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A REVIEW OF THE LIFE SCIENCE CURRICULUM (2018) IN TERMS OF MEDIA LITERACY¹

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ABSTRACT

The rapid development of technology in recent years has increased the impact of media on children. With the widespread use of digital technologies and social media, the effects of media on children's development are increasing. From an early age, children who grow up in front of the screen, intertwined with the media, need to have knowledge about media literacy. It is significant for children to gain awareness of the unreal world offered by the media and to develop the right media usage habits. For this reason, as one of the important skills of the 21st century, it is essential to provide children with the skills related to media literacy. To meet this need, training programs should be organized accordingly, and existing programs should be reviewed. That is because educational programs should be aimed at raising the human model needed by the age. Based on this determination, in this study, the Life Science course program in the first three years of primary school was examined in relation to "media literacy". Since Life Science lesson is an axis course, it is considered to be a suitable course to gain knowledge, skills and habits related to media. In the study, a qualitative research design was preferred; document review was used as one of the data collection methods. In line with the purpose of the research, it was examined whether the life science course curriculum, which was updated in 2018, included media literacy. As a result, the Life Science Curriculum was not found sufficient in terms of media literacy, and suggestions were presented to improve the program in terms of media literacy.

Keywords: Media literacy, life science curriculum, program elements

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INTRODUCTION

One of the most important goals of education is to raise individuals who are suitable for the human model needed by the age. In the current age, a number of skills have been defined, especially under the name of 21st century skills. 21st century skills are designed for the type of people needed by the age, enabling individuals to succeed in today's world and deliver learning products (Silva, 2009). These skills are included in the literature as important skills to raise individuals who adapt to developing science and technology. 21st century skills include skills such as "life and career skills", "learning and renewal skills", and "skills to build knowledge, media and technology skills" (Trilling & Fadel, 2009). Considering the intensity of the use of technology in this age, skills related to the use of media are becoming increasingly important and constitute the subject of this research.

Children are introduced to the media from an early age. Being a conscious media user is important for children, parents and teachers. For this reason, the concept of media literacy is a concept that concerns everyone from small to large and includes the skills that everyone should acquire. Considering media literacy as a concept, according to Aufderheide's definition, media literacy is defined as "access to messages in a wide variety of forms, the ability to analyze, evaluate and transmit/produce these messages" (Binark, 2010 quoted in: Hobbs, 2004: 122).

Media literacy training focuses on five key concepts: The realization that the media is constructed; the fact that there is a creative language and content in the media; the emphasis on the fact that the same message can be perceived differently by different people; the hidden and implicit messages given by the media and the purpose (Jols & Thoman, 2008). In order for these messages to be perceived and interpreted by the child, they must be competent in terms of cognitive development. According to Piaget's theory of cognitive development, abstract thinking has not yet developed in preschool and primary school years (Yörükoğlu, 2016). However, children in this age group are exposed to all kinds of negative effects of the media. For this reason, it is thought that waiting for secondary school years will be late, studies related to this should be included in educational settings from a young age and are recommended in many studies (Altun, 2008; Bozkurt and Coşkun, 2018; Gündüz Kalan, 2010). Media literacy training to be given to young children and older children should serve five main purposes and raise awareness. Media literacy skills and objectives for young children should be given by adapting them to their age and developmental characteristics. Children born into the digital age have a natural ability to use media channels, to transmit the message through these channels, to produce and consume the message. This natural ability needs to be guided correctly by adults (Posos Devrani, 2020). Qualified educational programs are needed for teachers to be good guides for children on this path.

There are several studies in the field literature on the media literacy of teachers and prospective teachers (Burak & Durak, 2021; Bozkurt & Coşkun, 2018; Güven, 2014; Karaman & Karataş, 2009; Karaman, 2010); education programs (Çakmak & Altun, 2013; Sayın, 2015). In the field of education, issues such as the acquisition of media literacy to children are among the issues emphasized. The number of researches on this subject is increasing day by day and it is thought that more studies are needed (Altun, 2009; Güven, 2014; Gündüz Kalan, 2010; Keleş,

2009; Semiz, 2013). In the studies on media literacy examined, there are topics such as evaluation of the media literacy program (Altun, 2009; Keleş, 2009); review of parents' awareness of media literacy in preschool (Gündüz Kalan, 2010); review of media literacy levels of prospective teachers (Burak & Durak, 2021; Güven, 2014).

Considering the media literacy in educational programs, there are a few studies on its place in the Turkish education program (Çakmak & Altun, 2013; Sayın, 2015) and its place in the Life Science program (Altun & Çakmak, 2013). Program reviews are related to old programs and research examining media literacy in programs renewed in 2017 has not been found during literature review. In this regard, there is a study found on digital literacy in basic education programs (Altun & Alpan, 2021).

Purpose and Importance of the Study

Educational programs and learning environments should play their part in raising awareness and competence in children about the media. In Türkiye, media literacy is included as an elective course in the second level of primary education. This course was prepared as "Primary School Elective Media Literacy Course Curriculum" under the leadership of the Board of Education and was accepted by the Ministry of National Education in 2006 (Altun, 2009; Altun & Çakmak, 2013). This course was provided as one hour of instruction per week in the 6th, 7th or 8th grade of primary education, then it was given as 2 hours per week in the 7th or 8th grade of primary education as of 2012. The program was last updated by the Board Of Education in 2018 along with other training programs (MEB, 2018). Since the course is in the elective category, it is not available in every school. Considering the importance of media literacy, the fact that this course is both an elective course and that it is in the 7th and 8th grades of primary education is interpreted as a deficiency for our age. Because in this age, children are exposed to the effects of the media until they reach that age. Considering that children are intertwined with the media from a very young age, it is thought to be a necessity to give this education at a much earlier age. Altun (2008) criticizes the current practices with "the fact that students do not undergo any training in media literacy neither in the first level of primary education nor in the second stage of primary education, so that students are exposed to the negative effects of the media, especially until they reach the second stage of primary education". In another research conducted by Bozkurt and Coşkun (2018), it is emphasized that media literacy should be a skill to be developed throughout life starting from an early age and that the education to be given should be spread to a process starting from preschool to adult education.

Although there is no media literacy course in primary school years, it is possible to come across concepts such as digital competencies, media and information literacy in the programs of different courses. In this respect, it would be appropriate to know how primary school programs are in terms of media literacy and to enrich them if there are deficiencies. With its holistic and interdisciplinary structure in the first three years of primary school, the Life Science curriculum is considered to be suitable in terms of providing skills related to media literacy.

Since Life Science course is an effective course in preparing children for life, in providing children with the basic knowledge, skills, attitudes, thoughts and values required by the age, in creating a conscious life consciousness

by developing life skills (Öztürk & Dilek, 2004; Sönmez, 2005), it also comes to mind as an important course in terms of raising awareness of media literacy. Accordingly, in this research, answers to following research questions were searched about the place of media literacy in the life science program updated in 2018:

1. What is the place of media literacy in the “goals” of the life science program?
 - a. How do the skills in the life science program include media literacy skills?
 - b. How do these skills fit into the overall objectives of the program?
 - c. What is the status of media literacy gains in the program achievements?
2. What is the place of media literacy in the Life Science program “Content Element” (units)?
3. What is the place of media literacy in the context of Life Science “Educational Situations (Learning-Teaching Process) element”?
4. What is the place of practices that will provide media literacy in the Life Science Program “Assessment and Evaluation item” processes?

METHOD

Model of the Study

A qualitative research approach was used in the study. Document review was preferred from the data collection methods used in qualitative studies. Document review includes the analysis of written materials containing information about the facts and phenomena targeted to be examined (Yıldırım & Şimşek, 2011). In the study, Life Science Course Curriculum was examined as a written document. In line with the purpose of the research, the 2018 Life Science Course Curriculum was examined in detail in terms of media literacy and subjected to content analysis.

Data Collection

In this research, the life science curriculum, which was examined as a document, was subjected to content analysis to discuss it comprehensively. Examining documents with content analysis, stages such as sampling from the data subject to analysis, development of categories, determination of the analysis unit and digitization stages are used (Bailey, 1982). The following stages were used in this study:

1. To select a sample from the data subject to analysis: The 2018 Life Science Curriculum book was chosen with the purposeful sampling method.
2. To develop categories: Before the researcher starts the research, he/she determines the categories based on the theories in the field literature. In this study, four basic program elements appropriate to the literature were identified. These determined categories were considered as the basic categories of the document analysis to be performed.

3. To determine the unit of analysis: It involves the determination of units such as words, themes, sentences, substances as the unit of analysis. For this research, words and themes such as media, technology, communication, questioning, conscious media use, media were examined.
4. Digitization: Digitization is not a mandatory stage, there is not much digitization in this research. The digitization phase makes it easier for the reader to understand the data about the numbers. In this study, digitization was made by giving the number of acquisitions and units.

Analysis of Data

A training program consists of four basic elements. The goal includes the concrete experiences to be gained to the student, the content subject area, the learning and teaching processes or in other words, the educational situations include all kinds of methods and techniques to be used in learning and the situations related to the learning environment, and assessment and evaluation includes how much of the goals are achieved or not as a result (Demirel, 2011). In this research, the “objectives” of the Life Science program, its general and specific objectives and achievements, the “Content” and the units and subjects, the “educational situations” and the statements related to this in the program, the expressions in the program related to the “assessment and evaluation” dimension were examined. In this research, the 2018 Life Science Teaching program book was determined as research document. The limitation of the research is that a single document was examined.

FINDINGS

Findings on the First Research Question

Depending on the target size of the program, the objectives, achievements and skills expected to be gained in the program were examined. The objectives of the 2018 Life science program are presented in the table regarding the general objectives of the program:

Table 1. Findings on General Objectives

General Objectives	Objectives Associated With Media Literacy
- Student Knows Himself and the Environment He Lives in.	- Student Uses Information and Communication Technologies in Accordance with Its Purpose.
- Student Has the Basic Values of Family and Society.	
- Student Makes National, Spiritual And Human Values Experiential.	
- Student Is Aware of What They Need to Do to Ensure Their Personal Development.	
- Student Develops Personal Care Skills.	
- Student Gains Awareness of Living a Healthy and Safe Life.	
- Student Gains Social Participation Skills.	
- Student Acquires the Ability to Perceive Time and Space.	
- Student Develops the Ability to Use Resources Efficiently.	
- Student Gains the Ability to Learn to Learn.	
- Student Gains Basic Scientific Process Skills.	
- Student Loves His Country and Be Willing to Keep His Historical and Cultural Values Alive.	
- Student is Sensitive to Nature and Environment.	
Total Count: 14	

According to Table 1, the aim of “Uses information and communication technologies in accordance with its purpose” within the general objectives was indirectly related to media literacy. Of the 14 general objectives, only one is indirectly related to media literacy.

The inclusion of media literacy skills in the skills included in the 2018 Life Science program is presented in Table 2.

Table 2. Findings on Skills

Skills in the Program	Objectives Associated with Media Literacy
1. Research	2. Using Information and Communication Technologies
2. Using Information and Communication Technologies	8. Contact
3. Sensing Change and Continuity	10. Decision-Making
4. Balanced Nutrition	13. Self-Preservation
5. Conversation of Nature	19. Self-Management
6. Entrepreneurship	
7. Observation	
8. Communication	
9. Collaboration	
10. Decision-Making	
11. Career Awareness Development	
12. Use Of Resources	
13. Self-Preservation	
14. Self-Knowledge	
15. Personal Care	
16. Following The Rules	
17. Sensing Space	
18. Recognizing National and Cultural Values	
19. Self-Management	
20. Health-Preservation	
21. Problem-Solving	
22. Social Participation	
23. Time Management	
Total Count: 23	Total Count: 5

Of the twenty-three skills according to Table 2, five skills were indirectly related to media literacy skills. *Media-related* skills such as *ability to use* information and communication technologies, communication skills and healthy *communication*; deciding on the right media content with *decision-making skills*; self-protection and protection from the harmful effects of the media and *self-management skills*, as well as self-management and developing healthy media consumption habits can be improved. To gain media literacy, these five skills must be acquired. Intellectual skills such as critical thinking, creativity, problem solving could also be considered in relation to media literacy, and these skills could also be added.

Gains associated with the question of “What is the status of media literacy achievements in the target element of the Life Science program?” are presented in Table 3:

Table 3. Findings on Acquisitions

Grade Level	Acquisitions	Unit
1. Grade	Ls.1.3.7. When Using Mass Media, the Student Takes Care to Protect Its Body Health.	3
1. Grade	Ls.1.4.6. Student Uses Technological Tools and Equipment Safely.	4
2. Grade	Ls.2.4.5. Student Is Sensitive to the Safe Use of Technological Tools and Equipment.	4
3. Grade	Ls.3.2.5. Student Gives Examples of the Contributions of Tools and Technological Products Used at Home to Our Lives.	2

Very few achievements relative to the number of achievements in the program are associated with media literacy. Two gains from the first grade, one gain from the second grade, one gain from the third grade are associated with media literacy. When the distributions of the gains are examined, while the two expressions “to care” and “to become sensitive” are affectively weighted *gains*, achievements containing the expressions “to uses” and “to give examples” are included as cognitive field application and comprehension steps. The total number of achievements for the first grade in the Life Science Program is 53, of which there are 2 related to media; the total number of achievements in the second grade is 45, of which 1 is media-related; the total number of achievements in the third class is 50, and there is 1 media-related acquisition among them.

Findings on the Second Research Question

A review was made within the scope of the topics of the units for their place in the “content element” of the Life Science program.

Table 4. Distribution as per Units

Grade Level	Acquisitions	Unit	Descriptions
1st Grade	Ls.1.3.7. When Using Mass Media, the Student Takes Care to Protect Its Body Health.	3rd Unit Healthy Life	<i>The Importance of Using Mass Media Such As Television, Telephone and Computer Consciously Is Emphasized. The Points to Be Considered When Using Mass Media and the Negative Effects of Misusing These Tools on Human Health Are Emphasized</i>
1st Grade	Ls.1.4.6. Student Uses Technological Tools and Equipment Safely.	4th Unit Safe Life	<i>Emphasis Is Placed on the Safe Use of Electronic Tools and Equipment Such as Computers, Televisions, Mobile Phones, Tablets, Game Consoles and Electrical Appliances. It Is Emphasized That Caution Should Be Exercised Against Situations That May Cause Technology Addiction Such as Internet and Computer Games.</i>
2nd Grade	Ls.2.4.5. Student Is Sensitive to the Safe Use of Technological Tools and Equipment.	4th Unit Safe Life	<i>It Is Emphasized that the Safe Use of Technological Products Warns Those Around Them within the Framework of Courtesy Rules When Necessary</i>
3rd Grade	Ls.3.2.5. Student Gives Examples of the Contributions of Tools and Technological Products Used at Home to Our Lives.	2nd Unit Life At Home	

Rather than the expression of media literacy, the program includes achievements related to the expression of “conscious use of information and technology”. When the distribution of subjects is examined, the issues related to the correct use of technology, technological products and safe use are included in the first class in the 3rd and 4th units, from the second class to the 4th unit and from the third class to the 2nd unit. Considering the spiral between the subjects, it was found that while there was a spiral between the subjects in the first and second grade “Safe Life” Unit, the “Healthy Life” in the first grade and the “Life at Home” units in the third grade did not comply with the spiral principle alone.

Findings on the Third Research Question

Since there is not much explanation in the program book about the learning and teaching processes, the general principles have been examined. In terms of the general learning principles in the program, the findings are in the table. Among the 12 learning principles in the program, the fifth principle was determined to be related.

Table 5. Findings on Learning Principles

Principles of Learning in the Program	Objectives Associated with Media Literacy
<p>1. Care Should Be Taken to Make in-School and out-of-School Practices in the Course of the Course. In Particular, Extracurricular Practices Such As Oral History, Local History, Museum Visits, Nature Education, Getting to Know Official Institutions and Organizations and Private Institutions and Organizations Should Be Given Importance and Student-Centered Activities Planned in Advance Should Be Carried Out in This Direction.</p> <p>2. In in-School and out-of-School Applications, the Cognitive, Affective and Dynamic Development of the Students and Their Individual Differences Should Be Taken into Consideration.</p> <p>3. Care Should Be Taken to Establish a Connection between School and Life with the Activities to Be Carried Out in Line with the Achievements.</p> <p>4. Students Should Be Allowed to Use the Living and Inanimate Beings Around Them As Teaching Materials by Paying Attention to Ethical Issues.</p> <p>6. Experiments Can Be Made at A Simple Level in Natural Gains.</p> <p>7. Some of the Achievements in the Curriculum Should Be Processed in Time Periods Corresponding to Certain Days and Weeks.</p> <p>8. Since Students Have Not Yet Learned to Read and Write Numbers Greater than 1000 Until the Third Grade, Dates Should Not Be Given in the Textbook with Numbers or Writing While Teaching Subjects Such As National Holidays. During the Course of the Lesson, the Teacher May Verbally Indicate These Dates.</p> <p>9. While Applying the Program, the Necessary Flexibility Should Be Shown for Students with Special Needs, Activities Should Be Prepared and Plans Should Be Made in Line with the Interests, Wishes And Needs of the Students.</p> <p>10. While Applying the Program, Care Should Be Taken to Ensure That Students Acquire Values, All Achievements Should Be Matched with Relevant Values and Courses Should Be Taught Based on the Implicit Program Understanding.</p>	<p>5. Especially in Studies Where Students Are Expected to Conduct Research, They Should Be Supported to Share the Results of Their Research with Their Classmates by Using Materials Such As Posters, Posters, Panels, Brochures, Newspapers, Tables, and Graphics.</p> <p>11. In Accordance with the Developmental Levels of the Students, Importance Should Be Given to the Development of the Basic Life Skills Necessary for the Achievements, and the Activities Should Be Prepared with Such Understanding.</p>
Total Count: 11	Total Count: 2

The principle "*Especially in studies where students are expected to conduct research, it should be supported to share the results of research with their friends in the class by using materials such as posters, posters, boards,*

brochures, newspapers, tables, and graphics” is associated with media. It includes skills such as reading and sharing visual media elements, doing research, reading visual materials. The acquisition of life skills such as critical thinking, decision-making, communication, problem solving and planning, which are included in the development of life skills in the statement *“Importance In accordance with the developmental levels of the students, importance should be given to the development of the basic life skills necessary for the achievements, and the activities should be prepared with such understanding.”* will form the basis of media literacy skills.

Findings on the Fourth Research Question

The findings related to the question “What is the place of practices that will provide media literacy in Life Science program units, assessment and evaluation processes?” are presented in Table 6:

Table 6. Findings on Assessment and Evaluation

Assessment and Evaluation Practices in the Program	Objectives Associated with Media Literacy
1. Assessment and Evaluation Studies Should Ensure Maximum Harmony with All Components of the Curriculum and the Limits of Achievements and Explanations Should Be Taken As Basis.	5. Education Is Given Not Only for “Knowing (Thinking)” But Also for “Sensing (Feeling)” and “Doing (Action)””; Therefore, Cognitive Assessments Alone Cannot Be Considered Sufficient.
2. The Curriculum Does Not Draw Clear Boundaries for Practitioners in Terms of Assessment Tools and Methods That Can Be Used in the Assessment Process, But only Guides Them. However, in the Preferred Assessment and Evaluation Tools and Methods, the Necessary Technical and Academic Standards Should Be Complied with.	
3. Assessment and Evaluation Practices in Education Are an Integral Part Of Education and Are Carried Out throughout the Training Process. Assessment Results Are Not Discussed Alone But in the Integrity of the Processes Monitored.	
4. Due to the Fact of Individual Differences, It Is Not Appropriate to Speak of A Uniform Method of Assessment and Evaluation That Includes All Students and Is Generally Accepted for All Students. A Student’s Academic Progress Is Not Assessed or Evaluated by A Single Method or Technique.	
6. Multi-Focused Assessment and Evaluation Is Essential. Assessment and Evaluation Practices Are Carried Out with the Active Participation of Teachers and Students.	
7. The Characteristics of Individuals Such As Interest, Attitude, Value and Success That Are the Subject of Assessment and Evaluation May Change Over Time. For This Reason, It Is Essential to Use Assessments That Take Into Account Changes in the Process instead of Measuring These Characteristics in A Single Time.	

Although there are achievements related to media literacy in the program and gains in the indicators and a small amount of space in the units in the content, no findings in the assessment and evaluation dimension of the program for the measurement of these skills are directly related to the findings. However, according to the statement included in item 5 *“Education - Education is given not only for “knowing (thinking)” but also for “sensing (feeling)” and “doing (action)””; therefore, cognitive assessments alone cannot be considered sufficient”,* the relationship can be established in terms of acquiring attitudes and values related to the correct use of the media.

DISCUSSION and CONCLUSIONS

One of the skills under the title of using information and communication technologies, which is one of the skill headings of the 21st century, is media literacy skills (P21, 2019). As one of the 21st century skills covering communication and technology literacy; information includes all kinds of skills covering the use of digital technologies, communication and social network, and access to or use of information technologies with a view to research, organize, evaluate and transmit information, and also access, use, integrate, evaluate and produce information (P21, 2019). Providing these skills to children from a young age is one of the requirements of the 21st century.

Education and training programs have an important role to play to be media literate and to develop media literacy awareness in children. Theoretical and empirical studies in the field of media literacy, which aims to gain or improve the ability to reach, analyze, evaluate and convey the message as a part of the education given to children and young people in the education system, are expanding and increasing in importance day by day (Posos Devrani, 2020). For this reason, educational programs should contribute to the development of media literacy in children.

When the studies on media literacy in educational programs are examined, it can be said that the training programs are insufficient. The concept of "media literacy" has been addressed under different names in different studies; "digital literacy" and "digital competencies" are a few of them. In a study where the Turkish course was examined in terms of 21st century skills, it was determined that the areas of knowledge, media and technology and life and career skills were neglected from the 21st century skills (Bal, 2018). Similar research on the curriculum of Turkish language supports this finding (Kayhan, Altun & Gürol, 2019; Kurudayıoğlu & Soysal, 2019). In another study conducted in 2018 and examining the curriculum of Science courses, it was found that the gains of media literacy skills among the 21st century skills were handled in a small number (Kalemkuş, 2020). In another study related to the science curriculum, it was determined that the least gain was included in the science curriculum (Altun & Alpan, 2021). In the same study, the science course curriculum took its place as the program with the least gain in the context of digital literacy. In a study conducted by Altun & Alpan (2021), basic education programs were examined in terms of digital literacy. In the research, Turkish, Mathematics, Science, Social Studies and Life Science courses were discussed as digital competence topics in all of the curriculum; In terms of the number of achievements, it was determined that it was mostly handled in Social Studies and Turkish course (Altun & Alpan, 2021).

In this study, the Life Science Program, which covers the 1st, 2nd and 3rd grades of primary school from a young age, was discussed. Life Science course seems to be a holistic course that is suitable for providing children with these skills with perspectives that prepare children for life. Life science course is an interdisciplinary course that includes natural, social, artistic and cultural elements that are taught in the 1st, 2nd and 3rd grades of primary school (Sönmez, 2005). When the place of media literacy in the objectives of the Life Science Program, which is the first research subject of the research is examined, it can be observed that there are four gains in

achievements and indicators, and one in general gains the Life Science program, that there are five skills in skills section. In another research on the subject, achievements including digital literacy skills were regularly identified at each grade level in the Life Science program (Altun & Alpan, 2021). Accordingly, since Life Science is taught in primary school 1st, 2nd and 3rd grades, it can be said that it is accepted that students are introduced to digital literacy from a young age and that the conscious and safe use of digital technologies is aimed, and this result supports the findings of this research. In the light of these findings, it is thought that the Life Science Curriculum includes media achievements and skills in accordance with the era, but more achievements should be included in this area.

Considering the Life Science Program as a content item, it is determined that media-related content is included as a subject area in one unit from each grade level in accordance with the objectives. Considering the importance of the media subject, as a subject area, it is thought that the number of units and contents should be increased. Süral & Girmen (2019) state that primary school children need to improve their digital competencies based on the results of their research on the Life Science course and think that the number of relevant researches should increase. Süral & Girmen (2019) developed a digital assessment tool to be used in the Life Science course and found that students had problems using technology while performing this study and that students enjoyed this process.

According to the findings of this research, the results of the examinations within the scope of the Life Science Program “educational status element” were found to be very little. The lack of statements about the media in the program can be interpreted as not giving due importance to the subject. There are few explanations of the teaching-learning process and teaching principles and approaches in the program. Considering that digital literacy issues are included in the Life Science course achievements, it is thought that more guidance should be found in the dimension of educational situations (Altun & Alpan, 2021). This can be addressed by reviewing textbooks and teacher guidebooks to be able to comment in more detail about the educational status item. Researchers may be advised to examine Life Science textbooks and teacher guidebooks in terms of media literacy. However, it is an inevitable result that a skill that is given little space in the achievements and indicators of the program targets will also find little place in the educational situations and the elements of assessment and evaluation.

Teachers can enrich the units and achievements in the program with their own individual experiences. However, to achieve this, teachers need to be well-equipped individuals who have developed themselves in media literacy. In a study conducted by Possos Devrani (2020) together with primary and secondary school teachers, interviews were conducted with teachers on media literacy. These interviews have shown that media literacy is an issue that is valued by teachers and teachers want to learn more about it in more depth. As a result of the interviews, it was seen that teachers had a lack of knowledge about the content of media literacy. This situation shows that the media literacy course should not be a single course, but a module that is integrated into different courses and spread throughout the education. Therefore, media literacy is an issue that should be handled intertwined with all disciplines and handled in cooperation with teachers, parents and children. It is thought that teachers

should be able to improve themselves by receiving in-service trainings on this subject if necessary. An educator who does not have media literacy competence cannot respond to the education of children in this field or to the counseling requests of parents in this field at the necessary level (Possos Devrani, 2020).

SUGGESTIONS

In the light of the findings obtained in this research, some suggestions have been developed:

- It may be recommended to review the achievements and subject contents of the primary school Life Science program related to media literacy and to give more importance to this issue.
- It may be recommended that primary school teachers contribute to program development activities by carrying out studies that will increase their knowledge and experience about media literacy.
- It may be recommended to examine Primary School Life Science textbooks and teacher guidebooks in terms of media literacy.
- It can be suggested that Media Literacy should be considered in all disciplines and associated in coordination with the programs of different courses.
- It may be necessary to provide children with prerequisite skills to gain media literacy skills. For this, it may be necessary to gain high-level thinking skills such as problem solving, critical thinking, decision making, analysis and evaluation. It is proposed to add achievements to the programs that will improve media literacy as well as thinking skills and life skills.
- It may be recommended to integrate the skills that will provide critical thinking, problem solving, decision making, etc. into the programs to gain them from a young age.
- It may be advisable to investigate the place of media literacy skills in programs at every grade level, from preschool to undergraduate level.
- The opinions, knowledge and experiences of teachers and teacher candidates on the subject can be determined.
- In addition to the organization of training programs, it is important for the teachers who implement the program to improve themselves about "media literacy" and to expand the achievements in the program.

ETHICS TEXT

In this article, journal writing rules, publication principles, research and publication ethics rules, journal ethics rules were followed. Responsibility for any violations that may arise regarding the article belongs to the author. In this study, there was no situation that required ethics committee approval.

Author's Contribution Rate Statement

The author's contribution rate to this article is 100%.

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