Are Primary Teachers Literate or Not: A Study on Curriculum Literacy of Primary Teachers

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Are Primary Teachers Literate or Not: A Study on Curriculum Literacy of Primary Teachers

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Abstract

This study aims to investigate the curriculum literacy levels of primary teachers. The study group of this study, which is based on a case study from qualitative research designs, consists of teachers working in primary schools in the 1st term of the 2020-2021 academic year in Diyarbakir. The teachers in the study group were selected by criterion sampling, one of the purposive sampling methods. The semi-structured interview technique was used in the data collection process of the research. In addition, the qualitative data obtained were analyzed with descriptive analysis methods. As a result of the analysis, it was revealed that the primary teachers did not directly access the curriculum designed by the MoNE but indirectly followed the curriculum by downloading the annual plans from the web pages on the internet. In addition, interviews with teachers revealed that they could barely demonstrate the philosophy, values, and competencies in the curriculum and were not aware of these parts. On the other hand, primary teachers stated that they focused on basic skills (reading, writing, and arithmetic), life skills (self-confidence, entrepreneurship, self-regulation, problem-solving), and values education (love, respect, honesty, sharing, and responsibility) in success. It is seen that while teachers mostly talk about the acquisitions related to basic skills, life skills, and values education in the curriculum, they refer less to the acquisitions of related mathematics and engineering skills, which are widely used and vital in today's world. This result showed that they care about the inclusion of skills, life skills, and values education in the curriculum, and they try to achieve the goals for these skills by the students.

Keywords: Curriculum, Primary School Teacher, Curriculum Literacy

Introduction

The concept of literacy was a skill to be gained by newly beginner students of primary school in traditional education. However, it is now frequently mentioned in different fields of educational study. The concept of literacy was initially expressed as the ability to gain reading and writing skills (Dictionary of Turkish Language Institution [TDK], 2020) and to analyze symbols expressed in written language (Kurudayıoğlu & Tüzel, 2010), while it is now an important skill that affects not only the individual but also the whole society (Raja, 2005). With the change in life conditions, scientific and technological developments, and the emergence of additional needs, the meaning of the concept of literacy has deepened, and its framework has diversified (Aşıcı, 2009). The definitions of literacy made by UNESCO at different times in fifty years easily show how much the concept has changed. For example, in 1958, UNESCO defined the concept as a person who can both read and write a short and simple statement about his/her daily life. In 1978, UNESCO defined it as someone who can engage in all activities in which literacy is necessary for the effective functioning of his group and community and continues to use reading, writing, and calculation skills for the development of society. In 2005, it defined literacy as the ability to describe, understand, interpret, create, communicate and calculate using printed and written materials related to various contexts.

As seen, literacy is a concept that has been defined differently throughout its historical past (Barone, 2015), and in line with the different social needs, various kinds of literacy for individuals have appeared in different fields following the 2000s (Grisham & Wolsey, 2006). In this century, the concept of literacy is particularly highlighted for learners in an educational context as a member of world citizens to have digital literacy, information literacy, health, and environmental literacy skills to cope with the needs of 21st century and life skills (Partnership for 21st Century [P21], 2010). This has changed the approaches in the curriculum prepared for educational systems and has led to the development of curricula that can meet the current needs. However, no matter how well the curricula were designed, they could not show the success and effect they aimed for unless they were correctly and fully

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understood by the teachers who played a key role in the implementation process (Yıldırım, 2019). Penick (1995) stated that the most prominent reason the curriculum could not achieve the desired success was the teachers’ commitment to traditional methods in teaching and learning process. The studies in this field have frequently sampled the teachers as the data source in the curriculum (Kurt & Erdoğan, 2015; Ozan & Köse, 2014), teachers emphasized they do not know the curricula sufficiently and need some kind of introduction regarding the curricula they will implement (Çifçi & Tatar, 2015; Duru & Korkmaz, 2010). Finally, the concept of curriculum literacy was brought to the agenda as a solution, and this concept was also included in the curriculum of teacher training institutions updated on May 16, 2018 (Higher Education Council [HEC], 2018).

Review of Literature

Curriculum Literacy as a Term

The concept of curriculum literacy was first put forward by Akınoğlu and Doğan (2012) in the literature, then was conceptualized by putting forward that the differences in the application of curriculum stem from the teachers' ability to understand, perceive, interpret, and evaluate the curriculum. Yıldırım (2019) defined curriculum literacy as the ability of practitioners to reach a correct mindset by asking “Why, What, How, and How Much” questions while examining the curricula. Kahramanoğlu (2019) defined curriculum literacy as the process of making sense of and analyzing the official curriculum using teachers' high-level mental skills. Akyıldız (2020) considered curriculum literacy as the competence to understand, implement, and evaluate the curriculum developed in a field. Keskin (2020) expressed curriculum literacy as the teacher's knowledge regarding the features and use of curriculum in practice, using the curriculum as a guide by making critical evaluations and interpretations. Erdağ (2020), on the other hand, defined curriculum literacy as teachers' ability to know and implement the curriculum, and it is a qualification that all education stakeholders should have to adapt to the 21st-century learning approaches. As seen from its various definitions, curriculum literacy requires teachers both appropriate knowledge and use of the curriculum and its features.

The Function of Curriculum Literacy in Education

The concept of curriculum literacy has two important functions in the educational process. The first of these is that it helps curricula designed with great effort and time to achieve desired goals (Olivia, 2009), which determines the quality of education. Although curricula serve as a guiding resource that teachers implement on certain days and times of the week (Bulach, 2002), each teacher can implement the program as much as he/she understands and adopts it (Ryu, 2015). For this reason, no matter how perfectly a program is designed, it needs to be understood appropriately by the implementers to implement it correctly (Akyıldız, 2020; Ellis, 2013; Park, 2008). The related literature shows the existence of teachers using the same curriculum but implementing it in different ways (Bümen et al., 2014; Gallagher & Tobin, 1987; Songer & Gotwals, 2005), and even some teachers manage the teaching process with traditional methods by resisting changes and updates made in curricula (Penick, 1995). It is also noted that as one of the main variations of the teaching and learning process, teachers have problems in possessing the skills and competencies they need to truly understand, perceive, and implement the curriculum (Süral & Dedebali, 2018). Based on these results, teachers should plan the educational process by understanding the curriculum's structure, philosophy and essence to implement it in the targeted way (Akınoğlu & Doğan, 2012); that is, they should be well-literate.

The second function of curriculum literacy is to contribute to curriculum development and evaluation studies. Curriculum development in education is a dynamic process in which necessary revisions are made as educational programs are designed, developed, tested, implemented, and evaluated (Erden, 1998; Gürkan, 2005; Özdemir, 2009). Curriculum development in education is a process carried out in cooperation with all stakeholders in order to change and improve the curriculum in terms of quality (Marsh & Willis, 2007). Curriculum development requires a continuous process because the designed curriculum cannot be complete unless it is implemented (Varış, 1996). Therefore, an evaluation of the designed curriculum is required. Curriculum evaluation is needed to determine whether the designed curriculum has achieved the desired goals and criteria during its implementation and to provide reliable feedback to decision-makers about the existing problems or utilities of the curriculum (McCain, 2005; Morrison, 1993). The studies on curriculum development and evaluation in Turkey have shown that the curricula implemented after the design process are regularly evaluated, certain decisions are made in this direction, and the programs are eventually renewed (MoNE, 2006-2010-2018). Also, these studies mostly included teachers as the study group (Gündoğdu & Dönmez, 2016; Kızıkoğlu & Senemoğlu, 2015; Kurt & Erdoğan, 2015; Ozan & Köse, 2014). However, the relevant literature shows that teachers mostly do not have adequate information; they do not know the programs well enough and need a certain introduction regarding updated curricula (Çifçi & Tatar, 2015; Duru & Korkmaz, 2010; Kaymakçı, 2015; Şimşek, 2017; Kahramanoglu,
In this case, as the most preferred study group in curriculum evaluation studies, the teachers express their opinions about the programs that they do not have sufficient knowledge and use and risk the reliability and validity of the relevant studies. Based on these views, knowing the curriculum literacy levels of teachers may contribute both to the desired success of the curriculum and to the development and evaluation studies. As Ariav (1991) noted, knowledge of curriculum development approaches and correct application of the curriculum is related to the level of curriculum competence of teachers.

Curriculum Literacy Studies in Turkey

The related literature shows that there has been a trend in the subject of curriculum literacy in the last five years, and scientific research have focused on this subject. The preliminary studies in this field aimed to develop a reliable and valid measurement tool to measure the curriculum literacy of teachers, school administrators, and teacher candidates (Akyıldız, 2019; Bolat, 2017; Karataş, 2020; Yar Yıldırım & Dursun, 2019; Yar Yıldırım, 2020; Yıldırım, 2019). Following studies, Erdem & Eğmir (2018), Kana et al. (2018), Çetinkaya & Tabak (2019), and Süral & Dede bali (2018) examined the curriculum literacy levels of pre-service teachers and concluded that pre-service teachers consider themselves sufficient in terms of knowledge and use of curriculum designed. Aslan (2018), Kahramanoğlu (2019), Erdamar (2020), and Keskin (2020) examined the curriculum literacy levels of teachers working at various school stages and concluded that the teachers had a high level of curriculum literacy. The common point in these studies is that they were based on quantitative methods, and the curriculum literacy levels of teachers and pre-service teachers were measured with 5-point Likert scales. Therefore, the related literature needs studies dealing with teachers’ curriculum literacy from a different and deeper perspective. To add, the relevant literature points out that on the one hand, teachers have a high level of curriculum literacy, on the other hand, they feel inadequate and need knowledge and introduction of the curriculum they will implement. Based on these contradictory results, we need to get more detailed and in-depth analyses of teachers’ curriculum literacy by interviewing the teachers individually. In addition, this study planned to deal with the curriculum literacy of primary school teachers who implement at least three curricula each year total 11 curricula belonging to different study fields throughout the four years teaching process in primary school. Primary teachers implement the curriculum of a variety of disciplines like Turkish Language, Mathematics, Music, Visual Arts, Physical Education, and Game Courses, Information Technologies and Software from the 1st grade to 4th grade, while they implement a curriculum of Life Science (1st, 2nd, 3rd grades), Social Studies (3rd and 4th grade), Science (3rd and 4th grade), Human Rights and Citizenship (4th grade), Traffic Safety (4th grade) at certain grade levels in Turkey (MoNE, 2018). Based on this, this study aimed to examine the curriculum literacy of primary teachers along with the following research questions:

1. How do primary teachers access to curricula designed by MoNE?
2. What do primary teachers know about the perspectives of curricula designed by MoNE?
3. Do the primary teachers find the curricula designed by MoNE up-to-date or not? In which parts?
4. What areas and skills do primary teachers emphasize most when implementing curricula designed by MoNE?
5. Which methods and techniques do primary teachers mostly use to help students to achieve the aims of curricula?
6. What kind of assessment and measurement techniques do primary teachers mostly use to assess students’ achievements?

Method

Research Design

This study was based on a case study, one of the qualitative research designs. The case study is based on deep foundations and tries to describe events that occur in their natural environment at a determined time and place with the help of various data collection tools (Hancock & Algozzine, 2006). With this design, a single situation or event is examined in depth longitudinally, data is collected systematically and what happens in the real context is searched (Subaşı & Okumuş, 2017). This study adopted a descriptive case study, which is one of the case studies put forward by Yin (2003), since the descriptive case study describes the phenomenon revealed in previous studies and allows the description and conceptualization of the key concepts and subsets of the examined phenomenon (Ozan-Leymun et al., 2017).

Participants

The study group of this research included teachers working in primary schools in the 1st term of the 2020-2021 academic year in Diyarbakir. Teachers in the study group were selected with criterion sampling, one of the
purposive sampling methods. A basic feature of the criterion sampling method is to study all cases that meet a predetermined set of criteria, which can be determined by the researcher or a pre-determined list (Yıldırım & Şimşek, 2013). In this study, the fact that the primary teachers have taught in all four levels of primary school (1st, 2nd, 3rd, and 4th grades) was used as a sampling criterion. 20 primary teachers were sampled by criterion sampling method for the interviews, and their demographic characteristics were presented in Table 1.

Table 1. Demographic characteristics of participant primary teachers.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Age</th>
<th>Experience</th>
<th>Educational level</th>
<th>Department</th>
<th>The school setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>F</td>
<td>32</td>
<td>12</td>
<td>Bachelor’s degree</td>
<td>Mustafa Kemal University Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T2</td>
<td>F</td>
<td>35</td>
<td>10</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T3</td>
<td>M</td>
<td>31</td>
<td>6</td>
<td>Bachelor’s degree</td>
<td>Ziya Gökalp Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T4</td>
<td>F</td>
<td>26</td>
<td>4</td>
<td>Bachelor’s degree</td>
<td>Hacettepe Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T5</td>
<td>M</td>
<td>37</td>
<td>15</td>
<td>Bachelor’s degree</td>
<td>Ziya Gökalp Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T6</td>
<td>M</td>
<td>35</td>
<td>12</td>
<td>Bachelor’s degree</td>
<td>Bayburt University Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T7</td>
<td>M</td>
<td>34</td>
<td>12</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T8</td>
<td>M</td>
<td>37</td>
<td>14</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T9</td>
<td>M</td>
<td>36</td>
<td>14</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T10</td>
<td>M</td>
<td>35</td>
<td>12</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T11</td>
<td>F</td>
<td>45</td>
<td>24</td>
<td>Bachelor’s degree</td>
<td>Abant Izzet Baysal University Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T12</td>
<td>F</td>
<td>39</td>
<td>15</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T13</td>
<td>F</td>
<td>40</td>
<td>16</td>
<td>Bachelor’s degree</td>
<td>Abant Izzet Baysal University Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T14</td>
<td>F</td>
<td>39</td>
<td>16</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T15</td>
<td>M</td>
<td>37</td>
<td>10</td>
<td>Bachelor’s degree</td>
<td>Abant Izzet Baysal University Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T16</td>
<td>F</td>
<td>30</td>
<td>9</td>
<td>Bachelor’s degree</td>
<td>Ziya Gökalp Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T17</td>
<td>M</td>
<td>29</td>
<td>6</td>
<td>Master</td>
<td>Ziya Gökalp Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T18</td>
<td>F</td>
<td>37</td>
<td>15</td>
<td>Bachelor’s degree</td>
<td>Marmara University Education Faculty</td>
<td>City Center</td>
</tr>
<tr>
<td>T19</td>
<td>M</td>
<td>30</td>
<td>7</td>
<td>Master</td>
<td>Giresun University Education Faculty</td>
<td>District</td>
</tr>
<tr>
<td>T20</td>
<td>M</td>
<td>36</td>
<td>10</td>
<td>Bachelor’s degree</td>
<td>Siirt Education Faculty</td>
<td>District</td>
</tr>
</tbody>
</table>

Table 1 shows the distribution of participant teachers by gender, age, teaching experience, education level, the department they graduated, and the school setting. As shown, nine of the participants were female and eleven were male; the age of four teachers was 30 and below, fifteen teachers were between 31 – 40 and one teacher was 41 and over. Seven teachers had 0-10 years’ experience, twelve teachers had 11-20 years’ experience, and one had 20 years or above teaching experience. Additionally, eighteen teachers had undergraduate degrees, and only two teachers had master’s degrees. Eight teachers graduated from Siirt University Education Faculty, four teachers from Dicle University Ziya Gökalp Education Faculty, three teachers from Abant Izzet Baysal Education Faculty,
and one from Mustafa Kemal University Education Faculty. Finally, eight of the teachers worked in the city center and twelve were in the district.

**Data Collection Process**

In this study, a semi-structured interview technique was used. Semi-structured interviews provide the interviewees with the option to express themselves and provide in-depth information in the relevant field (Büyüköztürk et al. 2016). In order to serve this purpose, interview questions were prepared to determine the curriculum literacy levels of primary teachers. The draft questions were sent to the three experts in the field and required revisions were made in line with the feedback. After that, the questions were directed to three primary teachers, and it was confirmed that they served the purpose. The questions were as follows:

- How do you access to curriculum? Which web page?
- What do you know about the philosophy adopted in the curricula?
- What is the general aim of the curricula you use? And is it up to date or not?
- What skills, learning areas and values are emphasized in the curricula of primary schools?
- What kinds of aims are emphasized in curricula? Which one do you mostly help students to gain and why?
- Which teaching and learning methods are offered by the curricula, which one do you mostly use in the process and why?
- What kind of assessment and measurement methods and techniques are offered by the curricula, which one do you mostly use in process and why?

For the interviews, appropriate teachers for the criteria were contacted, and an appointment was arranged for the interviews with the volunteers. Then, on the appointment day and time, a link was sent to the teacher via the contact address to interview online. At the beginning of the interview, the participant teachers' consent was taken to record the online interview process. Then participant teachers were informed orally and loudly by the researchers about the scope, purpose, the use of data through the study, and their withdrawal right from the study. After that, interview questions were directed to participant teachers one by one. During the process, the same questions were directed to the teachers in the study group and enough time and opportunity were granted to express themselves. The questions were directed in different ways, without spoiling the meaning, so the teachers could easily understand and answer them.

**Data Analysis**

The qualitative data obtained in this study were analysed with descriptive analysis methods. The data is summarized and interpreted in the descriptive analysis according to predetermined themes (Yıldırım & Simsek, 2013). In this study, 20 teachers were interviewed for 6 hours, 16 minutes and 18 seconds; on average, each teacher was interviewed for 19 minutes. The shortest interview lasted 10 minutes, and the longest one 31 minutes. Afterward, the interviews were listened to again and again by the researchers, transcribed to word format, and 68 pages of data were obtained.

**Validity and Reliability**

Creswell & Miller (2000) stated that the research paradigm significantly influences the choice of validity and reliability criteria. Batdı and Oral (2021) stated that validity and reliability studies in qualitative research, unlike quantitative research, focus on situations such as what the events mean and how the experiences are interpreted. Guba and Lincoln (1994) mentioned the concept of reliability for the concepts of validity and reliability in qualitative designs. Based on the views as mentioned above, this study focused on internal validity, which expresses the conformity of the findings with reality; external validity, which expresses the generalizability of the research findings to similar situations and participants; and objectivity, which expresses the distance and impartiality of the interviewee.

In order to ensure the external validity of the research, the study group, the research process, and the procedures in the process were explained in detail. In addition, the raw data obtained during the process were kept in case of a request for comparisons in the interviews. To ensure internal validity, the findings were processed in detail, and all the findings were directly transcribed to Word format on the PC without comment. To prevent any deviation from the research or subject during the interview process, the questions prepared within the scope of the research were directed to the participants with different expressions to obtain data that would serve the purpose of the research.
In order to ensure the reliability of the study, first, the interview data transcribed by the researchers were examined by another researcher to ensure any deficiencies or missing about the recording. Then the data selected over a small sample number were analysed and a codebook was created by the researchers (Kuckartz, 2014). The data obtained from a small part of the data set were coded separately by two researchers, and the reliability between the coders was calculated. The reliability formula suggested by Miles and Huberman (1994) was used to calculate the reliability of the coding \( \text{Reliability} = \frac{\text{Agreement}}{\text{Agreement} + \text{Disagreement}} \). The inter-coder reliability was calculated as .84 in this study.

**Results**

In this section, the data obtained regarding the research questions were analysed, and the themes were presented in diagrams.

**The way of primary school teachers access to curricula**

In this part, primary school teachers were asked how and from where they accessed the curricula. As a result of the responses of teachers being analyzed, two main themes were obtained and presented in Figure 1.

As seen in the figure, primary teachers access to curricula in two ways: directly and indirectly. Most of the participating teachers indicated that they indirectly access the curricula and use the annual plans instead of the curricula to achieve the educational goals. The rest of the teachers directly accessed the curriculum to check the annual plans they had downloaded. The views of primary teachers on this question were as follows;

*No, I’ve never check over it. I’m accessing through the annual plans. I usually access the annual plans from the eğitimhane.com, sometimes from the MoNE course webpages. Sometimes, I also check out the sınıföğretiminizbizi.com page. I check whether my downloaded annual plan is compatible with that year (T2). I have never check over the curricula. For 12 years, for example, I have never wondered what aims exist in the science curricula and what kind of assessment and evaluation approach it is talking about (T6). Well, I’ve never looked into it. I haven’t had a chance to review it. I have a smart board to access the aims. I Access the aims via annual plans. There are ready-made templates for the annual plan; we take them and adapt them to ourselves. There are some web pages. I usually download the annual plans from eğitimhane.com (T10).*

**Primary teachers’ knowledge regarding the perspective of curricula**

In this part, primary school teachers were directed to questions about the perspectives of curricula and were asked to talk about the curricula' philosophy, values and competences. As result of teachers' responses, three main themes were obtained and presented in Figure 2.
In the interviews with the primary teachers, it is seen that only a few of the teachers have knowledge about the perspective of the curriculum (philosophy, values, and competencies of the curriculum). They seem unable to express an opinion or have enough information about the curriculum's philosophical approach and highlighted competencies. However, the teachers seem to have more knowledge about the values in the curriculum than the competencies and philosophical approach. The views of primary teachers on this question were as follows:

I don’t believe it has much philosophy. In my opinion, I can say that when the teacher spends his/her time by adding his/her own view and idea and reflecting this to the child, a philosophy is formed (T2).

The student is passive, the teacher is active, and everything is built on it. The curriculum does that. We have these in our curricula; however, rarely implemented (T5).

I can say this because I have always worked in the village. The level is pretty bad, it’s not constructivism or progressivism, and this is not something I take into account (T6).

Primary teachers views on the current status of the curricula

In this part, primary school teachers were asked questions about the current state of the curriculum and were asked to explain the reasons for their views. As a result, responses from the teachers were analysed and presented under two major themes in Figure 3.
The interviews with the primary teachers showed that, while some teachers consider the curricula compatible with today’s world, some do not. The figure pointed out that primary teachers think curricula are up to date as they highlight communication, questioning, and problem assessment skills, values, and environmental awareness, as well as they are consistent with the principle of vitality and scientific developments. However, those teachers do not consider the curricula up to date because of their being far from the cultural structure and today’s world, as well as not considering individual differences, not being technology-based and accessible, and having an excess of abstract concepts. In addition, some teachers stated the curriculum is heavy, and this cause problems regarding timing in the implementation process; therefore, they do not think the curricula are in harmony with today’s world.

The views of primary teachers on this question were as follows;

“I don’t think it’s compatible. For example, I see that in the 21st century, science technology, laboratories, coding, and especially such applications are still not made in MoNE schools. Therefore, I do not see it as consistent (T6).

In fact, if I am not mistaken, critical thinking, productivity, and social and cultural skills are included in the curricula. The Turkish course I said, includes more learning aims. Since the number of both weekly course hours and educational aims in mathematics is limited, there are aims for critical thinking and problem-solving skills. I think they are included in the curricula, but I am unsure if we can implement them properly. We try to do it in a compressed way because the curriculum is intense. We are trying to implement the whole curriculum but we are experiencing difficulties, we cannot concentrate (T13).

In fact, we can say that it is compatible with today’s world. However, since we have many students and parents who cannot keep up with today’s world due to some problems arising from the individual development of children, socio-economic level, environment, culture, family structure, and the school structure, we naturally have difficulties. Since the curricula are sent from a certain center to the entire country, unfortunately, not every student in the school can live at the same level due to certain impossibilities. In this respect, we also feel deficient. For example, a curriculum in the city center may not be the same as a curriculum in a village school, I think it would be better if it was not the same. In addition, it can be a little difficult to implement the same curriculum in every school in a city center because the curriculum to be implemented to students with high socio-economic or cultural levels and those to be implemented in schools with a low level of consciousness needs to be slightly different, that is, the curriculum would be more useful if it is designed according to student level and individual differences (T17).

Primary school teachers' views regarding the educational aims of curricula

In this part, primary school teachers were asked questions about the educational objectives of the curricula, and they were asked to share their views on the knowledge, skills, and behaviors that are emphasized in the curricula and which of them they are trying to teach to students. As a result of the responses of teachers being analysed, four main themes were obtained and presented in Figure 4.
T10, T17) and arithmetic (T1, T4, T6, T8, T17) skills, which showed that they were persistently trying to teach these skills to students. Also, they cared about life skills and values education since they frequently emphasized such skills as entrepreneurship, self-control, problem-solving, communication and thinking (critical, reflective, analytical, and creative thinking). In addition, some teachers (T10, T14) prioritized the love of school rather than the achievement of curriculum aims, while some others just tried to help students to achieve the curriculum aims on time within the learning process. The views of primary teachers on this question were as follows;

Let them learn to read, write, do arithmetic, and be a good person. I care about these (T6).

I want them to understand me and put it into practice. I just don’t want them to understand by heart. I taught you something. I would love for them to put what they have learned into practice. But how much is done in practice? It’s a debatable topic. What we care about is that the children we teach can get somewhere when they grow up. For this, let the child has love for school. This is enough for us. If the child likes school, I think it will be ok. Since I am a bit prone to mathematics, I focus a lot on mathematical skills. For me, math is at the beginning of everything. A child who understands mathematics thinks more easily and rationally. It is easier for him to grasp. It seems to me that they can do everything. I am in favor of their being more analytical thinkers (T10).

As for me, it is a problem-solving. A child should be able to do his work and solve his problems. Problem solving should be used to produce his own solution to the problem he will encounter in mathematics and his life. A common mistake made children in this period is that parents are actually experiencing a conflict of generations or a conflict in what we call modern life. We try to raise our children with what we hear. Maybe we make the same mistake too. But I want children to be raised so they can do their own work, solve their problems, and ask for help when needed. I am trying to train my students in this direction. They need to look critically (T13).

Primary school teachers’ views regarding the teaching and learning process of curricula

In this part, primary school teachers were asked questions about the curricula teaching and learning process. They were asked to share their views regarding their behaviours and choices for activities suggested in curricula for the achievement of aims. As a result teachers’ responses, two main themes were obtained and presented in Figure 5.
Figure 5 shows that teachers developed strategies for implementing the teaching and learning process of the curricula in two different ways. While the first of the strategies adopted by the teachers mainly targeted at implementing the constructivist approach and considering the interests and needs of the learners, the second strategy is based on the teacher’s subjective point of view. Those teachers adopted the first strategy to take a stance against memorization, use the discovery learning approach, guide learners, emphasize the principle of vitality in learning, adopt social, language and thinking skills, and moral values. In addition, they use technology in the teaching and learning process, adopt a game-based approach, attach importance to concretization, and individual differences of learners, and practice self-control. However, the teachers adopted the second strategy in the curriculum with a subjective approach because they believe that the achievements of aims in the curriculum cannot be possible as the curricula include too much; therefore, teachers experience burnout and difficulty focusing on or internalizing the achievements. These all lead teachers to adopt a different way of implementing curricula in line with their subjective point of view. The views of primary teachers on this question were as follows:

*Generally, teachers feel like going to class, finishing the course, and leave. They have the intention of saving the day. It would be wrong to generalize, but if there are 10 teachers in a school, 2 teachers really do something by tearing themselves apart, adding something from themselves. However, the rest just fill the time. Teachers sometimes make excuses when there is an activity to avoid taking part in it. I do not understand this? For example, they say I would not take part (T2).*

*Some children have a quick wit, but I teach them individually, but if a child is low to gain the aims, I try to get him/her to gain it by one by. For example, I see that if a student cannot count from 1 to 100, it is sufficient for him/her to count from 1 to 20 (T4).*

Figure 5. Primary school teachers’ views regarding the teaching and learning process of the curricula
In order to solve exam questions, the development of reasoning skills, which is the most common problem that I come across, which I also observe with my daughter, and it also appears in the source books too. I often encounter with this. As for me, it is problem-solving and reasoning skills (T18).

Primary school teachers’ views regarding the assessment and measurement process of curricula

In this part, primary school teachers were asked questions about the assessment and measurement process of the curricula, and they were asked to share their views regarding their practices and choices for assessment and measurement methods suggested in curricula for testing the achievements of aims. As a result of teachers’ responses were analysed, two main themes were obtained and presented in Figure 6.

Figure 6. Primary school teachers’ view regarding the assessment and measurement process of the curricula

As seen above, primary schools’ teachers use both traditional and alternative assessment and measurement tools in the process. Primary teachers mostly use questioning, rubrics, portfolios, creative story writing, self-assessment, project-based practices, and checklist as alternative assessment and evaluation tools. They use open-ended questions in written and oral examinations, fill-in gaps items, and true-false tests as traditional measurement and evaluation tools. It is also seen that observation technique is the most preferred alternative assessment tool and the test technique is the most preferred traditional assessment and evaluation tool. However, some primary teachers consider it sufficient to know the student during the evaluation process; they do not keep records or only use the evaluation exercises at the end of the textbook. The views of primary teachers on this theme were as follows;

I’m making observations. I ask questions during the course. By doing these, I already know and understand the students. I do not keep a record while making an assessment (T1).

In the first years, I was not doing anything for evaluation. Then three inspectors visited. They came to school every year. There were evaluation tools beyond all the books, and they suggested we do these evaluations. After that day, I evaluate according to the evaluation tools at the end of the activity book. I partially used my observations of students’ behavior; but now I don’t use it. My students don’t understand. This is a big trouble. Even if I know the child, I know that I have to evaluate them. For example, I had a student who was a little older than the other children. He did math very well, but I don’t know if it was my fault, but he was excited and stuttered in reading. Success in other courses affected the score I would assess in that
course. If he is good at the other courses, he is good at this too. I said he failed because of the excitement. Therefore, I feel the need to make evaluations (T3).

You know, exams are done with paper and pencil, so I think so. I do both oral and written assessments. For example, I always devote one day a week to grammar. I am giving an example of the grammar subject I studied this week from the Turkish course. If I am going to cover another subject in the Turkish course next week, I always try to remind that subject in the first 10 minutes, and I get feedback from the children verbally. Afterwards, at certain intervals, I distribute tests or any worksheets and collect them, or give them as homework, then I collect it and check it, if there are any left behind, I try to give feedback by communicating with the family or informing the child in the classroom. I already evaluate each student on their own. We were preparing evaluation tools for each course according to the achievements of the school subjects at the 1st, 2nd, 3rd grades. Even though there is no exam, the assessment tools we have prepared check for achievement of the objectives in terms of how we will assess students. If the student has achieved that aim, we already give a valid score, but if he does not, we do not evaluate based on comparison like student A is more successful than student B, but we evaluate as if the student has gained that behaviour. We evaluate whether the gain has been achieved or not. I used the evaluation tools in the 1st, 2nd, and 3rd grades, and now there is an exam in the 4th grade (T18).

**Results and Discussion**

This study, aiming to examine the curriculum literacy of primary teachers, revealed that primary teachers do not directly access the curriculum designed by MoNE but indirectly follow the curriculum by downloading the annual plans from web pages on the internet. The previous studies also concluded that teachers followed the curriculum from textbooks and guidebooks (Karacaoğlu & Acar, 2010; TED, 2009). The other studies in the literature also supported these findings. They concluded that teachers do not follow the MoNE’s web pages posting the curricula (Dursun, Bedir, & Gülçü, 2017), they do not change their annual plans unless there is an update or revision in the curriculum (İşcan & Eskicümlü, 2003), and even they download their annual plans from the internet or take it from other colleagues (Öztürk, 2012). Here, it wouldn’t be wrong to say that teachers make evaluations based on the annual plans for evaluation, fidelity, or literacy studies of the curriculum. It has been emphasized that although annual plans are partially effective in education, their effect is weak, and many of the methods and activities suggested in the plans are actually ignored (Sirinkan & Gündoğdu, 2011). Thus, the curriculum literacy level of primary teachers may not be sufficient. However, it is necessary to know how teachers perceive and understand the curriculum and how they approach the skills and competencies to implement the curriculum (Demir & Toraman, 2021). Curriculum literacy is the ability of teachers to have the knowledge and execute the knowledge about the curriculum (Erdem & Eğmir, 2018). For this reason, teachers need to have a certain level of curriculum literacy to know, implement and develop a curriculum if necessary as a part of fulfilling their professional responsibilities under legal regulations (Yar-Yıldırım, 2020).

Annual plans provide teachers with guidance regarding objectives, the learning and teaching process, and assessment and evaluation components. However, they provide insufficient information about the philosophy, purpose, values, and competencies of the curriculum. One of the most important issues in teachers’ recognition of the curriculum is their understanding the philosophy of curriculum (Keskin, 2020). The interviews with the teachers revealed that they can barely point out the philosophy, values and competencies in the curriculum and are unaware of these parts. However, curriculum literacy enhances the teachers’ ability to perceive the philosophical approach in the curriculum, enables teachers to adopt the approaches in the curriculum more quickly, develop more accurate perspectives towards the curriculum increasing their beliefs towards curriculum (Yilmaz & Kahramanoğlu, 2021). Erdamar and Akpınar (2020) attribute teachers’ low theoretical curriculum literacy to their ineffective training process during the pre-service education, to the school culture and curriculum development process in the country. In addition, participants’ teachers are also unaware of the innovations and updates in the curriculum. This result is consistent with other studies in the literature; the teachers are unaware of the innovations or updates in the curriculum and they stated to be not well informed about the curricula (Çifçi et al., 2013; Demirtaş & Erdem, 2015; Gönal & Akdağ, 2021). Therefore, the teachers may think that the curricula are far from today’s world and are not up to date as they haven’t got well information about the curricula and base their own perspectives on the implementation process. This causes teachers to implement the curriculum and to choose materials and activities as much as they know (Kahramanoğlu, 2019). Another finding obtained within the study is, primary teachers’ behaviors (orienting towards subjective practices, focusing only on achievement) and affective reactions (desire to save the day, inability to internalize the curriculum, etc.) exhibited while implementing the curriculum can be results of this too.

Primary teachers started to focus on the basic skills (reading, writing, and arithmetic), life skills (self-confidence, entrepreneurship, self-regulation, problem-solving), and values education (love, respect, honesty, sharing, responsibility) in the achievement of aims in curricula. It is seen that while the teachers mostly mentioned the achievements related to basic skills, life skills, and values education in their courses, they pointed out less about
the achievements related to mathematics and engineering skills, which are widely used and vital in today's world. This result showed that teachers care about the achievement of 21st-century skills, life skills, and values education in curriculum, and attempt to realize the students' aims regarding these skills. Therefore, primary teachers play a critical role in the individual's acquisition of vital knowledge and skills (Celik et al., 2019). However, the participant teachers mostly mentioned learning and innovative skills such as problem-solving, innovation, creativity, and communication within 21st-century skills. Still, they barely mentioned about media and information literacy, flexibility, adaptability, entrepreneurship, and productivity, leadership, social, and intercultural skills. With the curriculum update made in Turkey in the 2017-2018 academic year, the curriculum highlights 1. Mother Tongue Literacy 2. Physical Education and Sports Competencies 3. Information Literacy 4. Information and Communication Technologies Literacy 5. Science Literacy 6. Human Rights and Democratic Sensitivity Competencies 7 Mathematical Literacy 8. Learning Competencies 9. Self-Awareness 10. Art Proficiency 11. Basic Life Competencies 12. Foreign Language Literacy and Competencies 13. Basic skills such as Knowledge and Consciousness of Citizenship (MoNE, 2018). Also, the studies in the literature showed different results regarding teachers' use of 21st-century skills in curricula. For example, some teachers use moderately (Karabekmez, 2021), and some are high and close to high (Eğmir & Çengelei, 2020; Gürültü et al., 2019; Kıyasoğlu, 2019; Közikoğlu & Özcanlı, 2020). The related literature frequently stated that teachers especially care about values education (Dincer & Gözel, 2019; Gür et al., 2015), consider it necessary (Bayırlı et al., 2020; Sayın, 2020), and prioritize problem-solving skills (Calp & Edis, 2020). However, the primary teachers hardly ever mention the achievement of math and engineering skills as they may not know mathematics and engineering skills (Ozkaran & Akçay, 2021) and cannot express how to structure them (Sarac & Yıldırım, 2019). As a result, the participant teachers mentioned the 21st-century skills and values education themes more than the mathematics and engineering skills in the curriculum because of their having low curriculum literacy. It is thought that teachers are more familiar with the themes of 21st-century skills and values education through scientific studies in this field, measurement tools and instruments, activities and weeks highlighted by MoNE and related institutions. Especially with similar activities and studies emphasizing STEM, mathematics, and engineering skills as they also increase the teachers' awareness in this field. As Akgündüz et al. (2015) stated, Turkey is at a lower level than the USA and EU countries in terms of mathematics and engineering skills and awareness, so universities and related institutions should conduct studies and related projects related to STEM education.

Primary teachers refer to the principles of vitality, concretizing, students-centered and active learning, using the constructivist approach, and focusing on enjoyable and game-centered learning environments with the help of technology in the learning-teaching process, in which the achievements of the curriculum are realized. In this respect, the teachers are consistent with the philosophy and general objectives of the curriculum during the implementation process of the curriculum. However, the teachers complained throughout the interviews that the curricula were not designed considering regional differences. However, MoNE (2018) expects teachers to make adjustments and adaptations in curricula in realizations and achievement of objectives and aims. This results from the fact that teachers cannot internalize the curriculum sufficiently and have low curriculum literacy. Teachers with sufficient curriculum literacy can make the adjustments and adaptations in curricula in the implementation process, making them more functional by considering their feature of being designed as a framework (Yakar, 2016; Tan, 2005). The feature of the framework is required in areas where curricula are designed from a single center and used jointly throughout the country (Ornstein & Hunkins, 2014). Thanks to this feature, only the outlines of the program and its elements have been determined, and it provides the opportunity to adapt it to the conditions of the school and region during the implementation process (Akpinar, 2014). Therefore, teachers are expected to adapt curricula to their students and teaching environments by preparing annual plans that include the planning of education throughout the academic year (Öztürk, 2012). However, instead of making use of the curriculum, the teachers frequently complain that the curriculum does not consider regional differences as they access the annual plans prepared by teachers in other regions and provinces of the country via the internet (Aslan & Çöökik, 2018; Çoban, 2020; Günaal & Akdağ, 2021). This is an indicator of teachers' inadequate curriculum literacy rather than a curriculum-related problem, as curriculum literacy requires consideration of geographic, economic, and cultural differences during the implementation process (Keskın, 2020; Karataş et al., 2022). As a result, teachers who cannot adapt the curriculum to their region, school, and student level will not reach a sufficient level of curriculum literacy. In this case, it will lead to the deterioration in the unity of the curriculum implementation and the emergence of a learning-teaching process that differs from its aims and implementation principles (Kahramanoğlu, 2019). In this study, some of the primary teachers stated they felt burnout during the teaching-learning process; they only focused on saving the day, while some of them stated that they only focused on the achievements of aims or included extra-curricular activities.

In the measurement and assessment process, primary teachers used both traditional and alternative measurement and evaluation tools together to determine students' achievement. Despite this, it is understood that the teachers do not record the data of assessment and evaluation tools, and they think it is sufficient for the evaluation process.
just to get to know the students. Primary school curricula emphasize the use of measurement and assessment tools and activities that supports, complete, and provide more information about the student by focusing on the development of students in the process (Karataş & Oral, 2019; Tuncer & Geçim, 2019). In this context, it recommends teachers benefit from observation forms, checklists, rubrics, and assessment scales (MoNE, 2018). However, in this study, some teachers stated that they must use the measurement as mentioned above and evaluation tools; they also preferred the use of traditional measurement and evaluation tools such as tests, open-ended questions in written or oral forms, true-false tests too. In addition, the participant's primary teachers used the test technique from the traditional assessment tools and the observation technique most among the alternative ones. The related literature also supports this result and teachers frequently were concluded to use the observation technique as one of the alternative assessment and evaluation tools (Duran, 2016; Özkoparan, 2016) because primary teachers do not feel qualified enough to use all of assessment and evaluation tools thus it is time-consuming for them (Tuncer & Geçim, 2019). Therefore, primary teachers need counselling and information on the effective use of measurement and assessment tools (Carnevale, 2006). As a matter of fact, the main condition of a teacher to be able to apply a method or technique effectively is to know that subject. Otherwise, as in curriculum literacy, the application of something without knowledge will not be possible (Özenç & Çakır, 2015).

As a result, this study was carried out to examine primary teachers' curriculum literacy to provide deeper and more detailed information as an alternative to the quantitative study findings in the related field. However, since the study is based on the self-declaration of primary teachers, it is limited to their perceptions and views. In this respect, studies based on classroom observations, analysis of teachers’ documents, or mixed methods are also needed. Anyway, the study contributes to the curriculum evaluation, literacy, and fidelity studies in the literature or to researchers working in these fields as it is thought to provide deep and detailed data on the curriculum literacy of primary teachers working with curricula of various disciplines. In addition, based on the results, we suggest that informative meetings and training should be provided to the primary teachers about the curricula they have implemented or will implement during the seminar periods of school, and scientific meetings should be organized where teachers can come together and discuss their practices on implementing curricula.

Author(s) Contribution Rate

Dr. Sedef SÜER: Literature review, statement of the problem, research questions, data collection and analysis discussion and implications.

Dr. Mehmet DEMİRKOL: Statement of the problem, research questions, data collection and analysis, discussion.

Conflicts of Interest

No potential conflict of interest was reported by the authors.

Ethical Approval

Dicle University Rectorate, Social and Human Sciences Ethics Committee, Number: 14679147-663.05

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