

AN INVESTIGATION OF THE ACKNOWLEDGE IN THE PRIMARY SCHOOL 2018 LIFE STUDIES LESSONS CURRICULUM IN TERMS OF CULTURALLY RESPONSIVE EDUCATION

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ABSTRACT

This research, which aims to examine the achievements in the 2018 primary school life studies lessons curriculum in terms of culturally responsive education, was conducted using document analysis, one of the qualitative research models. The data of this research consists of the 1st, 2nd and 3rd-grade achievements in the life science curriculum at the primary education level. The data obtained from the life studies lessons curriculum were analyzed by content analysis. Based on the data obtained from the research results, 14 culturally responsive education acknowledge were identified at the 1st-grade level, 15 at the 2nd-grade level and 10 at the 3rd-grade level. The unit with the most culturally responsive education acquisitions was "Life in our country", while no culturally responsive education acquisitions were identified in the "Life in nature" and "Safe life" units. Cultural responsive education can distribution more balanced in terms of grade and unit level.

Keywords: Life science, Primary school, Culturally responsive education.

2018 HAYAT BİLGİSİ ÖĞRETİM PROGRAMINDAKİ KAZANIMLARIN KÜLTÜRE DUYARLILIK AÇISINDAN İNCELENMESİ

ÖZET

Kültüre duyarlı eğitimde, öğrencilere kendi kültürlerini diğer kültürlerle nasıl bütünleştireceklerini öğretmek sosyal ilişkilerin kurulmasına katkıda bulunması beklenmektedir. En önemli amacı, ulusların ve halkların kültürel gerçeklerini ve önemini anlamak, kültürlerarası iletişimi geliştirmek ve farklı etnik kökenlerden gelen öğrencilerin başarısını artırmaktır. 2018 İlkokul hayat bilgisi öğretim programındaki kazanımları kültüre duyarlılık açısından incelemeyi amaçlayan bu araştırma nitel araştırma modellerinden doküman incelemesi kullanılarak yapılmıştır. Bu araştırmanın veri kaynağını hayat bilgisi öğretim programındaki ilköğretim kademesinde yer alan ilk üç birinci, ikinci ve üçüncü sınıf kazanımları oluşturmaktadır. Hayat bilgisi öğretim programından elde edilen veriler içerik analizi ile çözümlenmiştir. Araştırma sonuçlarından elde edilen veriler ışığında birinci sınıf düzeyinde 14, ikinci sınıf düzeyinde 15 ve üçüncü sınıf düzeyinde 10 tane kültüre duyarlı kazanım tespit edilmiştir. En çok kültüre duyarlı kazanımın yer aldığı ünite "Ülkemizde hayat "olurken "Doğada hayat" ve "Güvenli hayat" ünitelerinde herhangi bir kültüre duyarlı kazanım tespit edilmemiştir. Kültüre duyarlılığa ilişkin kazanımlar sınıf ve ünite düzeyinde dağılım olarak daha dengeli bir şekilde yer alabilir.

Anahtar sözcükler: Hayat Bilgisi, Kültüre duyarlı eğitim, ilköğretim.

Introduction

The school is not a place where lessons are held separately from society; it is a structure where community life can be used in a real and effective way. Considering that life consists of the natural and social environment, children's education should be designed taking into account their needs in

their natural and social environment. Children are expected to be able to use the knowledge and experiences they acquire in their daily lives at school and to use the knowledge and skills they acquire at school effectively in their daily lives. The teaching of primary school children for this purpose is realized through the life science course (Dewey, 2017; Oker and Tay, 2020). The life science lesson is the first place where children have the opportunity to associate what they have learned in their real lives after family life. In addition, the life sciences lesson is an appropriate lesson in terms of structure and content in that it provides children with the opportunity to recognize their individual differences and the differences of their friends and to experience how they can use these differences in learning (Bektaş, 2007). The life science course, which includes social elements in real life, allows students to make connections with real life in the sense that it is taught in relation to their immediate environment (Aydın and Gürler, 2012).

The life science course, which is given to students in the first three levels of primary school, enables children to make sense of themselves, their immediate environment, and the events and phenomena around them by examining their natural and social environment. In this respect, the life science course serves as a basic course. (Şahin, 2009). The life science course, which enables individuals to be intertwined with life from birth, aims to achieve the goals of today's contemporary education programs such as self-actualization, happiness and sensitivity to the environment (Ütkür et al., 2016). Life science, which builds the foundations of citizenship education, consists of social sciences, natural sciences, art, modern thought and values (Sönmez, 2010, as cited in Oker and Tay, 2019). In this way, children's psychological, cognitive and moral development is supported (Aydın and Gürler, 2012). In other words, life science course enables children to recognize themselves and the world according to their developmental characteristics and to be a good citizen (Yıldırım, 2021).

According to the curriculum, human beings are biological, psychological, social and cultural beings who can bring about change in themselves and their environment. Until 2015, the learning areas in the curriculum were individual, society and nature (Talip, 2015). Since the 2015 curriculum, the content has been organized with a unit-based perspective, and the curriculum includes units such as "Life in Our School", "Life in Our Home", "Healthy Life", "Safe Life", "Life in Our Country" and "Life in Nature" for the first three levels (MoNE, 2018). When the curriculum is examined, it is seen that it is important for individuals to live and maintain their cultural values (MoNE, 2018). Akcan (2022) states that life science plays a very important role in terms of recognizing students' cultural values, living their cultures, and creating awareness about different cultures. In this respect, the fact that the curriculum includes cultural elements shows that it attaches importance to culture. One of the competencies of the Turkish Qualification Framework (MYK, 14/12/2022), which was developed in accordance with the European Qualification Framework and which determines the qualification principles of vocational, general, academic education and training programs and informal learning at all levels starting from primary school to university is to engage in creative language-related interactions that are socially and culturally appropriate such as communication, education and training, home and entertainment in the mother tongue. While social and citizenship-related competencies include interpersonal competencies with oneself and others; communication in foreign languages requires skills and competencies such as intercultural understanding skills and bridging between cultures (MoNE, 2018). In this sense, the fact that the competencies in the life science curriculum include culture and cultural elements, as well as skills such as intercultural understanding skills and bridging between cultures, is a very important structure in terms of realizing a culturally sensitive education. This is supported by the cultural elements and culturally sensitive words and sentences in the content of the life science achievements whose achievement structure is given in Figure 1 below (MoNE, 2018).

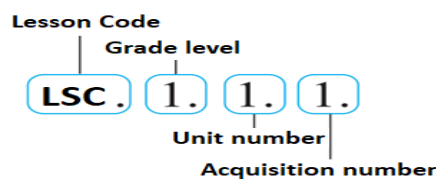


Figure 1: 2018 Life Science Curriculum - LSC- (MoNE)

In addition, in the curriculum, in the first three levels of primary school; "LSC.1.5.4. Recognizes that people from different cultures live together in our country." "LSC.2.5.7. Respects the lifestyles and habits of people from different cultures living in our country." Acquisitions such as "LSC.3.5.7. Participates in social responsibility projects for the problems of people from different cultures living in our country" clearly reveal this situation. According to Akcan (2022), life science provides an environment that enables children to perceive the objects and events they encounter in daily life, as well as expressing the impressions and reflections they evoke in their inner world. Life science is an appropriate tool for using cultural events and phenomena as a resource in the classroom. A life studies course that is not taught in a culturally sensitive manner will be inadequate and incomplete in terms of education and training in countries like Turkey where diversity is very high.

Culturally Responsive Education

People are born into a society and live their lives as a member of that society according to the culture of the society they live in. They create their own culture by interacting with different cultures throughout their social life (Karaseyfioglu and Çalışkan, 2021). Arslanoğlu (2000) defined culture, which has entered our language from Latin, as cultivating the land for agriculture. According to Taylor (2016), culture is a complex whole that includes the knowledge, teachings, arts, customs, laws, traditions, customs and other abilities and habits of the people who make up a society. Çeçen (1996), on the other hand, defines culture as everything that covers all values and is made by people. Culture is also defined as the knowledge and beliefs that have systematically continued from the past to the present, which constitute the mind structures of individuals' lives and enable them to communicate comfortably among themselves (Gezon and Kottak, 2016, as cited in Nayır, 2020).

Based on these definitions, culture can be considered as "everything except genetic codes". The increase in migration and developments in communication technologies have initiated a process that has led people with different cultural characteristics to interact with each other (Kastoryana, 2018). This process, which continues from local to universal in the globalizing world, has led to various changes in communities. With the increase in cultural diversity, needs and expectations have changed in the field of education, and this diversity has led to the emergence of many concepts (Nayır and Sarıdaş, 2020; Nayır and Sarıdaş, 2021). The anthropological literature of the last decade has provided us with various concepts to describe the efforts made in the classroom to harmonize school culture and student culture to ensure academic success. Au and Jordan (1981) used the terms "culturally appropriate", Mohatt and Erickson (1981) "culturally congruent", Jordan, 1985; Vogt et al. (1987) "culturally compatible" and Cazden and Leggett, 1981; Erickson and Mohatt (1982) "culturally responsive" (Landson-biling, 1992). In order to develop an approach that recognizes cultural diversity as a richness and to raise individuals in this sense, cultural diversity as well as the cultural background, experiences and values of the individual constitute a resource for that society. The inclusion of these resources in the education and training process and the active participation of these individuals in the process has brought the concept of "education sensitive to cultural values" (Karataş, 2020). Nayır (2020) defined culturally responsive education as an effort to reach students from various ethnic, religious, linguistic, racial, socio-economic cultures and students who differ due to situations such as family, economic and health problems in the dominant society. Culturally responsive education is expected to contribute to building social relationships by teaching students how to integrate their own culture with other cultures. Its most important aim is to understand the cultural realities and importance of nations and peoples, to improve intercultural communication and to increase the success of students from different ethnic backgrounds (Gay, 2015). In other words, culturally responsive education is more than accepting and respecting cultural differences; it is also about learning students' cultures and making existing cultures a part of the educational process (Vangölü and Sak, 2022). The smallest building block of society is the individual and there is as much culture in a society as there are individuals. In this respect, Turkey has many cultures due to its 7 geographical regions, 81 provinces and hosting many civilizations since the past. It can be said that Turkey has a multicultural structure with its many cultures from the past to the present and the phenomenon of migration that has

increased recently. This diversity and richness in society presents many factors that cause inequality in our education system (Kotluk and Kocakaya, 2018; Vangölü and Sak, 2022) as well as individuals with differences such as (ethnic diversity, disabilities, gender, religion, language, race, socioeconomic status, etc.). Therefore, in order to ensure academic success in education and eliminate inequality, educational activities should be organized in accordance with cultural values and differences (Kozikoğlu, 2020). The most important goal of culturally responsive education is to support these culturally diverse students with academic, social and individual activities. In this sense, although it is very important to know the content of the program, in order to make it more permanent, students should have access to information and it should be related to students' life and experiences outside of school (Gay, 2014).

Acquisition (Target)

The changing needs of the individual and society, rapid advances in science and technology, approaches and theories emerging in education and training have affected the expectations from the individual and brought about change. With this change, individuals are expected to produce knowledge, use the knowledge they produce in their daily lives, solve problems, think, be decisive, empathize, and contribute to social and cultural life. In order to create individuals who can meet these expectations, curricula should be prepared in a simple and understandable way that aims to provide values and skills by taking into account the differences of individuals rather than transferring information (MoNE, 2018). In this sense, Turkey abandoned the behaviorist approach in 2005 and switched to the constructivist approach. This transition brought about a curriculum change and the statements of achievement replaced the statements of goal and behavior in the curricula (Atik and Aykaç, 2019). Since the activities planned for the education and training process have a certain time limit, it is tried to be realized with appropriate measures such as determining the most important ones among them and trying to gain them. Acquisitions are of great importance in the education process in terms of directing teaching activities, realizing the teaching-learning process and providing guidance for measurement and evaluation (Demirel, 2007). Since 1924, the first basic element of the life science course, which has been included in primary education programs and aims to introduce the real world, is the outcomes, and this feature has continued in the recently implemented 2018 program (Karacaoğlu, 2019).

Outcomes (objectives) are the characteristics consisting of knowledge, attitudes, skills, interests, habits and abilities that are desired to be gained by students through education or that are deemed necessary for people to have (Demirel, 2007). In life sciences curricula, achievements are organized based on the events and phenomena that children encounter in their daily lives and are listed in a certain order by creating a substructure for previous achievements (Karabağ and İnal, 2012). For this purpose, while repetitive acquisitions and explanations are specified in units and grade levels organized spirally, learning products that need to be acquired in a holistic and one-time manner are also included (MoNE, 2018). Learning products are taxonomically categorized in different ways. The concept of taxonomy is derived from natural sciences, which argues that living things can be classified hierarchically from simple to complex and as a prerequisite for each other. Similarly, it is thought that acquisitions can be classified as cognitive, psycho-motor, affective (Sönmez, 2017). In Bloom's taxonomy, each outcome is prepared for the next target based on the previous level of achievement. Since it progresses in stages, no achievement is clearly and precisely separated from the other. Although the outcomes are prepared in relation to a field, they contain a cognitive, affective and psychomotor pattern. According to Bloom's Taxonomy, thinking activities related to the mind are cognitive; interest, attitude, belief and value are affective; skills related to muscles constitute acquisitions related to the psychomotor domain (Karacaoğlu, 2019). As can be seen in Figure 2 below, the outcomes and the explanations that draw the boundaries of the outcomes show a simple and concise content in a holistic manner within the framework of values, skills and competencies within the scope of classes and grade levels.

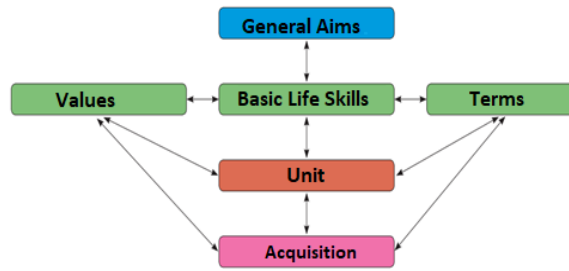


Figure 2: 2018 Life Science Curriculum (MoNE)

Thus, curricula that develop students' metacognitive skills, are related to previous learning that allows for permanent learning, cover other disciplines, and include values, skills and competencies that exist in real life have emerged (MoNE, 2018). Curricula consist of outcomes that cover students. Since curricula are carried out in a planned manner and in line with a specific purpose thanks to the outcomes created according to the student, the outcomes in the curriculum should be designed in a way that will contribute to the organization, implementation and evaluation of the content (Anderson and Krathwohl, 2001; Gezer et al., 2014, as cited in Zorluoğlu, 2017).

When the literature is examined, it is seen that there are many studies that focus on examining life science outcomes according to certain criteria and culturally responsive education. Barlas's (2015) study on the effectiveness of Life studies objectives in gaining common and course-specific skills according to teachers' opinions; Karacaoğlu's (2020) study on examining 2nd grade Life studies acquisitions according to the criteria in the literature and determining their levels; Pehlivan and Günel (2022) identified the problems encountered in providing cultural understanding and helping to create interaction in social studies courses with refugee students; Kotluk and Kocakaya (2018) examined the understanding of culturally responsive education based on the literature in a comprehensive way and discussed culturally responsive education as an alternative educational understanding for Turkey's cultural structures that Turkey has; Kozikoğlu (2020) examined the relationship between teachers' views on culturally responsive pedagogy and cultural intelligence levels. It has been determined that there is no study examining the acquisitions in the life science curriculum in terms of culturally responsiveness. In this sense, it is thought that examining the life science course outcomes in terms of culturally responsiveness within the scope of the research will create a new perspective on the evaluations within the scope of life science course outcomes and culturally responsiveness in the literature and will be a source of studies on culturally responsiveness and life science course outcomes. From this point of view, in this study, an answer to the question "What is the status of life studies course outcomes in terms of culturally responsiveness?" was sought. For this purpose, answers to the following sub-objectives are sought:

1. How cultural responsiveness is included in the acquisitions in the Life Science curriculum?
2. At which grade level did cultural responsiveness show the most weight in the acquisitions in the Life Sciences curriculum?
3. In which unitary units are the cultural responsive acquisitions concentrated in the acquisitions in the Life Science curriculum?

Method

Research Model

Document analysis, one of the qualitative research designs, was used in the study. Aydın (2018) defines qualitative research as the qualitative process followed to address facts and events holistically and realistically in a natural context through data collection methods such as observation, document analysis and interview. Document analysis, which is one of the effective resources that can

be used in qualitative studies, is carried out by analyzing written materials that contain information about the facts and events related to the subject to be researched (Yıldırım and Şimşek, 2021).

Document review, which is a systematic way to examine and evaluate all printed and written materials, can be used by a researcher who wants to work on a subject related to education in accordance with the problem situation of the research; course materials, curriculum, school-related correspondence, program guidelines, student records, students' homework and exams, etc. (Bogdan and Biklen 1992; Goetz and Lecompte, 1984, as cited in Yıldırım and Şimşek, 2020; Kırıl, 2020). Based on this context, document analysis method was used in this study since it was aimed to examine the first, second and third grade achievements in the life science curriculum at the primary school level in terms of cultural responsiveness.

Data Collection

The material of this study consists of 148 acquisitions at the first, second and third grade levels in the 2018 Life studies curriculum prepared by the Ministry of National Education (MoNE) Board of Education and Discipline. The distribution of the objectives according to the units is given in Table 1 below:

Table 1
Distribution Of Acquisitions According To Units

Units	Acquisitions		
	1st Grade	2nd Grade	3rd Grade
Life in our school	17	11	10
Life at home	7	9	8
Healthy life	7	7	5
Safe life	7	6	7
Life in our country	7	8	9
Life in nature	8	9	6
Total	53	50	45

As seen in Table 1, while the unit "life in our school" has the highest number of achievements at all grade levels, it was determined that the 1st grade had the highest number of achievements in general.

Data Analysis

A comprehensive literature review was conducted to create a data collection tool to examine the acquisitions in the curriculum in terms of culturally responsiveness (Agwuele, 2016; Landson-billings, 1995; Gay, 2014; Nayır, 2020; Banks, 1993; Richard et al., 2007; Warren, 2018; Karataş and Oral, 2018; Kotluk and Kocakaya, 2018; Landson-billings, 1992; Mensah, 2011; Karataş, 2020). Based on the definitions of culturally responsive pedagogy obtained in the literature review, items were identified for the characteristics that should be in a culturally responsive education. Based on these items, categorical data to be created for content analysis were determined. The features in the created category are as follows: Language, Gender, Ethnic diversity, Awareness of cultural differences, Cultural experiences, Individual differences, Respect for cultural differences, Cultural elements, Cultural characteristics and values, Communication with students from different cultures, Sexual orientation, Disability, Socio-economic level, Ethnicity/race, Religion or belief, Age.

After the life science curriculum, which is the data source, was obtained from the page of the Board of Education, the acquisitions were examined one by one in line with the features in the form. In order to examine the achievements in terms of culturally responsive pedagogy, categorical data were created as a result of the literature review on culturally responsive pedagogy before the study. Since this research was conducted according to the categorical data on culturally responsive pedagogy,

descriptive analysis was preferred. Descriptive analysis is a type of qualitative analysis in which themes are determined before the research and the data collected with various techniques are summarized and interpreted (Aydın, 2018). In this analysis, the data are described in a systematic and clear way and then transferred to the reader in an organized and interpreted way. Direct quotations are used to make the findings more striking. After the descriptions are explained and interpreted, various conclusions are drawn by revealing cause and effect relationships. The emerging themes are interpreted by the researcher by associating, making sense and making forward-looking predictions (Yıldırım and Şimşek, 2021). Afterwards, it was examined whether there were any findings in the acquisitions in terms of culturally responsiveness. Content analysis was preferred in line with the course of the research, as tables were created with the data obtained in this direction by looking at whether the acquisitions contain any features related to culturally responsiveness, the frequency of use, in which units and grade level they are mostly included. Content analysis is a type of analysis in which words can be summarized in smaller categories by coding within a certain system and can be repeated. Content analysis determines the existence, meaning and relationships of words or concepts in the text or texts and makes inferences about the message that the text tries to give by analyzing them (Büyüköztürk et al., 2013). Based on the findings obtained as a result of content analysis, these codes are interpreted in the findings section.

Validity and Reliability

In order to ensure the reliability of the study, the methods and stages used in the study were clearly stated. Detailed explanations about how the data were collected, analyzed, interpreted and conclusions reached were included in the study, allowing this study to be conducted by others. The data were analyzed by two different researchers at different places and times. Direct quotations were made from the outcomes to support the resulting coding. In the conclusion and discussion section, the data were clearly related and different opinions supporting and not supporting these judgments were included. In order to ensure the validity of the research, the categorical form was shown to an expert academician and feedback was received. As a result of the feedback received, a few missing features were identified and as a result of this feedback, the form was finalized by adding the features of "age", "sexual orientation", "disability" and "socio-economic level" by conducting a literature review again. Coding reliability was ensured by using Miles and Huberman's (1994) reliability formula. The number of codes agreeing with each other was determined as 30 and the number of codes disagreeing with each other was determined as 8, and the reliability rate was 0.78.

Ethics Committee Permission

In this study all rules were followed stated in the directive of Scientific Research and Publication Ethics of Higher Education Institutions. in addition to, since the data in this study were collected by document analysis method, it does not require Ethics Committee permission.

Findings

In this section, the findings obtained by examining the 2018 Life studies curriculum, which is the data source, in terms of culturally responsiveness are presented. The relevant findings are presented in tables below and supported by direct quotations.

Table 2
Distribution Of First Grade Culturally Responsive Characteristics According To Units In The Life Science Curriculum.

Culturally responsive characteristics	Units						Total
	Life at our school	Life at Home	Healthy Life	Safe Life	Life in our country	Life in Nature	
Language							0

Gender	1	2					3
Ethnic diversity					1		1
Awareness of cultural differences					1		1
Respect for cultural differences	1						1
Sexual orientation							0
Individual differences	2	2					4
Socio-economic level							0
Disability	1						1
Religion/belief					1		1
Communication with students from different cultures	1						1
Cultural experiences							0
Cultural elements					4		4
Cultural characteristics and values			1	1			2
Ethnicity/race	1				1		2
Age							0
Total	7	5	1	0	8	0	21

When Table 2 is examined, a total of 15 culturally responsive acquisition characteristics were identified in the life science curriculum, including language, gender, ethnic diversity, awareness of cultural differences, respect for cultural differences, gender orientation, individual differences, socio-economic level, disability, religion/belief, communication with students from different cultures, cultural experiences, cultural elements, cultural characteristics and values, ethnicity/race and age.

When the acquisitions in the first-grade Life Science curriculum were examined according to the identified characteristics, it was found that the acquisitions belonging to the characteristics of "individual differences" and "cultural elements" were the most common. There were no outcomes related to "language", "sexual orientation", "age", "cultural experiences" and "socio-economic level". It is seen that 7 acquisitions in the unit "Life in our school", 5 acquisitions in the unit "Life in our home", 1 learning outcome in the unit "Healthy life" and 8 acquisitions in the unit "Life in our country" show sensitivity to culture. As shown in Table 2, there are no acquisitions related to culturally responsiveness in the "Safe life" and "Life in nature" units.

Table 3
Distribution Of Culturally Responsive Acquisitions At The Second Grade Level According To Units In The Curriculum

Culturally responsive characteristics	Units							Total
	Life at our school	Life at Home	Healthy Life	Safe Life	Life in our country	Life in Nature		
Language	2						2	
Gender		1					1	
Ethnic diversity					1		1	
Awareness of cultural differences					1		1	
Respect for cultural differences	1				1		2	
Sexual orientation							0	
Individual differences	3	2					5	
Socio-economic level							0	

Disability	1							1
Religion/belief					1			1
Communication with students from different cultures								0
Cultural experiences								0
Cultural elements					4			4
Cultural characteristics and values	1	2	1					4
Ethnicity/race					1			1
Age								0
Total	8	5	1	0	9	0		23

When the acquisitions in the second grade Life Science curriculum were examined according to the determined characteristics, it was found that there were mostly acquisitions related to the characteristics of "individual differences". There were no acquisitions related to "communication with students from different cultures", "sexual orientation", "age", "cultural experiences" and "socio-economic level". It is seen that 8 acquisitions in the unit "Life in our school", 5 acquisitions in the unit "Life in our home", 1 learning outcome in the unit "Healthy life" and 9 acquisitions in the unit "Life in our country" show sensitivity to culture. As shown in Table 3, there are no acquisitions related to culturally responsiveness in the "Safe life" and "Life in nature" units.

Table 4
Distribution of third grade culturally responsive characteristics according to units in the Life Science curriculum

Culturally responsive characteristics	Units						Total
	Life at our school	Life at Home	Healthy Life	Safe Life	Life in our country	Life in Nature	
Language							0
Gender							0
Ethnic diversity							0
Awareness of cultural differences	1				1		1
Respect for cultural differences					1		1
Sexual orientation							0
Individual differences	1	1					2
Socio-economic level							0
Disability							0
Religion/belief							0
Communication with students from different cultures							0
Cultural experiences					1		1
Cultural elements					1		1
Cultural characteristics and values	2	1			2		6
Ethnicity/race							0
Age							0
Total	4	2	0	0	6	0	12

When Table 4 is examined, a total of 15 culturally responsive outcome characteristics were identified in the life science curriculum, including language, gender, ethnic diversity, awareness of cultural differences, respect for cultural differences, gender orientation, individual differences, socio-economic level, disability, religion/belief, communication with students from different cultures, cultural experiences, cultural elements, cultural characteristics and values, ethnicity/race and age.

When the acquisitions in the third grade Life Science curriculum were examined according to the identified characteristics, it was found that there were mostly acquisitions belonging to the characteristics of "cultural characteristics and values". There were no outcomes related to "language", "sexual orientation", "age", "cultural experiences", "ethnicity/race", "communication with students from different cultures", "religion/belief", "disability", "ethnic diversity", "gender" and "socio-economic level". It is seen that 4 acquisitions in the unit "Life in our school", 2 acquisitions in the unit "Life in our home" and 6 acquisitions in the unit "Life in our country" show sensitivity to culture. As shown in Table 4, there are no acquisitions related to culturally responsiveness in the "Safe life", "Healthy life" and "Life in nature" units.

Table 5
Distribution Of Culturally Responsive Acquisitions According To Classes And Units

Grade	Unit	Number of acquisitions	Number of culturally responsive acquisitions	%
1st Grade	Life at our school	17	4	23,5
	Life at Home	7	4	57,1
	Healthy Life	7	1	14,3
	Safe Life	7	0	0
	Life in our country	7	5	71,4
	Life in Nature	8	0	0
2nd Grade	Life at our school	11	6	54,5
	Life at Home	9	3	33,3
	Healthy Life	7	1	14,3
	Safe Life	6	0	0
	Life in our country	8	5	62,5
	Life in Nature	9	0	0
3rd Grade	Life at our school	10	4	40
	Life at Home	8	2	25
	Healthy Life	5	0	0
	Safe Life	7	0	0
	Life in our country	9	4	44,4
	Life in Nature	6	0	0

When we look at the distribution of culturally responsive acquisitions by grade and unit, we see that the most culturally responsive acquisitions in the first grade program were 5 (71.4%) in the "Life in our country" unit and the least 1 (14.3%) in the "Healthy life" unit, while a total of 14 culturally responsive acquisitions were identified at the grade level.

In the acquisitions included in the second grade program, culturally responsive acquisitions were mostly included in the "Life in our school" unit with 5 (62.5%) acquisitions and in the "Healthy life" unit with at least 1 (14.3%) acquisition, while a total of 15 acquisitions were identified at the classroom level. In the acquisitions in the third grade program, culturally responsive was mostly included in the units "Life in our school" and "Life in our country" with 4 (44.4%) acquisitions, while a total of 10 acquisitions were identified at the grade level. In the "Safe life" and "Life in nature" units in the first, second and third grade levels, no culturally responsive acquisitions were identified.

Language

According to the findings in Table 3, it was observed that there were 2 written statements about language in culturally responsive acquisitions in the curriculum. The statements obtained with language in culturally responsive acquisitions at the 2nd grade level in the life science curriculum (LSC) (p.19) are as follows:

Acquisition: "LSC.2.1.8. Expresses himself/herself in an understandable and clear language while communicating at school."

Acquisition description: "The necessity of expressing their needs, wishes, feelings, thoughts and objections in an empathetic language within the framework of courtesy rules is emphasized."

Acquisition: "LSC.2.1.10. Complies with the rules while playing games with friends at school."

Acquisition description: "Emphasis is placed on topics such as using polite language towards friends while playing games, being cooperative, controlling anger, not harming friends, and the fact that winning or losing the game is a natural situation."

In the acquisitions presented under the "Life in our school" unit, the necessity of expressing oneself with empathetic language and courtesy language while communicating at school was emphasized.

Individual Differences

In the 2018 life science curriculum, when culture-sensitive achievements were examined, it was observed that there were 11 written statements about individual differences. In the life studies curriculum at the first grade level (LSC curriculum, p. 12), the statements obtained with individual differences in culturally responsive achievements under the unit "Life in our school" are as follows:

Acquisition: "LSC.1.1.1. Participates in the in-class acquaintance activity."

Acquisition description: "Introduces himself/herself and meets his/her teacher and friends."

Acquisition: "LSC.1.1.2. Distinguish similarities and differences between themselves and their peers."

Acquisition description: "By focusing on the physical characteristics of the students, elements such as recognizing individuals with special needs, paying attention to the devices and prostheses used by them are also emphasized."

In the learning outcome, students are expected to raise awareness about individuals with special needs based on their physical characteristics and to distinguish individual differences between themselves and their peers by emphasizing their devices and prostheses.

Another of the statements obtained with individual differences in the culture-sensitive acquisitions under the "Life in our home" unit at the first grade level in the life sciences curriculum (LSC curriculum, p. 14) is as follows:

Acquisition: "LSC.1.2.1. Introduces family members."

Acquisition description: "The concept of family is explained and the names and prominent characteristics of people such as mother, father, siblings, grandparents are emphasized. In classes where there are children who have experiences such as divorce, death and separation from home in their families, sensitivity should be shown while processing the acquisition."

Drawing attention to the fact that there may be individual differences in family structures such as divorce, death, and leaving home, the learning outcome states that this issue should be treated sensitively while processing. In addition, it is seen that the outcome also fits the gender characteristic in terms of cultural responsiveness.

Acquisition: "LSC.1.2.4. Adheres to the rules of courtesy when communicating with family members at home."

Acquisition description: "While communicating with family members at home, it is emphasized that they express their feelings, thoughts and wishes with appropriate tone of voice, gestures and words within the framework of courtesy rules. It is emphasized that they should ask for permission to enter the rooms of other family members at home."

The statements obtained with individual differences in the culture-sensitive acquisitions under the "Life in our school" unit at the second grade level in the life science curriculum (LSC, p. 18) are as follows:

Acquisition: "LSC.2.1.1. Introduces himself/herself with different characteristics."

Acquisition description: "Focus on physical characteristics, what they like, what they can do and what they want to do."

Acquisition: "LSC.2.1.2. Respects individual differences."

Acquisition: "LSC.2.1.4. Participates in decision-making processes on classroom."

Acquisition description: "Within the framework of different opinions and solutions, issues such as determining and planning classroom activities, establishing classroom rules, preparing bulletin boards and decorating the classroom are emphasized. It is emphasized that appropriate communication language should be used in the decision-making process. In addition, care is taken to ensure that decisions are made with the participation of students."

In the continuation of the first outcome, which emphasizes that students' physical characteristics, abilities, wishes and tastes may be different and that they should introduce themselves with these characteristics in the classroom environment, it is stated that students in classes with these differences should be respected. In the last learning outcome, it is emphasized that these differences should be taken into consideration when making decisions about classroom issues and the necessity of an appropriate communication language.

The statements obtained with individual differences in culture-sensitive acquisitions under the "Life in our home" unit at the second grade level in the life science curriculum (LSC curriculum, p. 19) are as follows:

Acquisition: "LSC.2.2.1. Introduces close relatives."

Acquisition description: "The subject is explained based on the concept of relatives. Examples of relatives (aunt, uncle, cousin, etc.) are given. Relatives are explained simply with examples without going into the meaning of the concept. In classes where there are children from families where parents are separated from each other due to reasons such as divorce, separation and death, more care should be taken when teaching the acquisition."

While explaining the concept of relatives, this acquisition, which is not the same in every family such as divorce, separation from home and death, which shows individual differences in this respect, is also suitable for the gender category in terms of addressing examples that differ in terms of gender such as aunt, uncle, cousin and uncle.

Acquisition: "LSC.2.2.7. Be sensitive to people in need of help in their immediate surroundings."

Acquisition description: "Emphasis on helping family members, relatives, neighbors, sick, pregnant, elderly and people with special needs."

The learning outcome states that students should be sensitive to people with individual differences such as family members, relatives, elderly, sick, pregnant and individuals with special needs who may need help in their immediate environment. As it includes values such as being helpful and being sensitive to problems, it conforms to both categories in terms of cultural values and characteristics.

The statements obtained with individual differences in the culture-sensitive acquisitions under the "Life in our school" unit at the third grade level in the life sciences curriculum (LSC curriculum, p. 23) are as follows:

Acquisition: "LSC.3.1.1. Recognize their strengths and areas that need to be strengthened."

Acquisition description: "The subject is explained based on students' interests and skills (cooperation, planned and efficient work, communication, etc.). Students are asked to make a self-evaluation. While their strengths are appreciated, it is emphasized that they can improve the aspects that need to be strengthened."

Students are expected to make self-evaluation in the learning outcome, which emphasizes that students can develop their interests, skills, strengths and aspects that need to be strengthened.

The statements obtained with individual differences in the culture-sensitive acquisitions under the "Life in our home" unit at the third grade level in the life science curriculum (LSC curriculum, p. 19) are as follows:

Acquisition: "LSC.3.2.1. Compares the characteristics of the childhood of his/her family elders with the characteristics of his/her own childhood."

Acquisition description: "Topics such as the places where the family elders were born and grew up, the jobs they liked to do, the games they played and the technological possibilities of the period are discussed."

In the learning outcome, students are expected to compare their family elders and their own childhood periods by using the places where they were born and grew up, the jobs they enjoyed, the games they played and the technological opportunities of the period.

Ethnic Diversity

In the life sciences curriculum at the first, second and third grade level (LSC curriculum, p. 19), the expressions obtained with ethnic diversity in the culture-sensitive acquisitions of "Life in our country" are as follows:

Acquisition: "LSC.1.5.4. Recognizes that people from different cultures live together in our country"

Acquisition description: "Explains the subject by referring to people who have migrated from their countries compulsorily or voluntarily."

Acquisition: "LSC.2.5.7. Respects the lifestyles and habits of people from different cultures living in our country."

Acquisition description: "Explains the subject by referring to people who have migrated from their countries compulsorily or voluntarily."

Acquisition: "LSC.3.5.7. Participates in social responsibility projects for the problems of people of different cultures living in our country."

Acquisition description: "Explains the subject by referring to people who have migrated from their countries compulsorily or voluntarily."

It is stated that people from different cultures live in Turkey due to reasons such as forced and voluntary migration. Considering the relationship between ethnic diversity and culturally responsiveness, it is seen that the acquisitions are sensitive to culture. At the same time, when we look at the concepts of recognizing and respecting this difference in the achievements, it is seen that the achievement characteristics comply with all three categories.

Awareness of Cultural Differences

It was observed that there were 4 written statements about awareness of cultural differences in culture-sensitive acquisitions in the curriculum. The statement obtained with the awareness of cultural differences in the culturally sensitive acquisitions of "Life in our country" at the first grade level in the life science curriculum (LSC curriculum, p. 16) is as follows:

Acquisition: "LSC.1.5.4. Realizes that people from different cultures live together in our country."

Acquisition description: "Explaining the subject by referring to people who have migrated from their countries either voluntarily or involuntarily."

The outcome explains the subject with the phenomenon of migration with the aim of making students aware that there are people from different cultures in our country and that they live together with them.

Another statement obtained with awareness of cultural differences in the culture-sensitive acquisitions of "Life in our country" at the second grade level in the life science curriculum (LSC curriculum, p. 19) is as follows:

Acquisition: "LSC.2.5.7. Respects the lifestyles and habits of people of different cultures living in our country."

Acquisition description: "Explaining the subject by referring to people who have migrated from their countries either voluntarily or involuntarily."

In the learning outcome, it is tried to make students aware that people with cultural differences live in their country and that they should respect this situation.

Another statement obtained with awareness of cultural differences in the culture-sensitive learning outcome "Life in our school" at the third grade level in the life science curriculum (LSC curriculum, p. 21) is as follows:

Acquisition: "LSC.3.1.6. Recognize the individual and social contributions of their school."

Acquisition description: "To follow the contributions of the school to students and society through educational, social and cultural activities."

Another statement obtained with awareness of cultural differences in the culture-sensitive acquisitions of "Life in our country" at the third grade level in the life sciences curriculum (LSC curriculum, p. 26) is as follows:

Acquisition: "LSC.3.5.7. Participates in social responsibility projects for the problems of people of different cultures living in our country."

Acquisition description: "Explaining the subject by referring to people who have migrated from their countries either voluntarily or involuntarily."

The aim of the learning outcome is for students to participate in projects for the problems of people in our country who show cultural differences due to forced or voluntary migration.

Cultural Experiences

It was observed that there was 1 written expression related to "cultural experiences" in culture-sensitive acquisitions in the curriculum. The expression obtained with "cultural experiences" in the culture-sensitive acquisitions of "Life in our country" at the first grade level in the life science curriculum (LSC curriculum, p. 26) is as follows:

Acquisition: "LSC.3.5.9. Researches the people who have contributed to our country with their works."

Acquisition description: "The effect of the personal characteristics of individuals such as Engin Arık, Jale İnan, Mehmet Akif Ersoy, Mehmet Ali Kâğıtçı, Naim Süleymanoğlu, Nene Hatun, Nuri Demirağ, Vecihi Hürkuş, Zihni Derin on their success is emphasized."

Based on the personal characteristics of individuals who have contributed to our country with their work, their experiences are stated through success stories.

Respect for Cultural Differences

It was observed that there were 3 written expressions related to "respect for cultural differences" in culturally sensitive acquisitions in the curriculum. The expression obtained with "respect for cultural differences" in the culturally sensitive outcomes of "Life in our school" at the first grade level in the life science curriculum (LSC curriculum, p. 13) is as follows:

Acquisition: "LSC.1.1.6. Understands how to behave during the flag ceremony."

Acquisition description: "Emphasizes the need to respect the Turkish flag and the Turkish National Anthem."

The statement obtained with respect for cultural differences in the culturally responsive acquisitions of "Life in our school" at the second grade level in the life science curriculum (LSC curriculum, p. 18) is as follows:

Acquisition: "LSC.2.1.2. Respects individual differences."

The expression obtained with respect for cultural differences in the culturally responsive acquisitions of "Life in our country" at the second grade level in the program (LSC p. 21) is as follows:

Acquisition: "LSC.2.5.7. Respects the lifestyles and habits of people from different cultures living in our country."

The acquisitions indicate that the Turkish flag, the National Anthem, the lifestyles and individual differences of people from culturally different backgrounds should be respected.

Cultural Elements

It was determined that there were 9 written expressions related to the code of "cultural elements" in culturally responsive acquisitions in the curriculum. The expression obtained with "cultural elements" in the culturally responsive acquisitions of "Life in our country" at the first grade level in the life science curriculum (LSC curriculum, pp. 16-17) is as follows:

Acquisition: "LSC.1.5.2. Recognizes historical, natural and touristic places in his/her immediate surroundings."

Acquisition: "LSC.1.5.3. Recognizes the general characteristics of our country"

Acquisition description: "The name of our country, its capital, the National Anthem and the Turkish flag are introduced. The shape of our flag and its color with emphasis on the moon and star are specified."

Acquisition: "LSC.1.5.6. Be willing to participate in national days, holidays, ceremonies and celebrations."

Acquisition description: "October 29 Republic Day, April 23 National Sovereignty and Children's Day, May 19 Commemoration of Atatürk and Youth and Sports Day, July 15 Democracy and National Unity Day, August 30 Victory Day and the preparations made for these days and their meaning for children are emphasized."

Acquisition: "LSC.1.5.7. Participates willingly in the celebration of religious days and holidays."

Acquisition description: "During Eid al-Fitr and Eid al-Adha, the preparations made in and around the home, feasting, treats and the meaning of the feast for children are emphasized. Other religious days are also mentioned."

The expression obtained with "cultural elements" in the culturally responsive acquisitions of "Life in our country" at the second grade level in the life sciences curriculum (LSC curriculum, p. 21) is as follows:

Acquisition: "LSC.2.5.2. Recognizes the importance of the Turkish flag and the National Anthem for his/her homeland and nation."

Acquisition description: "It is emphasized that the Turkish flag and the National Anthem represent independence and freedom. The emotional state of Mehmet Akif Ersoy while writing the National Anthem and the conditions the country was in can be summarized"

Acquisition: "LSC.2.5.6. Investigates the cultural heritage elements in his/her immediate surroundings."

Acquisition description: "Students are encouraged to conduct research on traditions and customs, food, clothing, clothing, music and local games."

The expression obtained with cultural elements in the culturally responsive acquisitions of "Life in our country" at the second grade level in the life sciences curriculum (LSC curriculum, p. 21) is as follows:

Acquisition: "LSC.2.5.4. Understands the importance of national days and holidays."

Acquisition description: "The role of national days and holidays in ensuring national unity and solidarity is emphasized."

Acquisition: "LSC.2.5.5. Understands the importance of religious days and holidays."

Acquisition description: "The effect of religious days and holidays on sharing and solidarity is discussed."

The expression obtained with cultural elements in the culturally responsive acquisitions of "Life in our country" at the third grade level in the life science curriculum (LSC curriculum, p. 26) is as follows:

Acquisition: "LSC.3.5.3. Introduces the features of historical, natural and touristic places in the immediate vicinity."

Acquisition description: "It is ensured that they do research about places such as mosques, fountains, inns, baths, museums, castles, historical bazaars, bridges, national parks, etc. in their immediate surroundings and share them with their friends in the classroom."

In the statements given above under the title of cultural elements, it is seen that cultural heritage elements such as anthem, flag, music, clothing, religious and national holidays, as well as historical, touristic and natural places contain achievements aimed at introducing and researching.

Cultural Characteristics and Values

It was observed that there were 11 written expressions related to the "cultural characteristics and values" code in the culturally responsive acquisitions in the curriculum. The expression obtained with "cultural characteristics and values" in the culturally responsive acquisitions of "Life in our home" at the first grade level in the life science curriculum (LSC curriculum, p. 14) is as follows:

Acquisition: "LSC.1.2.2. Understands the importance of family life."

Acquisition description: "The values that keep the family together (love, respect, loyalty, compassion, loyalty, etc.) and the contributions of cooperation and solidarity within the family to the family order are emphasized."

The statement obtained with cultural characteristics and values in the culturally responsive acquisitions of "Healthy life" at the first grade level in the life science curriculum (HLT curriculum, p. 15) is as follows:

Acquisition: "LSC.1.3.6. Observes good manners when eating."

Acquisition description: "While eating at school, issues such as starting the meal with a prayer, eating cleanly without spilling, not eating while standing and walking around, not talking with food in your mouth and using napkins are emphasized. Eating as much food as needed and preventing waste of bread and food are emphasized."

The statement obtained with cultural characteristics and values in the culturally responsive acquisitions of "Life in our school" at the second grade level in the life sciences curriculum (HLT curriculum, p. 19) is as follows:

Acquisition: "LSC.2.1.7. Complies with the rules of working in groups in classroom and school activities."

Acquisition description: "The basic rules of working in groups and the necessity of cooperation are emphasized and the subject is handled within the framework of the values of justice, friendship, honesty, self-control, patience, respect, love, responsibility and benevolence with friends in school activities."

In the life science curriculum at the second grade level (LSCÖP, p. 19), the expression obtained with cultural characteristics and values in the culturally responsive acquisitions of "Life in our home" is as follows:

Acquisition: "LSC.2.2.2. Understands the importance of kinship relations."

Acquisition description: "The values that keep relatives together (love, respect, loyalty, compassion, loyalty, etc.) and the contributions of cooperation and solidarity to kinship relations are emphasized."

Acquisition: "LSC.2.2.7. Be sensitive to people in need of help in their immediate environment."

Acquisition description: "Helping family members, relatives, neigLSCors, sick, pregnant, elderly and people with special needs is emphasized."

In the second grade level of the life sciences curriculum (LSC curriculum, p. 18), the expression obtained with cultural characteristics and values in the culturally responsive acquisitions of "Healthy life" is as follows:

Acquisition: "LSC.2.3.3. Complies with the rules of etiquette while eating."

Acquisition description: "Emphasize the rules of eating at home and in other social environments (restaurants, patisseries, dining halls, guesthouses, etc.). Eating as much food as needed and preventing bread waste are emphasized."

The statement obtained with cultural characteristics and values in the culturally responsive acquisitions of "Life in our school" at the third grade level in the life sciences curriculum (LSC curriculum, pp. 23-24) is as follows:

Acquisition: "LSC.3.1.4. Comprehends the issues to be considered in the friendship process."

Acquisition description: "Attitudes and values (respect, solidarity, sensitivity to each other's problems, mutual grace, trust and politeness, etc.) that will be instrumental in creating, protecting, strengthening and transforming friendship ties into friendship are emphasized."

Acquisition: "LSC.3.1.7. Be willing to participate in activities related to social aid and solidarity at school."

The statement obtained with cultural characteristics and values in the culturally responsive acquisitions of "Life in our home" at the third grade level in the life science curriculum (LSC curriculum, p.24) is as follows:

Acquisition: "LSC.3.2.2. Gives examples of the importance of neighborhood relations for his/her family and himself/herself."

Acquisition description: "It is handled in the context of the rights and obligations necessary for the healthy conduct of neighborhood relations."

The statement obtained with cultural characteristics and values in the culturally responsive acquisitions of "Life in our country" at the third grade level in the life science curriculum (LSC curriculum, p.26) is as follows:

Acquisition: "LSC.3.5.6. Investigates the contributions of national unity and solidarity to community life."

Acquisition description: "Emphasizes the contribution of July 15 Democracy and National Unity Day to individual freedom and independence of the country and the contribution of national unity and solidarity to our society."

It is seen that the achievements given above under the title of cultural characteristics and values aim to gain values such as neighborhood relations, solidarity, justice, friendship, honesty, self-control, patience, respect, love, responsibility and benevolence.

Communication with Students from Different Cultures

The expression obtained with "communication with students from different cultures" in the culturally responsive acquisitions of "Life in our school" at the first grade level in the life science curriculum (LSC p.13) is as follows:

Acquisition: "LSC.1.1.13. Adheres to courtesy rules when communicating at school."

Acquisition description: "Emphasizes the necessity of using courtesy expressions such as "thank you, hello, good morning, good day, goodbye, please, I apologize, you are welcome" in his/her relations with his/her teacher, friends and school staff. It is emphasized that they should ask for permission when entering other people's rooms (teachers' room, principal's room, janitor's room, classroom, etc.)"

In the explanation of the outcome, it is stated that students should use expressions such as "thank you, hello, good morning, good day, goodbye, please, I apologize, you are welcome" while communicating with individuals with different cultural characteristics such as teachers, friends and school staff at school.

Disability

In the culturally responsive acquisitions in the Life Science Curriculum, the disability code was included in 2 acquisitions in total, 1 in the first grade and 1 in the second grade. Direct quotations in the acquisitions related to the disability code are as follows:

Acquisition: "LSC.1.1.2. Distinguishes similarities and differences between himself/herself and his/her peers."

Acquisition description: "By focusing on the physical characteristics of students, elements such as recognizing individuals with special needs and paying attention to the devices and prostheses used by them are also emphasized."

Acquisition: "LSC.2.2.7. Be sensitive to people in need of help in their immediate environment."

Acquisition description: "Helping family members, relatives, neighbors, sick, pregnant, elderly and people with special needs is emphasized."

In the statements in the acquisitions, behaviors such as recognizing individuals with special needs, paying attention to the devices and prostheses used by them and helping people in this situation are emphasized.

Religion/Beliefs

Direct quotations from the religion/belief code related to culturally responsive acquisitions are as follows:

Acquisition: "LSC.1.5.7. Participates willingly in the celebration of religious days and holidays."

Acquisition description: "The preparations made in and around the home on Eid al-Fitr and Eid al-Adha, feasting, treats and the meaning of the feast for children are emphasized. Other religious days are also mentioned."

Acquisition: "LSC.2.5.5. Understands the importance of religious days and holidays."

Acquisition description: "The effect of religious days and holidays on sharing and solidarity is discussed."

In the acquisitions given under the "Life in our country" unit, there are statements regarding participation in the celebration of religious holidays such as Ramadan and Eid al-Adha and comprehension of their importance.

Ethnicity

In culturally responsive acquisitions, "ethnic structure/race" characteristics were included in a total of 3 acquisitions, 2 in the first grade and 1 in the second grade. Direct quotations in acquisitions related to the ethnic structure/race code are as follows:

Acquisition: "LSC.1.1.6. Understands how to behave during the flag ceremony."

Acquisition description: "Emphasizes the need to respect the Turkish flag and the Turkish National Anthem."

Acquisition: "LSC.1.5.3. Recognizes the general characteristics of our country."

Acquisition description: "The name of our country, its capital, the National Anthem and the Turkish flag are introduced. The shape of our flag and its color with emphasis on the moon and star are specified."

Acquisition: "LSC.2.5.2. Recognizes the importance of the Turkish flag and the National Anthem for his/her homeland and nation."

Acquisition description: "It is emphasized that the Turkish flag and the National Anthem represent independence and freedom. The emotional state of Mehmet Akif Ersoy while writing the National Anthem and the conditions the country was in can be summarized."

In the acquisitions, it is emphasized that the importance of the Turkish flag and anthem for the Turkish nation is recognized, introduced and respect for it is developed.

Discussion, Conclusion and Recommendations

In the light of the data obtained from this study, which aims to examine the achievements in the 2018 Life Science curriculum in terms of culturally responsive, it was determined that the achievements contain expressions related to culturally responsive, but these expressions are not sufficiently included at the unit, class and achievement level. Gay (2014) states that curricula should include content that includes different ethnic cultures. She emphasizes that curricula that are prepared with the influence of ethnic groups, gender and student experiences in the education process and that offer collaborative learning opportunities should be made permanent in all schools. In this study, culturally responsive acquisition features were created to examine the achievements in the curriculum in terms of cultural responsiveness. As a result of the examinations made within the framework of

the created features, it was determined that the two most common features were "Cultural characteristics - values" and "Individual differences". The instructional dimension, which is one of the three main dimensions of culturally responsive pedagogy (institutional, personal and instructional), states that we should create a climate that respects all cultures within the school, adapt the teaching resources and process to be culturally responsive, communicate with students from different cultural backgrounds and increase the interaction between them, and use cultural characteristics as a resource in teaching (Banks, 2013, as cited in Karataş and Oral, 2016). In this sense, the inclusion of "cultural characteristics and values" in the acquisitions in the Life Science curriculum shows that the acquisitions are designed to be sensitive to cultural values and that the cultural characteristics of students are embedded in teaching. Another feature included in the curriculum like the category of "cultural characteristics and values" is the finding of "Individual differences". It should be recognized that students have different aspects as well as commonalities. Recognizing individual differences is as important and necessary as paying attention to students' common values and practices (Richard et al., 2007). The fact that the acquisitions in the curriculum include individual differences means that it is thought that culture can contribute by reflecting on students' behaviors and attitudes. After "cultural characteristics-values" and "individual differences", "cultural element" was found to be the most frequently mentioned characteristic in the acquisitions. It is argued that students' ethnic differences, cultural knowledge, previous experiences, frames of reference and ways of practice should be utilized to make learning more effective and meaningful (Gay, 2000, as cited in Howard, 2003). The fact that the source of the life studies course is the daily life of the students and the events, phenomena and objects that occur around the daily life of the students makes it necessary for individuals to use their own cultures as a resource in the course. This situation has brought the cultures of the students to the classroom environment by ensuring that the achievements in the program contain cultural elements. It was determined that another culturally responsive outcome characteristics in the life science curriculum were "awareness of cultural differences" and "gender". Culturally responsive education practices enable students to benefit from each other's cultural experiences and capitals, to gain awareness and respect for cultural differences by utilizing the information to be taught to the students by making use of in-group dynamics, by associating the culture and cultural experiences of the students (Aceves and Orosco, 2014, as cited in Karataş, 2020). The fact that the acquisitions in the curriculum include the cultures of students from different cultures in the education process enables students to gain respect for individuals from different cultures by increasing cultural awareness. This situation is considered important in terms of encouraging students to belong to the classroom and school environment in the educational process (Karataş and Oral, 2016). A learning process that emphasizes in-group dynamics and the influence of ethnic groups, gender and student experiences can increase the success rate of students (Gay, 2014). It is possible to say that the inclusion of achievements related to "gender" in the life science curriculum is a code related to culturally responsiveness in the sense that the distribution of gender roles is determined by culture (Nayır, 2020). In the life science curriculum, there were no findings regarding the codes related to "Gender orientation", "Age" and "Socio-economic level" in the achievements in the first three levels of primary school age. This situation is not appropriate in terms of culturally responsiveness for a country like Turkey, where social and economic differences are high and different age groups are predominant in terms of population characteristics. In the light of the data obtained from the research results, it was found that the second grade curriculum is the grade level that gives the most space to culturally responsiveness in the acquisitions in the program, while the program acquisitions that give the least space to culturally responsive are the acquisitions in the third grade curriculum. The fact that culturally responsiveness is included more in the acquisitions at the first and second grade level, which are the youngest level in terms of developmental characteristics and age group, shows that this situation is not determined according to age and developmental characteristics, and that there is no increase in the number of culturally responsive acquisitions with grade level. When the findings of the culturally responsive acquisitions in the units are analyzed, the unit that includes the most culturally responsive acquisitions is "Life in our country", while the unit that includes the least is "Healthy life". In the units "Safe life" and "Life in nature", no culturally responsive acquisitions were found. This shows that each unit and outcome is not suitable for culturally responsiveness and does not provide any findings on culturally responsiveness.

In line with this study, it was determined that there were no outcomes related to "gender orientation", "socio-economic level" and "age" characteristics. Considering that there are students with various characteristics in the classes, achievements related to these characteristics can be included in the process of creating curricula. In line with the second and third sub-problems of the study, it was found that in the life science curriculum examined in line with the second and third sub-problems of the study, the gains related to cultural responsiveness were not included sufficiently or not included at all on the basis of some units and grade levels. Acquisitions related to cultural responsiveness can be distributed in a more balanced and adequate manner at the class and unit level. In line with the findings obtained in the study, it was determined that not every outcome was sensitive to culture. In this sense, a curriculum that can meet the needs of students with different characteristics in the implementation process can be created.

Contribution of Authors

In this research, the contribution rate of the first author is 60 %, the contribution rate of the second author is 30 %, and the contribution rate of the third author is 10 %.

References

- Agwuele, A. (2016). Culture Trumps Scientific Fact: 'Race' in US American Language. *Social Analysis*, 60 (2), 97-115. <https://doi.org/10.3167/sa.2016.600207>
- Akcan, E. (2022). Culturally responsive education as a sustainable educational approach : Reflections from primary school teachers' life science course practices. *Journal of Pedagogical Research*, 6(3), 88-102. <https://doi.org/10.33902/JPR.202215416>
- Arslanoğlu, İ. (2000). Kültür ve medeniyet kavramları. *Türk Kültürü ve Hacı Bektaş Velî Araştırma Dergisi*, (15), 243-255. <https://LSCydergisi.hacibayram.edu.tr/index.php/TKLSCVD/article/view/378>
- Aydın, N. (2018). Nitel araştırma yöntemleri : Etnoloji. *Uluslararası Beşerî ve Sosyal Bilimler İnceleme Dergisi*, 2(2), 60-71. <https://dergipark.org.tr/tr/download/article-file/614382>
- Banks, J. A. (1993). Multicultural education: Historical development, dimensions, and practice. *Review of Research in Education*, (19), 3-49. <https://www.jstor.org/stable/pdf/1167339.pdf>
- Barlas, B. (2015). *Hayat bilgisi dersi kazanımlarının ortak ve derse özgü becerileri kazandırmadaki etkililiğinin öğretmen görüşlerine dayalı olarak belirlenmesi*. (Yayınlanmamış yüksek lisans tezi). Çanakkale On Sekiz Mart Üniversitesi Eğitim Bilimleri Enstitüsü.
- Büyüköztürk. Ş. (2013) *Eğitimde bilimsel araştırma yöntemleri*. Pegem Akademi.
- Çeçen, A. (1996). *Kültür ve politika*. Gündoğan Yayınları.
- Demirel, Ö. (2007). *Eğitimde program geliştirme*. Pegem Akademi.
- Dewey, J. (2017). *Okul ve toplum*. Hüseyin Avni Başman (Çev. Ed.). Pegem Akademi.
- Erol, B. ve Kıroğlu, K. (2012). Hayat bilgisi ders kitaplarının dil ve anlatım yönünden değerlendirilmesi. *Selçuk Üniversitesi Türkiyat Araştırmaları Dergisi*, (32), 155-176. <https://dergipark.org.tr/en/download/article-file/257640>
- Gay, G. (2014). *Kültürel değerlere duyarlı eğitim : Teori, araştırma ve uygulama*. Hasan Aydın (Çev. Ed.). Anı Yayıncılık.

- Haigh, J. (2021). *Developing a culturally sustaining pedagogy: Some critical incidents. Critical Library Pedagogy in Practice*. Innovative Libraries Press, Huddersfield.
- Howard, T. C. (2003). Culturally relevant pedagogy : Ingredients for critical teacher reflection. *Theory into practice*, 42(3), 195-202. https://www.jstor.org/stable/1477420#metadata_info_tab_contents
- Karacaoğlu, Ö. C. (2020). 2. Sınıf hayat bilgisi kazanımlarının alinyazındaki ölçütlere göre incelenmesi ve düzeylerinin belirlenmesi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 21(1),34-62. <https://doi.org/10.29299/kefad.2020.21.01.002>
- Karaseyfioglu, F., ve Çalışkan, H. (2021). Sosyal bilgiler öğretmenlerinin kültürel değerlere yönelik duyarlılıklarının incelenmesi. *Eğitimde Multidisipliner Çalışmalar Dergisi*, 5(3), 88-101. <https://dergipark.org.tr/tr/download/article-file/1859668>
- Karataş, A., and Oral, B. (2016). Kültürel değerlere duyarlı pedagoji. *Akademik Sosyal Araştırmalar Dergisi*,4(34), 431-447 <https://doi.org/10.16992/ASOS.6560>
- Karataş, K. (2020). Kültürel değerlere duyarlı pedagojinin temel eğitime yansımaları. *Milli Eğitim Dergisi*, 49 (228), 107-127. <https://doi.org/10.37669/milliegitim.611903>
- Kastoryano, R. (2018). Multiculturalism and interculturalism: Redefining nationhood and solidarity. *Comparative Migration Studies*, 6 (17), 1-11. <https://doi.org/10.1186/s40878-018-0082-6>
- Kıral, B. (2020). Nitel bir veri analizi yöntemi olarak doküman analizi. *Siirt Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8 (15), 170-189. <https://dergipark.org.tr/en/pub/susbid/issue/54983/727462>
- Kozikoğlu, İ. (2020). Öğretmenlerin kültürel değerlere duyarlı pedagojiye ilişkin görüşleri ile kültürel zekâları arasındaki ilişkinin incelenmesi. *Yükseköğretim ve Bilim Dergisi*, 10 (3), 539-548. <https://doi.org/10.5961/jhes.2020.414>
- Ladson-Billings, G. (1992). Reading between the lines and beyond the pages : A culturally relevant approach to literacy teaching. *Theory Into Practice*, 31(4), 312-320, https://www.jstor.org/stable/1476313#metadata_info_tab_contents
- Mesleki Yeterlilik Kurumu. (2022). *Türkiye yeterlilikler çerçevesi bilgilendirme etkinliği*. 14.12.2022 tarihinde <http://ecvet.ua.gov.tr/Uploads/6e9b0f5c-75bf-4489-897c-e7ccd0bdd71a.pdf> adresinden erişilmiştir.
- Nayır, F. (2020). *Kültürel değerlere duyarlı eğitim*. Anı Yayıncılık.
- Nayır, F., ve Sarıdaş, G. (2020). Çok kültürlü eğitim, kültürlerarası eğitim ve kültürel değerlere duyarlı eğitime ilişkin kavramsal bir inceleme. *Journal of International Social Research*, 13(70), 669-779. <https://doi.org/10.17719/jisr.2020.4134>
- Oker, D., ve Tay, B. (2019). Hayat bilgisi dersi tutum ölçeğinin geliştirilmesi ve öğrencilerin Hayat Bilgisi dersine yönelik tutumları ve görüşleri. *Kalem Eğitim ve İnsan Bilimleri Dergisi*, 10(2), 731-756. <https://doi.org/10.23863/kalem.2020.173>
- Öğülmüş, S. (2016). *Hayat bilgisi öğretim ve öğretmen el kitabı*. Pegem Akademi
- Özkan, H. (2009). *2005 Hayat bilgisi 3. sınıf programı kapsamını geçerli öğretmen görüşün değişkenler açısından incelemek (Balıkesir ili örneği)*. (Yayımlanmamış yüksek lisans tezi), Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü.

- Özkan, U. B. (2019). *Eğitim bilimleri araştırmaları için doküman inceleme yöntemi*. Pegem Akademi.
- Öztürk, T. (2015). Öğrencilerin hayat bilgisi dersi öğretim programındaki temel becerileri kazanmalarına yönelik öğretmen görüşleri. *Eğitim ve Bilim*, 40(181), 271-292. <http://dx.doi.org/10.15390/EB.2015.4363>
- Richards, H. V., Brown, A. F., and Forde, T. B. (2007). Addressing diversity in schools: Culturally responsive pedagogy. *Teaching exceptional children*, 39(3), 64-68. <https://doi.org/10.1177/00400599070390031>
- Şahin, M. (2009). Cumhuriyetin kuruluşundan günümüze Türkiye’de hayat bilgisi dersi programlarının gelişimi. *Uluslararası Sosyal Araştırmalar Dergisi*, 2(8), 402-410. <https://124.im/KgL>
- Sarıdaş, G., ve Nayır, F. (2021). Kültürel değerlere duyarlı öğretmen özelliklerinin sıralama yargılarıyla ölçeklenmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, (53), 355-377. <https://doi.org/10.9779/pauefd.827009>
- Şimşek, S. (2015). *Örnek olaya dayalı öğretimin ilköğretim hayat bilgisi dersinde akademik başarıya ve öğrenmede kalıcılığa etkisi*. (Yayımlanmamış doktora tezi). Anadolu Üniversitesi.
- Sönmez, V. (1998). *Hayat Bilgisi öğretimi ve öğretmen kılavuzu*. Anı Yayıncılık.
- Sönmez, V. (2017). Association of cognitive, affective, psychomotor and intuitive domains in education, sönmez model. *Universal Journal of Educational Research* 5(3), 347-356. <https://doi.org/10.13189/ujer.2017.050307>
- Taylor, E. B. (2016). The Science Of Culture. (çev. Esra Dabağcı). *ViraVerita E-Dergi*, (4), 91-109. <https://viraverita.org/sites/default/files/edergi-yazilari/kultur-bilimi-cev-esra-dabagci.pdf>
- Ütkür, N., Kabapınar, Y. ve Önder, A. (2016). Örnek olay yönteminin hayat bilgisi derslerinde kullanımına yönelik bir eylem araştırması. *HAYEF Journal of Education*, 13 (2), 41-58. <https://dergipark.org.tr/en/download/article-file/226061>
- Yıldırım, A. (1999). Nitel araştırma yöntemlerinin temel özellikleri ve eğitim araştırmalarındaki yeri ve önemi. *Eğitim ve Bilim*, 23 (112), 7-17. <http://eb.ted.org.tr/index.php/EB/article/view/5326/1485>
- Yıldırım, A. ve Şimşek, H. (2018). *Sosyal bilimlerde nitel araştırma yöntemleri*. Seçkin Yayınları.
- Yıldırım, G. (2021). Somut olmayan kültürel mirasın eğitim programlarına yansımaları: Hayat bilgisi öğretimi. *Uluslararası Sosyal ve Eğitim Bilimleri Dergisi*, 0 (16), 231-247. <https://doi.org/10.20860/ijoses.974198>
- Zorluoğlu, S. L., Şahintürk, A., ve Bağrıyanık, K. E. (2017). 2013 yılı fen bilimleri öğretim programı kazanımlarının yenilenmiş Bloom taksonomisine göre analizi ve değerlendirilmesi. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 6 (1), 1-15. <https://doi.org/10.14686/buefad.267190>

Genişletilmiş Özet

Giriş

Toplumun en küçük birimi bireydir ve bir toplumda birey sayısı kadar kültürün olduğu söylenebilir. Bu bakımdan Türkiye, 7 coğrafi bölgesi, 81 ili ve geçmişten bu yana pek çok medeniyete ev sahipliği yapması nedeniyle pek çok kültüre ev sahipliği yapmaktadır. Türkiye'nin geçmişten günümüze barındırdığı birçok kültür ve son zamanlarda artan göçün etkisiyle çok kültürlü bir özelliğe sahip olduğu söylenebilir. Toplumdaki bu çeşitlilik, eğitim sistemindeki farklılıklara sahip bireyler için eşitsizliğe neden olan birçok faktörü ortaya çıkarmaktadır (Kotluk ve Kocakaya, 2018; Vangölü ve Sak, 2022). Bu nedenle eğitimde akademik başarının sağlanması ve eşitsizliğin ortadan kaldırılması için eğitim-öğretim faaliyetlerinin kültürel değerlere ve farklılıklara uygun olarak düzenlenmesi gerekmektedir (Kozikoğlu, 2020). Kültürel açıdan duyarlı eğitimin en önemli hedefi, kültürel açıdan çeşitliliğe sahip bu öğrencileri akademik, sosyal ve bireysel etkinliklerle desteklemektir. Bu bağlamda müfredatın içeriğini bilmek oldukça önemlidir. Çocukların okulda günlük yaşamlarında edindikleri bilgi ve deneyimleri kullanabilmeleri, okulda edindikleri bilgi ve becerileri günlük yaşamlarında etkili bir şekilde kullanabilmeleri beklenmektedir. İlkokul çocuklarının bu amaca yönelik eğitimleri hayat bilgisi dersleri aracılığıyla gerçekleştirilmektedir (Dewey, 2017; Oker ve Tay, 2020). Gerçek hayattaki sosyal faktörleri içeren Hayat Bilgisi dersleri, öğrencilerin yakın çevreleriyle ilişkili olarak işlenmesi anlamında gerçek hayatla bağlantı kurmalarını sağlar (Aydın ve Gürler, 2012).

Yöntem

Bu çalışmanın amacı 2018 İlkokul Hayat Bilgisi dersi öğretim programında yer alan 1., 2. ve 3. sınıf ders konularını kültüre duyarlı eğitim açısından incelemektir. Araştırma nitel araştırma desenlerinden biri olan doküman analizi yöntemi kullanılarak gerçekleştirilmiştir. Bu çalışmanın veri kaynağını Milli Eğitim Bakanlığı (MEB) tarafından hazırlanan 2018 Hayat Bilgisi dersi öğretim programında yer alan 1., 2. ve 3. sınıf seviyelerinde yer alan 148 kredi oluşturmaktadır. Hayat Bilgisi dersi müfredatında yer alan kabuller; dil, cinsiyet, etnik çeşitlilik, kültürel farklılıklara saygı, kültürel farklılıklara saygı, bireysel farklılıklar, sosyo-ekonomik düzey, engellilik gibi toplam 15 kültüre duyarlı eğitim içeren bir forma göre incelenmiştir. Din/inanç, farklı kültürlerden öğrencilerle iletişim, kültürel unsurlar, kültürel değerler, etnik köken/ırk vb. literatür taraması sonucu oluşturulmuştur. Hayat Bilgisi dersi müfredatındaki kabullerin kültüre duyarlı eğitim açısından incelenmesi sonucunda elde edilen veriler başlangıçta betimsel analiz kullanılarak analiz edilmiş olsa da daha sonra araştırmanın gidişatı doğrultusunda içerik analizi tercih edilmiştir. Ortaya çıkan kodlamayı desteklemek amacıyla müfredattan alıntılar yapılmıştır. Geri bildirim sonrasında bazı hatalar tespit edilmiş ve ardından literatür taraması yapılarak "yaş", "cinsel yönelim", "engellilik" ve "sosyo-ekonomik düzey" kategorileri eklenmiştir. Kodlama güvenilirliği Miles ve Huberman'ın (1994) güvenilirlik formülü kullanılarak sağlanmıştır. Araştırmacıların anlaştıkları kod sayısı 30, katılmadıkları kod sayısı 8 olup güvenilirlik oranı 0,78 olarak belirlenmiştir.

Bulgular

Araştırmadan elde edilen sonuçlara göre 1. sınıf Hayat Bilgisi dersi öğretim programında yer alan bilgiler belirlenen özelliklere göre incelendiğinde, çoğunlukla "bireysel farklılıklar" ve "kültürel unsurlar" özelliklerine ilişkin kabullerin olduğu tespit edilmiştir. "Dil", "cinsel tercih", "yaş", "kültürel deneyimler" ve "sosyo-ekonomik düzey" ile ilgili herhangi bir bildirim rastlanmadı. "Okulumuzda Yaşam" ünitesinde 7, "Evimizde Yaşam" ünitesinde 5, "Sağlıklı Yaşam" ünitesinde 1, "Okulumuzda Yaşam" ünitesinde 8 kazanımın olduğu görülmektedir. Ülkemiz" kültürel açıdan duyarlılık göstermektedir. "Güvenli Yaşam" ve "Doğada Yaşam" ünitelerinde kültüre duyarlı eğitime ilişkin herhangi bir ödüllendirme bulunmamaktadır. 2. sınıf Hayat Bilgisi dersi öğretim programında yer alan kabuller belirlenen özelliklere göre incelendiğinde en fazla "bireysel farklılıklar" özelliğine ilişkin kabullerin olduğu tespit edilmiştir. "Farklı kültürlerden öğrencilerle iletişim kurma", "cinsel tercih", "yaş" gibi konularda herhangi bir bildirim rastlanmamıştır.