



Essential qualities for elementary teachers of the 21st century: Voices of key stakeholders¹

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Abstract. This study aimed to explore the essential qualities for elementary teachers specifically in the 21st century based on the perspectives of teacher educators, pre-service and in-service elementary teachers, and the authorities of the Ministry of National Education and the Council of Higher Education in Turkey. Designed as phenomenological research, the participants included 58 teacher educators, 29 pre-service elementary teachers, 28 in-service elementary teachers, four authorities from the Ministry of National Education and one authority from the Council of Higher Education, who were selected through criterion sampling, maximum variation sampling, and snowball sampling strategies. The data were collected through semi-structured face-to-face interviews, and analyzed by content analysis method. The participants reported that elementary teachers needed to possess certain qualities that include the essential knowledge, skills, and attitudes in the following domains: (1) information and communication technologies, (2) higher-order thinking skills, (3) autonomy and collaboration, (4) flexibility, (5) adaptation, (6) culturally responsiveness, (7) local and universal issues, (8) personal and professional development, (9) students with special needs, (10) differentiation, and (11) effective communication. The study does not only reflect the evolving needs of elementary teachers along with the changing characteristics of the societies in the 21st century, but it also offers a ground for the future directions of elementary teacher admission, preparation, certification, evaluation, and appointment policies.

Keywords: Elementary teachers, Teacher competence, Teacher qualities, 21st century skills, Elementary teacher education, Phenomenology, Turkey

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INTRODUCTION

Today, as never before, individuals are expected to have a wide range of new qualities to adapt to the rapidly world (Griffin, Care, & McGaw, 2012) and succeed in the 21st century due to the emergence of information and communication technologies, globalization, mass education, urbanization, changes in the social life, industrial development, and the rise of international educational exams such as PISA (Programme for International Student Assessment), TIMSS (Trends in International Mathematics and Science Study), and PIRLS (Progress in International Reading Literacy Study) (American Association of Colleges of Teacher Education [AACTE] & Partnership for 21st Century Skills [P21], 2010; Akiba & LeTendre, 2009; Ananiadou & Claro, 2009; Day, 2013; Griffin et al., 2012; Organisation for Economic Co-Operation (OECD), 2013; Paine, 2013). Although many countries have been enacting several educational reforms to improve their education systems and thereby raise highly-skilled individuals (Schleicher, 2012), it has widely been acknowledged by various stakeholders including educational researchers, practitioners, and policymakers and that every single aspect of a school reform, first and foremost, depends on highly qualified teachers to be successful (Darling-Hammond, 2010), fueled by the evidence that teacher quality is a strong determinant of students' learning outcomes (Berry, Hoke, & Hirsch, 2004; Betts, Zau, & Rice, 2003; Buddin & Zamarro, 2008; Darling-Hammond, 2000, Darling-Hammond & Berry, 1999; Darling-Hammond & Sykes, 2003; Day, 2013; Goldhaber, 2007; Hanushek, 2010; National Council for Accreditation

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of Teacher Education (NCATE), 2006; OECD, 2005; Rice, 2003; Rivers & Sanders, 2002; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004; Stronge, 2002; Stronge, Ward, & Grant, 2011; Wayne & Youngs, 2003).

Given that teachers are considered to be at the heart of all policies that aim to improve the quality of schools and education (Angrist & Guryan, 2008; Cochran-Smith, 2003; Darling-Hammond, 2010; Hanushek, 2002; Hanushek & Rivkin, 2006; Harris & Sass, 2011; Krieg, 2006; OECD, 2005; Wenglinsky, 2000), raising teacher quality has become one of the most important goals of educational reforms to prepare individuals better. Therefore, as it is believed that teachers are crucial for both individual and nationwide success in this era than it has ever been before, the calls for better preparing teachers have increased significantly (AACTE & P21, 2010; Fallon & Fraser, 2008). Accordingly, it is expected that, in addition to learners, teachers should also be prepared to develop the essential knowledge (e.g., subject matter knowledge, pedagogical knowledge, curricular knowledge, knowledge of assessment, information and communication technologies, inclusion and diversity, educational policies, foundations of educational sciences), skills (e.g., planning, research, collaboration, adaptation, classroom management, reflection, metacognition, interpersonal and negotiation skills), and attitudes (e.g., commitment to diversity, multiculturalism, and democracy, ongoing learning, sense of self-efficacy) that are necessary to respond to the emerging educational demands and needs in the 21st century (Caena, 2013). This has been grounded in the view that teacher competences develop gradually in a continuum from initial teacher preparation to career-long professional development (Caena, 2013).

Although there have been various initiatives and efforts to raise teacher quality by developing new education policies (Akiba, LeTendre, & Scribner, 2007; Goldhaber, 2007), improving teacher quality has remained in the history of teaching profession and at the center of educational reforms over a long period of time (Goodwin, 2010) and it is still a major concern of parents, educators, administrators, and policymakers (Akiba et al., 2007; Buddin & Zamarro, 2008; Hanushek & Rivkin, 2012). In this regard, it has been criticized that the most challenging issues in the education systems still result from a lack of highly qualified teachers since education systems confront difficulties in recruiting, preparing, and retaining high-quality teachers (Schleicher, 2012) and thereby, the number of teachers who have the necessary qualities is not sufficient (Berry et al., 2008; OECD, 2005), leading to a serious problem of the shortage of highly qualified teachers. Similarly, from the national perspective, although many efforts have been made by policymakers to restructure and improve the teacher education system in Turkey especially in the past 40 years, the actions taken have mostly been top-down and short-term remedies due to the lack of a consistent teacher education framework, lack of pilot studies, and lack of considerations for evaluating the effectiveness of those actions based on empirical research (Aydın, Şahin, & Topal, 2008; Azar, 2011; Çakıroğlu & Çakıroğlu, 2003; Yıldırım, 2011, 2013). To name a few, introducing a unified system of teacher education and transferring the responsibilities of teacher preparation from the MoNE to the Council of Higher Education [CHE] (Altan, 1998; Azar, 2011), enacting constant structural and curricular changes in teacher education programs (Şişman, 2009), appointing the graduates of other faculties, who had no pedagogical training, as teachers (Bilir, 2011), offering alternative teacher certification programs (Soysal & Radmard, 2017), neglecting scientific knowledge, practices, and previous experiences in the development of in-service training policies (Günel & Tanrıverdi, 2014) have been among some of the significant attempts, which are allegedly predicated on the search for improving teacher education in Turkey. Yet, the enacted reforms have constantly been overturned by the new ones that have been competing with each other (Yıldırım, 2011). Moreover, it has been put forth that these reforms have mostly targeted to improve teacher supply as they concentrated on the issue of “teacher quantity” to address teacher shortage over the issue of teacher quality and thereby, led to aggravated concerns about the problem of underqualified teachers (Atanur-Baskan, Aydın, & Madden, 2006; Bilir, 2011; Kiraz, 2002; Okçabol, 2004; Sabancı & Şahin, 2006; Şişman, 2009; Üstüner, 2004; Yıldırım, 2011). Hence, especially since the late 1990s, preparing highly qualified teachers has been among the most enduring and compelling issues of the teacher education system in Turkey (Azar, 2011; Okçabol, 2004; Sabancı & Şahin, 2006; Yıldırım, 2011, 2013).

Despite many restructuring efforts that have been made to strengthen the teacher education system in Turkey to ultimately enhance teacher quality, empirical evidence from many research studies, particularly those conducted with elementary teachers, points to a variety of serious professional development needs of elementary teachers (e.g., Şahin, 2013) to be able to meet the educational goals of today's society. To illustrate, it is widely reported that elementary teachers find themselves less competent at and experience difficulties in educating students with special needs (Saraç & Çolak, 2012; Serin & Korkmaz, 2014); developing and using appropriate assessment and evaluation tools, and integrating information and communication technologies into teaching and learning (Eğitimi Araştırma ve Geliştirme Dairesi Başkanlığı [EARGED], 2008; Turgut, 2012); adapting to scientific, technological, and social changes, engaging in ongoing personal and professional development (Ergin, Akseki, & Deniz, 2012). Moreover, they articulate difficulties in managing schools with multigraded classes (Gözler & Çelik, 2013; Sağ, Savaş, &

Sezer, 2009; Sağ & Sezer, 2012; Taneri & Ok, 2014); planning instruction, developing instructional materials, developing extracurricular activities (Gültekin, Çubukçu, & Dal, 2010); choosing appropriate instructional methods and techniques and using them effectively, managing classrooms, schools and knowing official regulations, adapting to school environment and culture (Korkmaz, Saban, & Akbaşlı, 2004; Türk Eğitim Derneği [TED], 2009); curriculum development (Demirkaya & Yağcı, 2014); counseling (Küçüktepe, 2013); collaborating with colleagues and stakeholders (Sarı & Altun, 2015; Toker-Gökçe, 2013); and responding to the individual needs of students (TED, 2009). Accordingly, while the issue of improving teacher quality has been regarded as a matter of attracting, preparing, and retaining effective teachers, it is evident that the relevant reforms, at the outset, require the identification of essential teacher qualities so that quality pre-service and in-service teacher education policies can be built further (Caena, 2013).

Problem Statement

While there is consensus on the critical role of teachers and some shared agreement on the nature of teaching across different cultures, the essential teacher qualities varies for each country not only because they are historically and culturally bound with specific constraints in different contexts (Caena, 2013), but also that the national structures of the education systems and policies result in differences in terms of the role of teachers (Akiba et al., 2007). In this view, teaching is regarded as a complex and multifaceted act that builds on certain values and assumptions concerning education, teaching, learning, and society (Caena, 2013). Besides, those values and assumptions are situated in different economic, social, and political contexts of each country (Cooper & Alvarado, 2006). Therefore, especially considering today's ever-increasing demands that have chief implications on the qualities that are expected from teachers (Schleicher, 2012), arguments regarding the characteristics that comprise effective teaching vary with their emphasis on different elements and thereby, developing consensus on the constituents and a definition of teacher quality is challenging (Akin, 2017).

Particularly considering the teacher education context in Turkey, as part of "Teacher Training" component of the "Support to Basic Education Project" that was launched in 2000 alongside the agreement signed between Turkish government and the European Union Commission, the General Directorate of Teacher Training within the body of the Ministry of National Education (MoNE) carried out several activities to identify the generic (core) teacher competences, as well as the subject-area specific competences for each discipline. However, the identified competences have been widely criticized since they were not determined by including the voices and perspectives of multiple stakeholders and thereby, there had been no consensus on them (Bayındır, 2011; TED, 2009; Yıldırım, 2013). Consequently, it has been argued that the lack of comprehensive and agreed-upon teacher qualities has had a negative impact on the teacher admission, teacher preparation, teacher appointment, and teacher evaluation policies (Akpınar, Turan, & Tekataş, 2004; Aypay, 2009), as well as on teacher education research that aims to evaluate the effectiveness of the teacher education programs or the professional needs of in-service teachers since both teacher education research and policies, first and foremost, need to be built on the basis of well negotiated teacher qualities. In this respect, as Yıldırım (2013) argues, the essential teacher qualities need to be identified with increased attention to involving the perspectives of various key stakeholders, rather than asking the views of a single group. Besides, considering that teacher competences were defined by the MoNE more than a decade ago, it has been put on agenda as a high priority to revise the essential teacher qualities so as to meet the needs of the current era and thereby, reflect the realities and recent expectations in the 21st century (Akin, 2017). Especially given that the constructivist curricular reform that took effect in 2005 has brought new roles upon teachers, teacher competences need to be revisited and revised based on empirical research that involves the voices of multiple key stakeholders so that the new teacher roles suggested by evolving school curricula could be reflected into the qualities expected from teachers.

Purpose of the Study

The purpose of this study is to explore the essential qualities for elementary teachers of the 21st century based on the perceptions of teacher educators, pre-service and in-service elementary teachers, and the authorities of MoNE and the CHE in Turkey. As this study is part of a larger research, the present paper specifically focuses and sheds light on the qualities that are found to be essential for elementary teachers particularly in the 21st century.

Research Question

In line with the aforementioned purpose, the present study seeks to answer the following research question:

What are the essential qualities for elementary teachers specifically in the 21st century based on the perspectives of teacher educators, pre-service elementary teachers, in-service elementary teachers, and the authorities of the MoNE and the CHE in Turkey?

METHODS

Design

This study was designed as a phenomenological research as it aims to explore “the essential qualities for elementary teachers specifically in the 21st century” by gaining insight into the world of several individuals based on their perspectives and lived experiences (Marshall & Rossman, 2011; Merriam, 2014; Patton, 1990), and thereby seeks to reveal the deeper meanings and realities that the participating individuals construct around those experiences (Bogdan & Biklen, 2007). The phenomenological method insists that information and insight are not generated by large amounts of data that come from the world of nature, but are derived from an intense study of experiences and consciousness (Husserl, 2012). Drawing on these, the present study examines the perspectives and experiences of several participants, including teacher educators, pre-service elementary teachers, in-service elementary teachers, and the authorities of the MoNE and the CHE in Turkey, regarding the essential qualities of elementary teachers. Although phenomenological studies assume that there are multiple interpretations of the same phenomenon experienced by several individuals (Merriam, 2014), they also recognize that there is a commonality in shared experiences of individuals; therefore, the phenomenological studies attempts to arrive at a description of the common essence in perceptions and reactions of the participants regarding the phenomenon of interest (Creswell, 2013; Patton, 1990). Accordingly, the current study uncovers what is essential in the perspectives and experiences of the participating individuals concerning the essential qualities of elementary teachers.

Participants

Among purposive sampling strategies that ensure the selection of key individuals who are information-rich (Patton, 1990) and have the greatest potential in informing the research questions (Maxwell, 2013; Miles & Huberman, 1994), the participants of the present study were selected through criterion sampling, maximum variation sampling, and snowball sampling strategies (Patton, 1990). Table 1 presents the selection of the participants involved in the study.

Table 1. Selection of the participants

Participants	Sampling type
1. Teacher educators	<p><u>Selection of the universities</u></p> <ol style="list-style-type: none"> 1. Criterion sampling <ul style="list-style-type: none"> - Holding at least 10-year experience in elementary teacher education program 2. Maximum variation sampling <ul style="list-style-type: none"> - Three different universities <p><u>Selection of the teacher educators</u></p> <ol style="list-style-type: none"> 1. Criterion sampling <ul style="list-style-type: none"> - Teaching a course to pre-service elementary teachers 2. Maximum variation sampling <ul style="list-style-type: none"> - Working at the department of elementary teacher education program or the other departments which offer courses to pre-service elementary teachers - Teaching different courses to pre-service teachers based on different areas of expertise

2. Pre-service elementary teachers	<ol style="list-style-type: none"> 1. Criterion sampling <ul style="list-style-type: none"> - Being selected from the same universities that the teacher educators are to be selected from - Being a senior student - Being recommended as promising teachers by the teacher educators 2. Maximum variation sampling <ul style="list-style-type: none"> - Being enrolled at daytime or evening education program
3. In-service elementary teachers	<ol style="list-style-type: none"> 1. Criterion sampling <ul style="list-style-type: none"> - Working at public elementary schools 2. Maximum variation sampling <ul style="list-style-type: none"> - Working at urban or rural areas - Being a graduate of elementary teacher education program or being an out-of-field teacher - Teaching different grade levels (1st – 4th) - The university that teachers obtained their undergraduate degree from - Teaching experience
4. Authorities of the MoNE and the CHE	<ol style="list-style-type: none"> 1. Criterion sampling <ul style="list-style-type: none"> - Working at the relevant units within the MoNE and the CHE 2. Snowball sampling

As a result of the sampling procedure described above, the study included 58 teacher educators, 29 pre-service elementary teachers, 28 in-service elementary teachers, four authorities from the MoNE, and one authority from the CHE, whose demographical characteristics (e.g., gender, university, experience, degree of education) related to the purpose of the study are in summarized in Table 2, Table 3, Table 4, and Table 5 below.

As presented in Table 2, of 58 teacher educators, 31 (53.45%) were female and 27 (46.55%) were male. Of them, 24 (41.38%) participated from University-1 (U1), 14 (24.14%) participated from University-2 (U2), and 20 (34.48%) participated from University-3 (U3) with varying years of experience in offering courses to elementary teacher education program. In addition, while 29 teacher educators were affiliated with elementary teacher education program, the remaining 29 participants were affiliated with other programs that offer courses to pre-service elementary teachers.

Table 2. *The profile of the teacher educators*

Demographical characteristics	<i>n</i>	%
Gender		
Female	31	53.45
Male	27	46.55
University		
U1	24	41.38
U2	14	24.14
U3	20	34.48
Years of experience in offering courses to elementary teacher education program		
0-5 years	18	31.03
6-10 years	14	24.14
11-15 years	19	32.76
16-20 years	5	8.62
21-25 years	2	3.45
Affiliation (program)		
Elementary teacher education	29	50.00
Other programs	29	50.00
Academic title		
Prof. Dr.	8	13.79
Assoc. Prof.	17	29.31
Assist. Prof.	19	32.76
Dr.	10	17.24

Other	4	6.90
Total	58	100

As Table 3 illustrates, of 29 pre-service teachers, 23 (79.31%) were female and 6 (20.69%) were male. The number of participants from U1 and U2 was both 9, while 11 participants were from U3. The participants were enrolled in either daytime ($n=24$, 82.76%) or evening ($n=5$, 17.24%) education.

Table 3. *The profile of the pre-service teachers*

Demographical characteristics	<i>n</i>	%
Gender		
Female	23	79.31
Male	6	20.69
University		
U1	9	31.03
U2	9	31.03
U3	11	37.94
Program type		
Daytime education	24	82.76
Evening education	5	17.24
Total	29	100

As seen in Table 4, 18 (64.29%) teachers were female and 10 (35.71%) teachers were male. While 21 (75.00%) of them had their undergraduate degree in elementary teacher education program, 7 (25.00%) of them were an out-of-field teacher with varying years of teaching experience. Teaching different grade levels, the majority of them ($n=20$, 71.43%) were working at an urban school, while the remaining participants ($n=8$, 28.57%) were working at a rural school. Moreover, among them, 6 (21.43%) elementary teachers never had an experience of working at a rural school, while 22 (78.57%) of them have had such experience. Besides, 13 (46.43%) teachers had experienced teaching in multigrade classes and 15 (53.57%) teachers had not had such experience.

Table 4. *The profile of the in-service teachers*

Demographical characteristics	<i>n</i>	%
Gender		
Female	18	64.29
Male	10	35.71
Undergraduate education		
Elementary teacher	21	75.00
Out-of-field teacher	7	25.00
Degree of education		
Associate's degree	4	14.29
Bachelor's degree	21	75.00
Master's	2	7.14
Ph.D.	1	3.57
Teaching experience		
0-5 years	2	7.14
6-10 years	6	21.43
11-15 years	6	21.43
16-20 years	8	28.57
21 years and over	6	21.43
Experience in rural schools		
Experienced	22	78.57
Inexperienced	6	21.43
Experience in multigrade classes		
Experienced	13	46.43
Inexperienced	15	53.57
Grade level		
1 st grade	9	32.14

2 nd grade	3	10.71
3 rd grade	6	21.43
4 th grade	10	35.72
District		
Altındağ	2	7.14
Bala	3	10.71
Çankaya	4	14.29
Etimesgut	3	10.71
Keçiören	2	7.14
Mamak	3	10.71
Polatlı	5	17.85
Pursaklar	3	10.71
Yenimahalle	3	10.71
Area of the school		
Rural	8	28.57
Urban	20	71.43
Total	28	100

As presented in Table 5, four participants were from the MoNE and one participant was from the CHE with varying years of experience in the institution and in significant positions. Two participants were pursuing a Ph.D. degree, one participant had a master's degree, and one participant had a bachelor's degree. In particular, the participant selected from the CHE was a graduate of Institute of Education and had seven years of teaching experience as an elementary teacher in the past. On the other hand, among four participants who were selected from the MoNE, only one of them was a graduate of faculty of education. The rest of them had their undergraduate degrees from different faculties. Nevertheless, all of them previously worked as teachers - for 20, 11, 3, and 6 years - in different branches.

Table 5. *The profile of the authorities from the MoNE and the CHE*

Demographical characteristics	Institution	
	MoNE	CHE
Gender		
Female	2	1
Male	2	0
Degree of education		
Bachelor's degree	1	0
Master's	1	0
Ph.D.	2	1
Title & experience in the position		
Education specialist & current department manager	1 (14 years)	0
Education specialist	1 (8 years)	0
Former department manager	1 (11 years)	0
Head of department	1 (4 years)	0
Expert & Prof. Dr.	0	1 (5 years)
Total	4	1

Data Collection Instruments

As phenomenological studies depend to a large extent on in-depth interviewing (Marshall & Rossman, 2011), the data were collected through semi-structured, in-depth, and face-to-face interviews with participants in order to gain insight into their world (Creswell, 2013) regarding the essential qualities for elementary teachers specifically in the 21st century. In doing so, the study seeks to uncover the participants' perspectives and experiences on the phenomenon (Patton, 1990) in their own words, from their own frame of reference (Bogdan & Biklen, 2007). Based on the review of the literature, purpose of the research, and the research questions, the researchers developed four parallel interview schedules in Turkish for all groups of participants, which consisted of both demographical questions to provide relevant background to the study and also open-ended questions to elicit in-depth information from the

interviewees on the phenomenon. To illustrate, the demographical questions asked participants' gender, age, degree of education, teaching experience, the university being studied/worked at, and so on. Moreover, some of the open-ended questions are presented below:

1. What are the essential qualities for elementary teachers?
2. What are the essential qualities for elementary teachers specifically in the 21st century?
3. What are the qualities that are essential for elementary teachers particularly at the 1st, 2nd, 3rd, or 4th grade?

The parallel interview schedules were then revised in light of the expert opinions and pilot studies were conducted with each group - except the authorities from the MoNE and the CHE - to check whether the questions are relevant and well-organized for a meaningful conversation and the timing of interviews works as intended (Kvale, 2007). Lastly, ensuring the participants' permission, all interviews were audio-recorded. The interviews were conducted nearly in 30 to 60 minutes.

Data Analysis

After the data collection was completed, the audio-recordings were, first, organized and the anonymity of the participants was ensured by using labels together with numbers (e.g., TE3; TE for teacher educators, PT for pre-service teachers, T for in-service teachers, and M/C for MoNE/CHE). Then, each audio-recording was transcribed verbatim and the data were analyzed by content analysis method (Bogdan & Biklen, 2007; Patton, 1990). In doing so, an iterative and continuous process of systematically searching for codes, which are related to the qualities that are essential for elementary teachers specifically in the 21st century, was carried out, and essential patterns and recurrences among the emerging codes were identified (Patton, 1990) to derive broader categories (Bogdan & Biklen, 2007) such as information and communication technologies, higher-order thinking skills, autonomy and collaboration that included smaller codes - mostly in vivo codes (Creswell, 2013). To create a list of tentative codes and categories, one of the researchers, first, coded a number of transcripts alone. Then, as part of ensuring intercoder reliability, the researchers asked four experts to code the same transcripts to be able to check the consistency of the codes and the categories generated (Marshall & Rossman, 2011; Miles & Huberman, 1994; Patton 1990). As the data analysis proceeded, the codes and the categories were continuously revised by working back and forth between the data and the created codes or categories (Patton, 1990). The data analysis process was performed with the help of NVivo 10. Lastly, to illustrate the findings in participants' own words, the researcher identified sample quotations, which were, first, translated to English by the researcher and then, checked by an expert to ensure the accuracy of the translations and attain a reasonable approximation of the participants' words.

Trustworthiness

Trustworthiness of the study was established by means of ensuring the credibility, transferability, dependability, and confirmability of the present research, all of which were satisfied through different strategies (Lincoln & Guba, 1985; Marshall & Rossman, 2011). First, the strategies that were used to address the credibility of the study included taking expert opinions on the interview schedules, conduct of the pilot studies, in-depth and thorough data collection, triangulation of data sources through different participating groups, prolonged engagement with the data, field journals, peer debriefing, referential adequacy, and establishing intercoder reliability (Marshall & Rossman, 2011; Maxwell, 2013; Miles & Huberman, 1994; Patton 1990). Moreover, transferability of the study was enhanced through using appropriate purposive sampling strategies and providing a thick description of the background of the participants, data collection, and data analysis. Lastly, to address dependability and confirmability, the study employed audit trail (Lincoln & Guba, 1985; Marshall & Rossman, 2011), by which an external researcher experienced in qualitative research assessed the entire study for all the processes and decisions, as well as provided feedback on them to enhance the objectivity of the results yielded by the study at the end.

RESULTS

Based on the analysis of the interviews that were conducted with the participating teacher educators, pre-service elementary teachers, in-service elementary teachers, and the authorities of the MoNE and the CHE in Turkey, the results concerning the essential qualities for elementary teachers specifically in the 21st

century are presented below under the following themes with the sample quotations from participants: (1) Information and communication technologies, (2) Higher-order thinking skills, (3) Autonomy and collaboration, (4) Flexibility, (5) Adaptation, (6) Culturally responsiveness, (7) Local and universal issues, (8) Personal and professional development, (9) Students with special needs, (10) Differentiation, (11) Effective communication.

Information and Communication Technologies

A significant number of participants from all different groups underlined that elementary teachers should develop technology literacy. More specifically, they were expected to *recognize the key concepts in instructional technologies*. In addition, many participants asserted that elementary teachers should be able to *use the information and communication technologies effectively* and *integrate them into the courses*. In this regard, a pre-service teacher criticized teachers' lack of technology literacy in the current era with a special emphasis on their inability to use the technological tools. In particular, the pre-service teacher mentioned that:

...We are talking about the 21st century but most teachers still do not know how to use the technological tools. Using technological tools does not only include being able to use the computer. Teachers should, for instance, know how to use a smart board. I do not think that we are prepared for this (PT1).

Furthermore, some participants put forth that elementary teachers were expected to be able to *develop digital instructional materials according to the given course objectives*. In this respect, they also mentioned that elementary teachers needed to be able to *evaluate the appropriateness of the given digital instructional materials* and *have the knowledge of digital games for children*. To illustrate, among the pre-service teachers, one participant underscored the importance these skills for elementary teachers to be able to draw elementary-aged children's attention to the course and told that:

...Especially to be able to draw students' attention and make the courses more exciting for them, elementary teachers should be able to develop digital technological materials, such as PowerPoint presentations, videos or web pages, rather than the traditional materials. It is really hard to draw the attention of the students of this age to the course by using traditional materials (PT18).

As mostly articulated by the teacher educators and the pre-service teachers, it was found out that elementary teachers were also expected to *follow social media, use it for educational purposes, integrate social media into the courses, and also make use of it as way to foster parent involvement*. Accordingly, one of the teacher educators pointed to the critical role of the involvement of parents in their children's education especially when they are little aged and underscored that:

Social media is a good way for elementary teachers to reach out the parents given that they need the collaboration of parents more at the elementary education years. Besides, the use of social media has expanded incredibly. As such, the teacher, for instance, can create a group for their class on facebook and keep in touch with the parents in an easier way (TE30).

In addition to those qualities, particularly many teacher educators highlighted that elementary teachers should be able to *develop media literacy* so as to provide elementary students with assistance in selecting appropriate contents on the media. For example, a teacher educator made comparisons between the profile of students of today and that of past generations in terms of the changes in their habits, and emphasized the importance of developing media literacy as expected from elementary teachers:

Elementary teachers should be able to follow the media and be aware of the appropriate and inappropriate contents. As an example, they should be able to critique which cartoons are appropriate or not for the children. In addition, they should guide the parents regarding those contents as the students should not be exposed to them if they are not appropriate for young children. You know, students of this age do not play with their peers on the street, they rather spend their time either on the TV or on the internet. Thus, teachers should have media literacy and raise the media literacy of parents, as well, in advertising, cartoons, and other contents (TE27).

Lastly, to be able to develop the aforementioned qualities, most participants said that it is critical for elementary teachers to, first and foremost, *have positive attitudes towards technology*.

Higher-Order Thinking Skills

The participants from all groups found certain higher-order thinking skills, including *creative thinking, reflective thinking, critical thinking, analytical thinking, problem solving, and reasoning* of utmost importance for elementary teachers especially in the 21st century. In this regard, the participants from all groups especially underlined the importance of creative thinking skill as they believed that elementary teachers needed to be able to *design creative learning environments via the teaching methods and the instructional activities that they employ*, so as to also foster the creative thinking skills of their students. To illustrate, one of the pre-service teachers associated the creative thinking skill with the stages of cognitive development, implying that elementary students are at the concrete operational stage, and accordingly highlighted the role of creativity for elementary teachers in developing concrete and creative instructional materials:

...In the 21st century, creativity is one of the most important skills for individuals. ...Creativity is important especially for teachers for developing instructional materials. Considering that children learn easier through concrete materials, it is a very critical skill particularly for elementary teachers (PT10).

In addition, concerning reflective thinking skill, the following teacher educator addressed the critical role that especially field experiences and practicum courses played in the professional development of teacher candidates:

...Although many courses aim to foster reflective thinking or reflection upon practice, especially through the field experiences, teacher candidates are expected to reflect on what they do and learn from their real experiences in schools. Thus, this ultimately encourages them to develop reflective thinking skills, which is an important skill that elementary teachers must possess as it is essential to both teachers' and students' learning (TE12).

Moreover, one of the in-service teachers referred to initial teacher preparation programs and explained how they are/are not so influential in the development of teacher candidates' critical thinking skills and problem solving skills:

...In most of our pedagogical courses, the teacher educators provided us with certain cases to discuss together. I think, those cases were quite useful in terms of urging us to think about the possible causes and consequences of the given stories. Thus, such activities developed especially our creativity and critical thinking skills. On the other hand, except the Teaching Science and Technology I and II courses and the Classroom Management course, we did not have any opportunities to develop our problem solving skills throughout our teacher education (T6).

Autonomy and Collaboration

According to the participants of the study, elementary teachers of the 21st century were expected to work both autonomously and collaboratively. To this end, a large number of participants told that elementary teachers needed to *collaborate with other individuals including parents, other elementary teachers, and colleagues who especially refer to early childhood education teachers, teachers of other disciplines, school counselors, school administrators, inspectors, local authorities in the school area, and the colleagues in other countries*. Besides, some participants addressed the important role of *collaborating with special education teachers*, as well as *parents of the students with special needs*. To illustrate, one of the authorities from the MoNE placed elementary teachers in the local school context in stating the need for them to collaborate with several individuals, while an elementary teacher drew attention to the increasing number of students with special needs in regular classes and its impact on elementary teachers for effectively collaborating with the school counselors:

Elementary teachers should be able to collaborate with the local people in their school district, such as the headman of the village, members of the community council, the villagers, etc. These people could help them for the solution of the problems that they encounter as the MoNE may not be able to provide immediate support for all their needs (M2).

Since the past ten years, the number of the students with special needs has been increasing in the classes. In this regard, elementary teachers should collaborate with the school counselors especially to be able to develop individualized lesson plans for those students (T26).

In addition to these, there were a few participants mentioning that elementary teachers also needed to *collaborate with child development experts, psychiatrists, psychologists, and counseling and research centers*. Moreover, some participants, especially among the teacher educators and in service teachers, expressed that elementary teachers needed to *collaborate with scholars, educational journals, local institutions, nongovernmental organizations*. Accordingly, one of the teacher educators strikingly called for fostering effective collaboration between elementary teachers and educational journals and suggested action research as a strategy to strengthen such collaboration. On the other hand, one of the elementary teachers mentioned nongovernmental organizations to underline their collaborative role for elementary teachers to serve the needs of the community and society. Those participants addressed that:

There should be effective collaboration between elementary teachers and the educational journals. In particular, the journals could encourage teachers to carry out action research in their classes. To this end, the journals could publish special issues on teachers' research or allocate a certain amount of article quota for the teachers in each issue (TE50).

Elementary teachers should collaborate with the nongovernmental organizations to engage in community service and contribute to the development of the society. In this respect, they could be a member of such organizations, including the educational associations or foundations and nongovernmental organizations (T22).

Except working collaboratively, the study yielded that *working autonomously* was also considered to be essential for elementary teachers especially according to the teacher educators and pre-service teachers.

Flexibility

The participants believed that elementary teachers needed to be flexible to perform better in the 21st century, which involves that they should be *open to innovations, changes, and new ideas*, as explained by the participants from all groups. In this regard, one of the teacher educators compared the past decades and concluded by saying that 21st century has been characterized by constant change that requires elementary teachers to be open to change and continuously develop themselves:

When we look at the 1960s, the 1970s, and the 1980s, we will not be able to trace today's educational approaches in those times. At those times, we did not face a constant change on the educational approaches used in the schools. However, in this new era, the pace of change is very rapid in every regards. Therefore, today's teachers should be the professionals who are open to change and who can develop themselves continuously (TE37).

In addition, the participants stated that it was important for elementary teachers to develop *multiple perspectives* and *respect to different ideas or others' opinions* in this new era.

Adaptation

The participants uttered that adaptation was an important domain that included certain essential qualities for elementary teachers in the 21st century. Within this framework, many participants from all groups underscored the role of teachers' skills to *adapt to different settings, especially including the rural settings*. In this regard, the participants particularly pointed out that elementary teachers were expected to *know the characteristics of the different regions or local areas, the socio-economic structure of the school district, the characteristics of the society, and have the knowledge of rural life*. Accordingly, elementary teachers' *adaptation to different cultures* was also considered to be crucial for their professional lives. To illustrate, one of the teacher educators talked even about the importance of the tools, such as local cultural songs, that might be seem trivial, yet, indeed, very helpful for elementary teachers to adapt to different settings:

As a teacher, if you know the cultural characteristics of the area where you work, you can touch upon the people's lives, including the students and the parents, much better. Even knowing the cultural songs or the folk music common in that particular area helps teachers adapt to those different settings (TE23).

A considerable number of participants further stated that it was also critical for elementary teachers to *adapt to the changes in curriculum and the educational approaches*. Besides, elementary teachers were expected to *recognize the generational differences and adapt to the changes in students' interests*. For instance, the following pre-service teacher commented on the mentor teachers that they observed during their field practices and argued that those teachers still did not have positive attitudes towards adapting to the constructivist educational reform made in Turkey in the past decade:

What I noticed throughout our field practices was that the elementary teachers were not able to fully get used to the new constructivist curricula. In fact, it has been almost ten years and the curricula are no longer new, but the teachers still have strong orientations towards behaviorism rather than constructivism. One of the teachers that I observed during the field practice even had the pdf versions of the old books as he was not using the new books and did not believe that they were helpful (PT27).

In addition to the adaptation of teachers, the majority of the participants emphasized that elementary teachers should also be able to *facilitate their students' adaptation to the school settings, especially throughout the first grade*. In this regard, they mainly addressed that elementary teachers needed to *help the first graders develop positive attitudes towards school and encourage them to develop self-care skills* as part of their adaptation to the school settings. In relation to this, one of the in-service teachers especially stressed the impact of noncompulsory early childhood education in Turkey on the roles expected from elementary teachers and explained their facilitative role in children's transition to formal schooling as:

When the students start the 1st grade, it takes a while for them to get used to the school setting. As the early childhood education is not compulsory, for most children, elementary education is the first step of formal education and the first time that they discover a new environment other than their home. Therefore, elementary teachers should help the 1st grade students enjoy the school and get used to the certain rules. As a teacher, you should behave them warmly but keep at a moderate distance. The easier those students go through this adaptation process, the better they will go through the entire elementary education (T13).

Similarly, some participants discussed that elementary teachers were expected to *facilitate their students' transition to middle school* and also *facilitate their transition to the period of puberty*. Lastly, a large number of participants expressed that *facilitating the adaptation of students with special needs into educational settings* was also of great importance for elementary teachers in the 21st century.

Culturally Responsiveness

In relation to this theme, a large number of participants underscored that elementary teachers should *recognize and respond to all students' individual differences* especially in today's era. Accordingly, one of the teacher educators criticized most teachers' one-size-fits-all approach, and the authority from the CHE criticized teachers' inability to respond to the individual needs of their students:

Each student has different characteristics. As an example, when you heat a carrot, it softens. Yet, when you heat an egg, it becomes solid. Therefore, we cannot expect "one size fits all" approach to work in our classes. Teachers should rather know the individual differences of their students and be able to respond to them well (TE25).

I believe that teachers are prepared at the teacher education institutions just like technicians. I see that they have a lot of problems with responding to the individual differences of their students. Yet, each child is different, each child is unique. Therefore, teachers should recognize the individual differences of their students and be more responsive to them (C).

Besides, most participants especially addressed the critical role of *recognizing and responding to the individual differences of the students who have special needs*, as well as *the students in multigrade classes*. To illustrate, a pre-service teacher highlighted the particular case of elementary teachers who might teach in multigrade classes and implied the challenge that this may create for them to respond to the individual differences of students:

In every class, there are students whose characteristics are totally different from each other. As the teachers already experience difficulties in responding to the students in regular

classrooms, I cannot further imagine the case of multigrade classes in which you also need to consider the differences resulting from the existence of different grades and different ages (PT11).

Moreover, the participants specifically stated that elementary teachers needed to *recognize and respond to their students' diverse background characteristics, including their language, race, ethnicity, traditions, music, and so on*, and *foster multicultural education*. Accordingly, it is remarkable that one of the teacher educators emphasized the fundamental changes in the structure of the societies in the 21st century due to the several factors such as immigration, war, and globalization, and related them to the changes in schools and the roles expected from elementary teachers:

...The social fabric of the societies has changed considerably in all around the world. Along with the realities of the 21st century, there are more discussions also in our country on the issues such as globalization, multiculturalism, and so on, whereas, in the past, people mostly had a tendency to avoid these discussions, especially on multiculturalism. These changes have all been shaping the way of our lives. It is the same for the schools as you can see that there are many students who have different cultural backgrounds or whose ethnicities, mother tongues, or socioeconomic statuses are different from each other. As such, it is very important for teachers to be sensitive and culturally responsive in this era (TE37).

To this end, many participants especially suggested that elementary teachers needed to *organize an appropriate learning environment for all students, modify the curriculum for them, and monitor their development*.

Local and Universal Issues

The participants delineated that today's elementary teachers were also expected to have awareness towards the local and universal issues so as to encourage their students to develop such awareness, as well. In this regard, a significant number of participants explained that elementary teachers should *develop awareness towards the environment and the environmental problems*, as well as *act as environmentally responsible role models*. Furthermore, they pointed out that elementary teachers needed to *have awareness particularly towards the social issues of violence, child abuse, children's rights, human rights, animal rights, honor crime, and gender discrimination* in today's world. For example, the following elementary teacher raised attention to the issue of child abuse and described elementary teachers' critical role in fighting against it correspondingly:

...Child abuse is one of the most important issues in the recent years. In this regard, it is highly important especially for elementary teachers to have awareness towards this issue, which could help to decrease the number of those cases in the society (T15).

Concerning these social issues, elementary teachers were, first, expected to *know the societal and cultural characteristics of the local community where they work and know the fabric of the larger society*. Additionally, they were believed to *keep up-to-date on the issues that occur in the community and the larger society*, as well as *collaborate with the colleagues on the societal issues as active global citizens*.

Personal and Professional Development

Considering the articulations of the participants, it was found out that *attending different social and cultural activities* was highly important for elementary teachers of the 21st century as part of their personal development. A few participants also drew attention to the necessity of *engaging in at least one type of sports or dance, and adopting a personal hobby*. In this regard, they believed that these would also contribute to elementary teachers' professional lives as they are in a multidisciplinary field.

Concerning their professional development, the study showed that *organizing and joining different professional development activities continually* were highly important for elementary teachers. To this end, they were, first, expected to *have a desire for continuous professional development and be highly committed to their profession*. Accordingly, a pre-service teacher suggested that elementary teachers could follow the educational conferences that take place in their field:

...I really would like to be a very effective elementary teacher. To this end, I am trying to attend as many educational conferences as possible so that I can learn new things and make a

difference in my class in the future. For instance, there have been many conferences in our faculty/university and I usually attend them. I think, if a teacher does not take advantage of such activities, s/he will not be able to develop professionally (PT1).

Particularly, the majority of the participants suggested that elementary teachers needed to *follow the recent developments and events in their field, follow the leading journals, and join the professional organizations*. In relation to following publications, some participants particularly addressed the importance of *following international publications*, as well as *the other available professional resources in their field*. In addition to these, there were also some participants who emphasized the role of *considering professional ethics*. Lastly, many participants said that it was important for elementary teachers' professional development to *develop and carry out educational projects*.

Students with Special Needs

With respect to this theme, the majority of the participants expressed that elementary teachers, first and foremost, should *have positive attitudes towards the students with special needs*. Besides, most participants asserted that teachers should *have the knowledge of special education, including the characteristics of students with special needs*, as well as *how to treat them*. For example, one authority from the MoNE implied the need for having positive attitudes towards students with special needs and responding to their needs in pedagogically appropriate ways by stating that:

According to the World Health Organization, if there is no obstacle for the disabled individuals in the physical environment itself, then there is, indeed, no obstacle for those individuals to work. In other words, the rest is only about how you behave those individuals depending on your knowledge of the disabilities and also your attitude towards such individuals (M1).

Moreover, a large number of participants underscored that elementary teachers should also be able to *facilitate the inclusion of students with special needs in the class, as well as their adaptation to the school*. In this respect, they should *use the appropriate teaching methods and instructional materials effectively, and develop individualized lesson plans by differentiating the instruction and the assessment and evaluation techniques*. Accordingly, *effective classroom management* was also considered to be essential for elementary teachers to facilitate the inclusion of students with special needs in the class. In addition to these, the participants believed that it was critical for elementary teachers to *collaborate with other stakeholders such as the parents, the school counselors, the special education teachers, and the counseling and research centers* to monitor those students' development and be able to facilitate their inclusion in the class effectively. For instance, an in-service teacher remembered one of the students who had special needs in the class and concluded that elementary teachers cannot be successful unless they collaborate professionally with the experts:

I had a student who had advanced learning disabilities. As I made sure that it was beyond my knowledge and abilities to help that student, I decided to ask for additional support and collaborated with the experts of a counseling and research center in our school district. Until that time, whatever I tried to apply for the student did not help much without the collaboration of those experts (T14).

Lastly, some participants addressed the important role of *communicating effectively with the students who have special needs and their parents*.

Differentiation

The participants portrayed that it was necessary for elementary teachers to be able to *differentiate both instruction and also assessment and evaluation* especially within the context of the 21st century. Accordingly, regarding the differentiation of instruction, a remarkable number of participants discussed that elementary teachers needed to *differentiate the teaching methods, the course activities, and the instructional materials based on the individual needs of their students*, including the students who have special needs and the students in multigrade classes. In this respect, elementary teachers were expected to *develop differentiated individualized lesson plans* to be able to respond to the needs of those students. For instance, a teacher educator (TE10) said that "As the students in multigrade classes are studying in the same classroom, elementary teachers should be able to develop

different lesson plans to teach the students of those different grades together..." Moreover, in relation to the differentiation of assessment and evaluation, most participants said that elementary teachers needed to be able to *choose the appropriate assessment and evaluation techniques, and use them effectively*. To this end, it was revealed that they needed to *differentiate the assessment and evaluation techniques based on the objectives, the type of the courses, the purpose of evaluation, and the individual differences of the students including the students with special needs and the students in multigrade classes*.

Effective Communication

A large number of participants articulated that elementary teachers should have both effective *oral and written communication skills*. Regarding the oral communication skills, they said that elementary teachers should *use their body language, use their voice, use "I" language, and use the physical space in the class effectively*. Similarly, they should *make eye contact, establish face-to-face communication, listen others attentively, and make effective intonation*. Moreover, it was found important for elementary teachers to *be nice, attentive and sincere to establish effective communication*. With respect to the written communication skills, many participants addressed that elementary teachers should *have the necessary knowledge about formal written communication*.

The participants further explained that elementary teachers should be able to *communicate effectively with certain groups of individuals*. To this end, most participants highlighted *communicating with young children, which includes valuing them, building trust-based relationships with them, and being warmly yet being at a moderate distance to them*. Some participants also underlined the need for elementary teachers to *communicate effectively with the students in rural areas and the students with special needs*. In this regard, elementary teachers were expected to *use arts and drama as a tool to communicate* with those students. In addition to the young children, it was understood that elementary teachers were also expected to *communicate effectively with the parents, local authorities, governmental agencies, colleagues, school administration, and inspectors*.

Except these, a large number of participants stated that elementary teachers should be able to *communicate, at a basic level, with those whose mother tongue might not be Turkish in different regions*. To illustrate, one of the in-service teachers explained the difficulties that elementary teachers face in this respect and made a suggestion for initial teacher preparation that:

I used to work in the East before, and I had many difficulties in terms of establishing communication with the students there, as well as their parents. As the most villagers did not speak Turkish, their children did not speak Turkish, either. Even if I was trying to teach them Turkish, they were mostly speaking in their mother tongue with their parents or friends outside the school. ...I think we should have been taught how to communicate with such students and parents in those areas since Turkish may not be their mother tongue (T1).

Lastly, elementary teachers were expected to be able to *communicate in widely spoken foreign languages effectively, as well*.

Overall, the articulations of the participants from all groups portrayed that elementary teachers should possess certain knowledge, skills, and attitudes in the 21st century that are specifically related to information and communication technologies, higher-order thinking skills, autonomy and collaboration, flexibility, adaptation, culturally responsiveness, local and universal issues, personal and professional development, students with special needs, differentiation, and effective communication.

DISCUSSION and CONCLUSIONS

The present study aimed to investigate the qualities that are essential for elementary teachers particularly in the 21st century based on the perspectives of teacher educators, pre-service and in-service elementary teachers, and the authorities from the MoNE and the CHE in Turkey. In light of the analysis of the interviews, the study delineated that elementary teachers should possess certain qualities that include the essential knowledge, skills, and attitudes in the following domains: information and communication technologies, higher-order thinking skills, autonomy and collaboration, flexibility, adaptation, culturally responsiveness, local and universal issues, personal and professional development, students with special needs, differentiation, and effective communication.

Considering that the 21st century has been portrayed with globalization, extensive use of information and communication technologies, industrial and economic developments, urbanization and so on (AACTE & P21, 2010; Ananiadou & Claro, 2009; Day, 2013; European Communities, 2007; OECD, 2005, 2013; Paine, 2013; Schleicher, 2012), it is reasonable that elementary teachers of the 21st century were expected to develop certain qualities to meet the requirements and realities of the 21st century such as the knowledge, skills, and attitudes that are essential for the domain of information and communication technologies, as well as the domain of local and universal issues. Likewise, in parallel with the expectations from the students in the 21st century who are to be self-motivated, collaborative, entrepreneurial, independent, and lifelong learners, have effective communication, critical thinking, creative thinking, problem solving, and foreign language skills (AACTE & P21, 2010; Acedo & Hughes, 2014; Ananiadou & Claro, 2009; Ben-Jacob et al., 2000; Darling-Hammond, 2006; European Communities, 2007; Gopinathan et al., 2008; OECD, 2005; Schleicher, 2012), it is not surprising that the participants characterized elementary teachers of the 21st century as those who were equipped with the qualities pertaining to the domains of higher-order thinking skills, autonomy and collaboration, and effective communication. Moreover, consistent with the life and career skills that are suggested to succeed in the 21st century, such as adaptability, cultural awareness, cross-cultural skills, leadership and personal and social responsibility, flexibility, initiative and self-direction, productivity and accountability (AACTE & P21, 2010; Ananiadou & Claro, 2009; European Communities, 2007; Schleicher, 2012), it was seen that elementary teachers of the 21st century were also expected to possess the essential qualities related to the domains of flexibility, adaptation, local and universal issues. Furthermore, given that teachers face several conditions in educational settings, such as special education students, multilingual classrooms, culturally diverse classrooms and so on, today more than ever before (AACTE & P21, 2010; Cochran-Smith, 2000; Darling-Hammond, 2006; Gopinathan et al., 2008; OECD, 2005), it is plausible that elementary teachers were also believed to develop certain qualities concerning the domain of students with special needs and the domain of differentiation to respond to the individual needs of all students. Accordingly, as reported by several studies (e.g., Babaoğlu & Yılmaz, 2010; Bilen, 2007; Sadioğlu, Bilgin, Batu, & Oksal, 2013; Saraç & Çolak, 2012), considering that elementary teachers confront with challenges in teaching students with special needs and facilitating their inclusion, this also highlights the critical role of developing certain qualities that are related to the domain of students with special needs.

Based on these results, it is essential for elementary teachers to be equipped with the knowledge, skills, and attitudes related to those domains of qualities so that they can be successful in their career and respond to the emerging educational demands in the 21st century (Caena, 2013). Given that the success of educational reforms mainly depends on highly qualified teachers as teacher quality has a large impact on student outcomes (Berry et al., 2004; Betts et al., 2003; Buddin & Zamarro, 2008; Darling-Hammond, 2000, Darling-Hammond & Berry, 1999; Darling-Hammond & Sykes, 2003; Day, 2013; Goldhaber, 2007; Hanushek, 2010; NCATE, 2006; OECD, 2005; Rice, 2003; Rivers & Sanders, 2002; Rivkin et al., 2005; Rockoff, 2004; Stronge, 2002; Stronge et al., 2011; Wayne & Youngs, 2003), this might also be critical for the nationwide success of the Turkish education system in the long run.

Drawing on the results of the study, it can be argued that this study extends the essential qualities that have been identified by the MoNE for elementary teachers. In this regard, the study particularly extends the qualities determined on the national platform beyond the generic (core) (MoNE, 2006) and the subject-specific competences (MoNE, 2008). In so doing, unlike the studies that were carried out based on the perspectives of a single group of participants, the current study offers different frames of reference from multiple key stakeholders, including the voices of teacher educators, pre-service and in-service elementary teachers, and the authorities of the MoNE and the CHE. Hence, the study contributes to the existing research that has been carried out on the qualities that are essential for the elementary teachers in the context of Turkey. Moreover, given that the national competences were identified by the MoNE over ten years ago, the study offers implications of revising and updating the existing elementary teacher qualities by reflecting the evolving needs of elementary teachers based on the emerging needs in the 21st century.

The results of the present study also show similarities with the previous research studies that were conducted to explore the qualities expected from elementary teachers, while they did not particularly focus on the 21st century context. Accordingly, although those research studies were carried out with a single group of participants, they also concluded that creativity and effective communication (Ubuz & Sarı, 2009); collaborating with parents and colleagues (Çermik, 2011; Gökçe, 2002; Karakas, 2013; Ubuz & Sarı, 2009);

being open to change, having awareness of social issues (Çermik, 2011); and developing technology literacy (Gültekin, 2015; Hazır-Bıkmaz & Güler, 2002) were highly crucial for elementary teachers to perform well.

By exploring the essential qualities for elementary teachers specifically in the 21st century, the present study might provide a base for the elementary teacher admission, preparation, certification, appointment, evaluation, professional development, and career ladder policies which are interconnected and might be developed on the grounds of those domains of qualities (Caena, 2013). Underlying this is the fact that teacher competences are integrated into those policies and develop gradually from initial teacher preparation to in-service professional development. Therefore, the study does not only offer a ground for the curriculum of the elementary teacher education program in Turkey for preparing highly qualified elementary teachers through equipping them with those qualities, but it also provides insights to the policymakers in the MoNE and the CHE for developing effective and interconnected teacher certification, appointment, evaluation, and professional development policies.

Lastly, the study might also provide implications for the research on teacher education given that most studies in the teacher education landscape in Turkey have been designed on the grounds of the competences identified by the MoNE. Moreover, the results of the current study might offer essential insights to the educators and the researchers for future studies that can be carried out on the basis of these qualities to examine the effectiveness of the elementary teacher education programs and to explore the in-service training needs of the elementary teachers further. Thereby, the study might shed light into the potential professional needs of in-service elementary teachers and provide the policymakers with implications of developing effective in-service teacher training or induction programs.

Although this study was designed and carried out meticulously, as in any research, there are some limitations in this study. First, the study is limited by its reliance on self-reported data that results from the nature of interviewing. Second, the current study is limited to the perspectives of teacher educators, pre-service and in-service elementary teachers, and the authorities from the MoNE and the CHE. In this regard, further research might involve the perspectives of other significant stakeholders including elementary school students, parents, and school administrators, as well.

THE ETHICAL COMMITTEE APPROVAL

The ethical committee approval was obtained for this research from Middle East Technical University Human Subjects Ethics Committee with the decision numbered 28620816/189-354 dated April 11, 2014.

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