and occupational ethics during history.”</p>
Effective citizenship	<p>“SS.7.6.1. [Students] explain the emergence of democracy, its stages of development, and its meaning in the present day.”</p> <p>“SS.7.6.2. [Students] explain the contributions of Atatürk to the development of Turkish democracy.”</p>

According to Table 15, historical literacy was mostly associated with the learning strands of “culture and heritage” (5) and “science, technology and society” (3), including most historical and cultural topics. The relevant objectives targeted individuals to acquire knowledge, value, and skills in understanding, explaining, giving examples, analyzing and assessing historical events and cases, being aware of causes and effects, and perceiving change and continuity in developments along with time and chronology.

Table 16 Objectives related to global literacy

Learning strands	Objectives
Culture and heritage	<p>“SS.7.2.3. [Students] comprehend processes forcing change in the Ottoman Empire connected to developments in Europe.”</p>
Science, technology, and society	<p>“SS.7.4.3. [Students] analyze the impact of developments experienced in Europe in the 15th-20th centuries on the current accumulation of scientific knowledge.”</p>
Production, distribution, and consumption	<p>“SS.7.5.5. [Students] plan occupational choices by paying attention to newly emerging occupations linked to developments in the world.”</p>
	<p>“SS.7.7.1. [Students] give examples of international organizations that Türkiye is a member of”</p>

Global connections	<p>“SB.7.7.2. [Students] know the economic regions and institutions associated with Türkiye.”</p> <p>“SS.7.7.3. [Students] question stereotypes about a variety of cultures.”</p> <p>“SS.7.7.4. [Students] develop ideas about solving global problems with their friends.”</p>
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When Table 16 is examined, it appears that objectives related to global literacy were mainly included in the learning strand of “global connections” (4). The relevant objectives emphasize the knowledge, skills, and values such as being aware of national and international impacts of global innovation and development, struggling against global problems, cooperating, and attempting to understand and respect different cultures. The distributions of objectives, learning strands, and the number of objectives at each class level associated with alternative literacy types are presented in Table 17.

Table 17 General distribution of alternative literacies in objectives (4-7th grades)

Literacy	Grades	Learning strands							Total
		Individual and Society	Culture and Heritage	People, Places, and Environments	Science, Technology, and Society	Production, distribution, and consumption	Effective Citizenship	Global Connections	
Geographical literacy	4 th Grade			5	1			1	29
	5 th Grade		1	5		3		1	
	6 th Grade		2	4		3			
	7 th Grade			3					
Historical literacy	4 th Grade		4		1				29
	5 th Grade	1	3						
	6 th Grade	1	5				1		
	7 th Grade	1	5	1	3	2	2		
Scientific literacy	4 th Grade				1				26
	5 th Grade	1	1		2	1		1	
	6 th Grade	1	2	1	3	1	1	1	
	7 th Grade			2	3	1		3	
Cultural literacy	4 th Grade		3					2	24
	5 th Grade		5					1	
	6 th Grade		5					3	
	7 th Grade	3	1					1	
Citizenship literacy	4 th Grade							3	23
	5 th Grade	2						4	
	6 th Grade	4				1		6	
	7 th Grade	1		1		1			
Global literacy	4 th Grade							4	21
	5 th Grade							4	
	6 th Grade		1	1				4	
	7 th Grade		1		1	1		4	
Technology literacy	4 th Grade				4				9
	5 th Grade				1				
	6 th Grade				3				
	7 th Grade				1				
Natural disaster literacy	4 th Grade								7
	5 th Grade			1					
	6 th Grade			3			1		
	7 th Grade	1						1	
Critical literacy	4 th Grade								

5 th Grade				5
6 th Grade	1		1	1
7 th Grade	1			1

As Table 17 has shown, it appears objectives could be mostly associated with the alternative literacy types of geographical literacy (29) and historical literacy (29). Additionally, it is understood that skills related to scientific literacy (26), cultural literacy (24), civic (citizenship) literacy (23), and global literacy (21) are included in the curriculum to a large extent. When the distribution of learning strands of these objectives related to alternative literacy types are reviewed, geographical literacy was mainly included in the learning strands of “people, places and environments” (17) and “production, consumption and society” (6). On the other hand, historical literacy was mainly identified to be associated with objectives in the learning strands of “culture and heritage” (17) and “science, technology and society” (4). Apart from this, scientific literacy was mainly associated with objectives in the learning strand of “science, technology and society” (9); cultural literacy was mainly related to objectives in the learning strand of “culture and heritage” (14); civic (citizenship) literacy was mainly related to objectives in the learning strand of “effective citizenship” (13), and global literacy was related to objectives in the learning strand of “global connections” (16). As can be seen, alternative literacy types and the topics included in the learning strands are significantly consistent with each other.

4 Discussion, conclusion, and recommendations

This study assessing the 2018 Turkish Social Studies Curriculum in terms of alternative literacy types sought the answers to some research questions. The first research question investigated alternative literacy types in terms of competencies. This investigation concluded that cultural literacy, scientific literacy, technology literacy, civic (citizenship) literacy, and global literacy skills were mostly associated with competencies. The second research question separately considered objectives at each grade level (4th-7th grades) and generally observed that geographical literacy, historical literacy, scientific literacy, cultural literacy, civic (citizenship) literacy, and global literacy could be mainly associated with the objectives. The first of these skills of geographical literacy is closely related to many skills targeted for objectives through geographical topics in the curriculum. Among these, it is possible to list spatial perception, location analysis, map literacy, environmental literacy, observation, research, use of evidence, decision making, and drawing and interpretation of tables, graphs, and diagrams (Bloodworth & Petersen, 2011; Dikmenli, 2015; Erol, 2014; Golledge, 2002; Trimbach, Gaydos & Biedenweg, 2021; Turner & Leydon, 2012). This situation reveals the need to include geographical literacy closely associated with other skills in the curriculum. Secondly, historical literacy is often used synonymously with historical thinking (Rantala & Khawaja, 2018). Although there is a variety of classifications in the literature, historical thinking skills in broad terms are the followings: chronological thinking, historical concepts, creating cause-effect relation, perceiving change and continuity, research-based historical inquiry, historical analysis and interpretation, analysis of historical problems, decision making and historical empathy (MoNE, 2018b). Historical literacy is a tool for acquiring historical thinking skills, which are part of the Social Studies Curriculum (Blevins, 2015; Lee, 2005; Lévesque, 2010; Lorenzo, 2017; Rantala & Khawaja, 2018; Veijola & Mikkonen, 2016; Virta, 2007; Walker, 2006). The curriculum does not include historical thinking skills, but with the inclusion of historical literacy, they will be taught more clearly and comprehensibly. Third, scientific literacy, one of the literacy types associated with objective, is the desire to understand better what is known, learn new things, and produce, select and change ideas (Frederick, 2021). This type of literacy includes basic skills in the curriculum like research, critical thinking, use of evidence, decision making, problem-solving and innovative thinking. With this importance, it is necessary to include this literacy in the curriculum to develop students’ scientific thinking skills. Fourth, cultural literacy involves skills about critical thinking, empathy, communication, cooperation, and awareness of stereotypes and prejudice, including preconditions for different cultures to know each other. It is directly associated with the “cultural awareness and expression” competency. Including this

literacy in the curriculum will contribute to acquiring values of peace and respect. Fifth, civic (citizenship) literacy involves knowledge and skills about knowing laws, values, and rules valid in society or states to live as a good citizen, understanding rights and responsibilities, and being able to transfer these to daily life (Habibah, 2021; Latif & Talib, 2021). The most typical sections where this literacy should be included are 'effective citizenship' and "competencies related to social life and citizenship."

Additionally, citizenship literacy involves skills like research, critical thinking, financial literacy, legal literacy, communication, cooperation, awareness of stereotypes and prejudice, decision making, political literacy, problem-solving, and social participation. These features and relationships reveal the need to include citizenship literacy within the curriculum. The final literacy type associated with most objectives is global literacy which ensures the objective of knowledge, skills, attitudes, and values about recognizing different cultures, languages, and lifestyles, showing understanding and respect for them, desiring to learn about global problems, being aware of global roles and responsibilities, cooperating and adjusting (Hsu & Wang, 2010; Magnan, 2008; Zhang, Hsu & Wang, 2010). In this context, global literacy will contribute to acquiring basic skills like research, critical thinking, empathy, cooperation, awareness of stereotypes and prejudice, spatial perception, and problem-solving. At this same time, this literacy type is necessary to raise global citizens.

4.1 Limitations and future directions

Although this study is only conducted considering the Turkish Social Studies Curriculum, its results may guide researchers and inspire them to conduct new studies on alternative literacies in classroom environments.

4.2 Conclusion

As a result of this study, apart from the literacy types included in the Social Studies Curriculum, it was concluded that ten different alternative literacy skills could also be included in the curriculum. However, when these alternative literacy types are examined in terms of competencies and objectives, it appears that geographical, historical, scientific, cultural, civic (citizenship) literacy and global literacy are included significantly in the curriculum. This result shows the need to include these six literacy types within the curriculum. Additionally, it was identified that technology literacy, natural disaster literacy, visual literacy, and critical literacy do not occupy an extensive space in the curriculum. These literacy types should be discussed in detail as to whether or not they should be included in the curriculum in association with the other literacy types. However, technological developments in the 21st century, increasing natural disasters, increased xenophobia in the world, and the use of social media as a basic communication tool brings the discussion of how to integrate these other literacy types which have little place in the curriculum, to the agenda. For this reason, to raise citizens in line with 21st-century requirements, competencies, values, and qualifications, there is an urgent need to discuss literacy teaching in Social Studies in a broader way and to include these literacy types in the curriculum.

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