Examining Factors Facilitating Career-Changing Teachers' Adaptation to Change and the Challenges They Encounter

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Abstract

The present case study was designed to examine factors that facilitate the adaptation process of science teachers who were appointed or transferred to state schools, the challenges they encountered, and how they coped with these challenges. It was carried out with the participation of six science teachers (three males, three females) working at state middle schools in Turkey. The data were gathered through interviews with the teachers and analyzed through content analysis using the NVivo program. The research results reveal that the prominent factors that facilitate teachers' adaptation to school environments are their professional love, interest in students, effective communication, self-confidence, and empathy. It is also revealed that they encounter challenges with regard to teaching processes and teaching programs (e.g., incompetence in using instructional methods and techniques within the framework of the constructivist approach), the legislation/regulations by the Ministry of National Education (MoNE; e.g., extensive paperwork), school environment (e.g., physical inadequacies of the school), and discipline (e.g., establishing and maintaining classroom management). Finally, the findings indicate that teachers endeavor to overcome these challenges through cooperation with school administrators, colleagues, guidance counselors, and close relatives, and by accessing the needed information on the Internet (e.g., downloading annual and weekly plans).

Keywords

Change, Adaptation, Sciences, Teacher Training, Case Study

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Introduction

Concepts of change and adaptation to change are amongst the most significant agenda items for all societies today (Canlı, Demirtaş & Özer, 2015; Uyar, 2010). Educational institutions are at the forefront of establishments that constantly feel the need for change (Caena, 2014; Genç & Erayman, 2007), as the futures of societies largely depend on their ability to lead and adapt to changes that happen at a highspeed (Tuncer, 2011). They are also supposed to make changes that will enable the development and progress of societies by training qualified individuals in various disciplines. This may only be possible through changes in educational systems (Caena, 2014). Educational change refers to a change in structure, form or functioning of an educational situation or system with the aim of improvement (Dean, 1993, cited in Sarafidou & Nikolaidis, 2009). Along with worldwide developments, the Turkish Education System has been introducing frequent change initiatives since the last quarter of the 20th century in order to be able to respond to and keep up with the scientific and technological developments around the world (Kondakçı, Zayim & Çalışkan, 2010). Some of the initiatives driven by the internal environment are related to programs in teacher-training departments, entrance requirements of students to universities, primary and secondary school programs, and

school management (Helvacı, 2010). There have also been various changes in the use of computer technology in the e-school system (a database that includes information about students, such as registration, graduation, courses, exam results, and absenteeism in school), the development of teacher career systems and competencies, student guidance services (Kondakçı et al., 2010), schooling age, compulsory education period, and teacher appointment criteria, as well as strengthening of the physical and technological infrastructures of schools.

With the changes in the form of restructuring, education reform, reorganization or development, the aim is to increase the quality of education and to improve the quality of modern life. However, the existing literature reports that the expected level of success from these changes is well below the desired level (Canlı et al., 2015; Güçlü, Yılmaz & Demirçelik, 2014). Erdoğan (2015) attributes the failure in achieving the expected success of the changes/initiatives in Turkey to the lack of knowledge and experience in management of the educational changes and the top-down processes initiated by the Ministry of National Education, which disregard regional differences and other stakeholders' opinions during the decision-making process. Güçlü et al. (2014), on the other hand, attribute this to the ministerial mismanagement of the changes in Turkey, inadequate change-driven practices, inadequate infrastructure, and existing problems and other problems that may arise during the period of change being overlooked.

In-service teachers are likely to be faced with innovations and changes in many areas, such as professional development, curricula, learning methods and techniques, evaluation processes, use of materials and technology, and classroom management, along with those they encounter during the inter-institutional and interdisciplinary transition and the initial appointment. All these make the teaching profession a complex profession with a constantly changing and dynamic pattern (Kardos, Johnson, Peske, Kauffman, & Liu, 2001; Menon, 2012; Wang, Odell & Schwille, 2008), and make it essential to train teachers in the required teacher qualifications (Gökçek, 2008; Töremen, 2002) since adaptation to change is rather difficult and requires systematic and constant effort (Çınar, 2005; Tuncer, 2011).Thus, the functionality of the change process is usually hampered by such factors as inadequate knowledge and experience in change management, unprecedented continuous and rapid changes (Toffler & Toffler, 1996; Yalçın, Seçkin & Demirel, 2009), introducing sudden changes in education in order to keep up with the developments around the world, leaving the initiative only to certain units of the Ministry of National Education (MoNE) and disregarding the regional differences during the decision-making process, lack of a change strategy, disruptions in teaching practice, and inadequate adoption of the mandated changes by the teachers. Initiatives of change that teachers repudiate and resist are doomed to fail (Çınar, 2005). Resistance to change may arise from teachers' attempts to protect their habits (Tuncer, 2011), the possibility of the loss of social status, increasing workload, fear of economic loss and supervision, lack of knowledge, fear of failure, feelings of incompetence, and unawareness of what to do (Töremen, 2002). The realization of change by the teachers is possible by identifying the existing situation in a realistic manner and implementation of a well-planned in-service teacher-training program (Helvacı, 2010). Given the inverse relationship between resistance to change and change adaptation, teachers' adaptation to changing processes may be achieved more quickly and easily by reducing their resistance to change. Therefore, it is of utmost importance to conduct research to take measures to reduce the resistance, to facilitate teachers' adaptation processes and to improve their professional development.

One of the recent changes in the Turkish education system is the abolishment of "cram schools," which offered private supplemental education to students who were going to take nationwide entrance exams to further their education in certain institutions (decision published in the Official Gazette dated 14.03.2014 and numbered 28941). Based on the related law, some of them were directly abandoned, while others were gradually converted into exam-centered

private schools. In this process, tens of thousands of teachers working at cram schools started to work at different institutions, especially in private schools. Subsequently, on October 10, 2016, more than 5000 of those teachers were assigned to state schools as contracted teachers of different branches. It is noteworthy that cram schools significantly differed from state schools in their teaching philosophy, function, management, supervision, course content, teaching methods and techniques, measurement and evaluation procedures, infrastructure, student profile, parental expectations, technology use, price policies, etc. Undoubtedly, teachers who have already been working at state schools are also confronted with some of these changes (e.g., teaching methods and techniques, classroom size, etc.); nevertheless, it is difficult for teachers to change their attitudes and habits (Taş, 2009). To the best of the researchers' knowledge, no research has been conducted on the adaptation process of those teachers who brought their previous teaching habits, attitudes and experiences they developed in the exam-centered cram schools to the state schools in which they began to work.

A review of the relevant literature shows that numerous studies have been carried out regarding teacher education and qualifications of prospective teachers, novice teachers and in-service teachers. However, these studies mostly focus on participants' views on pre-service and in-service training, material development, changes in curriculum, disciplinary problems, and job satisfaction (Balbağ & Karaer, 2016; Çıray, Küçükyılmaz, & Güven, 2015; Ünsal & Bağçeci, 2016). A limited number of studies on change and change processes are mostly related to the concept of change, organizational change, leadership and the duties of leaders in this process, and changes in the education system (Canlı et al., 2015; Güçlü et al., 2014). The review of existing literature shows that a limited number of studies have investigated the problems faced by novice teachers (Tuncer, 2013; Yılmaz & Tepebaşı, 2011) and the process of in-service teachers' adaptation to the renewed teaching programs in Turkey in 2005 (Gökçek, 2008).

Every event in nature is directly related to science (Yangın & Sidekli, 2014), which plays a significant role in the future of societies (European Commission, 2015; Kola, 2013; Kurtuluş & Çavdar, 2011). People interpret events in nature with the principles of science and they adapt to environmental change and development by using the knowledge and skills gained in science education (Güneş & Karaşah, 2016). In addition, various studies suggest that the science curricula are revised more frequently than other school curricula primarily due to the changes in the universe and the scientific body of knowledge related to these changes (Kurtuluş & Çavdar, 2010). For instance, Turkey witnessed "hurricanes" a couple of years ago for the first time in its history. So, the science teaching program was re-designed to introduce that it has become a country where hurricanes could occur. Therefore, adaptation to innovation is more commonly faced by science teachers than other teachers (Çetin & Yoğurtçu, 2015; Yılmaz, Soğukçeşme, Ayhan, Tuncay, Sancar, & Deniz, 2014). Keeping these reasons in mind, and to bridge the aforementioned research gap, the present case study was conducted to examine factors that facilitate the adaptation process of science teachers who were appointed or transferred to state schools, the challenges they encountered, and their coping strategies in relation to these challenges. Based on the research objective, the following research questions were posed:

1. What are the factors that facilitate the adjustment process to the school environment of science teachers who are appointed to state schools?
2. What challenges do they encounter in the school environment?
3. How do they cope with these challenges?

Method

Research Model

This particular research was produced from a doctoral dissertation that was designed as a case study with the aim of revealing the factors that facilitate the adaptation process of science teachers who began to work at state middle schools in Turkey after having worked at test-centered cram schools, the challenges they encounter, and the strategies they use to overcome these challenges. A case study is a research design that clarifies a complicated social phenomenon (Yin, 2004) and is frequently preferred in applied disciplines such as education (Merriam, 2013). These are studies that require an in-depth data collection procedure about a given topic by using multiple sources of information, such as questionnaires, face-to-face interviews, audio-visual materials, documents, and reports (Merriam, 2013). Various methods and techniques, such as interviews, observations, self-assessment forms, SWOT analyses, document analyses, and control lists, were utilized in the doctoral dissertation; however, data for the present study were confined to those obtained through face-to-face interviews. Stake (2005), on the other hand, advocates that case studies could be conducted as internal, integrated, or instrumental depending on the research topic. Internal research design is initiated by the researcher's personal interest in such phenomena as a child, clinic or curriculum. In addition, it is not conducted to construct a theory or to understand a phenomenon. Integrated research, on the other hand, requires the investigation of multiple cases in order to account for a particular phenomenon, universe or case. Instrumental research is carried out to provide an understanding of a particular topic or to discuss a generalization. The case itself is of secondary significance since more significance is attached to the process. Hence, the instrumental research design was exclusively adopted in this study as it concentrated on the adaptation process of the science teachers who previously worked at the test-centered cram schools as they began to work in Turkish state middle schools. In other words, the focus was on what these teachers experienced during the adaptation process.

Working Group

The research was carried out with the participation of six science teachers working at state middle schools in the province of Kahramanmaraş, Turkey, during the 2015–2016 academic year. The criteria sampling method, which is one of the purposeful sampling methods, was used in the selection of the study group. Purposeful sampling is a method that allows for in-depth research by selecting rich situations in accordance with the purpose of the study (Patton, 2014). This research used certain criteria, such as being science teachers working at state middle schools during the 2015 and 2016 academic year and working at cram schools before being appointed to these schools by MoNE. The teachers who met these criteria were initially identified and invited to participate in our study. Most of them were not willing to participate due to the fact that it would be a long-term study that would require in-class observation and video-recording during classes. Therefore, the six teachers who accepted these research design commitments were included in this study. It is noteworthy that we decided to work with only four teachers at the beginning of our research but we added two more teachers along the way. These six teachers stayed with us throughout the project. For ethical reasons, codes T1–T6 were used instead of teachers' real names. Among the participants, three were male (T2, T3, T6) and three were female (T1, T4, T5). One of the teachers held a bachelor's degree in chemistry teaching (T2), while the others were graduates of science teaching. The teachers were not working at schools they were appointed to for the first time; in other words, they had worked at other schools prior to the current one. Their previous institutions were

located in the districts of Kahramanmaraş (T5), Sivas (T2, T1), Şanlıurfa (T4, T6), and Hakkari (T3). Five of them reported that they had over five-years experience in teaching MoNE after their appointment. The six teachers were all married with children at the time of the study.

The Researchers' Role

This research paper was produced from a doctoral dissertation written by one of the researchers, who was working as a science teacher at a state middle school in Turkey at the time of the study, under the supervision of the other researcher, who was working as a senior professor with an in-depth specialization in curriculum and instruction at a state university in Turkey and who had several published works on teacher training. It is significant to note that the doctoral researcher had taught science for over 15 years and that he had worked at cram schools prior to his teaching experience at state schools; therefore, he had been familiar with both working environments. In addition, he was well aware of the possible challenges, pros and cons in the adaptation process of the teachers as he had previously experienced them. He was particularly motivated to initiate this study because he strongly believes that this process significantly influences teaching and learning processes and he wishes to contribute to the improvement of education in Turkey. He obtained his MA in primary science teaching with a core focus on instructional methods and techniques, and published scientific works on textbook evaluation, textbook authoring, critical thinking, and multiple intelligences in educational settings during his doctoral study. It is also noteworthy that he had taken several courses on qualitative research methods at that time, which enabled him to run the data collection and analysis procedure of this research.

Data Collection Tools

Case studies require extensive data collection about the case by using data collection tools and sources, such as observations, interviews, questionnaires, documents, and audio and visual materials (Merriam, 2013). This research employed a semi-structured interview format developed by the researchers based on the existing literature. Subsequently, expert opinions were elicited from 12 academicians with in-depth specialization in science teaching who were working at a state university in Turkey at the time of data collection. The interview comprised 14 questions (eight related to personal aspects and six related to the research objective). The following are taken from the interview form in order to illustrate questions posed to the participants: (i) *What factors facilitated your adaptation process to the school where you were newly appointed?* (ii) *What factors or challenges did you encounter at this new school?* And (iii) *How did you cope with these challenges?*

Interviews were held with the teachers at schools between May and July 2016. The interviews were voice-recorded with the prior consent of the participants and transcribed after the sessions. In addition, the researchers took notes during the sessions and posed further questions to the participant teachers when needed. The doctoral dissertation from which this paper was produced did not only aim to examine the participant teachers' adaptation to change and the challenges they encountered during this process. The other data collection tools identified above were utilized mostly based on other objectives of the dissertation. In other words, they were not specifically intended to examine this process and the encountered challenges. For example, we observed their teaching and use of personal and professional skills in classes; however, this would not allow us to claim whether these facilitated their adaptation process or not. We needed to hear that from them during the interviews. Through observations, we just aimed to examine their teaching qualifications. Hence, we just included the findings elicited from interviews which provided relatively more precise information in accord with our

research objective. Our research questions were formed taking this into account.

Data Analysis

The raw data obtained from the interviews were transcribed and a file was created for each participant. Subsequently, these files were combined and qualitatively analyzed through content analysis using NVivo 11. Content analysis was adopted in this particular research (Patton, 2014) since it primarily focuses on the structure of the data; namely, codes and the related themes (categorizations) were created (Creswell, 2016). The creation of codes and themes has become systematic and practical thanks to NVivo 11 (Yurdakul, 2016). The two researchers performed coding independently of each other to increase the reliability of the coding and comparisons were made between the codes using the formula of Miles and Huberman (1994). Thus, the inter-rater reliability was calculated as being quite high (.81). In case of disagreement between the researchers, consensus was obtained after a discussion on the newly generated codes and themes. Lastly, the data were tabulated and interpreted with the inclusion of exact quotations in order to identify the underlying meanings of the codes.

Validity and Reliability

Lincoln and Guba (1985) note that four strategies can be utilized to ensure the validity and reliability of a qualitative study: (i) credibility for internal validity, (ii) transferability for external validity, (iii) dependability for internal reliability, and (iv) confirmability for external reliability. The steps for ensuring the validity and reliability of the research are summarized below.

Credibility. Approval from the participants about the correctness of the data was obtained in the study to increase credibility. In other words, they were asked whether we correctly understood their responses during the data collection process in order to increase credibility of data as noted in the literature (Merriam, 2013) and their confirmation was elicited. In addition, a long-term interaction was established and maintained with the participants before and during the data collection process in order to decrease their possible negative influence during data collection and to increase their trust in the researchers as their full confidence was needed for them to provide reliable data. Accordingly, the interviews were held only once their confidence was completely ensured. The findings were presented to a domain expert at Çukurova University for confirmatory examination. The researcher's role in the research was previously explained (see The Researcher's Role, p. 10).

Transferability. The characteristics of the participants, data collection and analysis processes, and the obtained findings were explained in detail so as to ensure transferability within the current study. The findings were outlined and direct quotations were included.

Dependability. The blind coding was performed by the researchers to compare the items in terms of agreement (Miles & Huberman, 1994). In case of disagreement between the researchers, the code was finalized after discussion (Silverman, 2005). Besides, all operations were performed through the NVivo program to provide a holistic presentation of the codes.

Confirmability for external reliability. Creswell (2016) postulates that research data should be open to external supervision so that the relevant stakeholders can examine whether the findings, comments and conclusions are supported with data. Therefore, all the raw data and analysis processes used in this particular research were stored in the computer environment. This will allow supervisors or other researchers to examine and confirm processes conducted in our study.

Findings

Factors Facilitating Teachers' Adaptation

Table 1 presents findings related to teachers' views on the factors that facilitate their adaptation to the school environment, such as personal characteristics and professional skills, social insurance, positive, social and physical environment of the school, and environment where the schools are located, parent and student characteristics.

Table 1. Factors Facilitating Teachers' Adaptation

Theme	Codes	Participant
Personal characteristics	Interest in profession	T1,T2,T3,T4,T5,T6
	Love/interest towards students	T1,T2,T3,T4,T5,T6
	Communicating with people easily	T1,T3,T4,T5,T6
	High self-confidence	T1,T3,T4,T5
	Having educator family members	T2,T4,T5,T6
	Integration with students in a short time	T1,T6
	Initiative	T5
Professional skills	Writing/solving questions quite easily	T1,T2,T3,T4,T5,T6
	Working at a cram school/experience	T1, T2,T4,T5,T6
	Having a good content knowledge	T3,T4,T5
	Note-taking and study habits gained in the cram school	T4,T6
	Receiving qualified pre-service training	T1,T5
Social insurance	Coming from an environment with more difficult working conditions	T1,T3,T4,T5,T6
	Having job security	T1,T2,T4,T5
	The validity of the program	T2,T4,T5
	Satisfying salary	T1,T4,T5

		Extending education and teaching process over a period of time	T2,T4,T6
Positive, social and physical environment	of the school	Psychological and mentally comfortable environment	T1,T2,T5,T4,T6
		Teachers' friendly and warm behaviors	T1,T2,T4,T5
		Administrators' appreciation	T1,T4,T5
		Appropriate planning for students and teachers	T5
		Adequate school infrastructure	T1
		Existence of social circle	T2
		Opportunity to meet novice teachers	T5
Environment, parent and student	characteristics	Positive social perception of working at cram schools	T4,T5,T6
		Sharing the same cultural environment	T1,T2,T5
		Level of the students	T1, T2

Table 1 displays teachers' views on the main factors that facilitate their adaptation, such as personal characteristics and professional skills. All participants stated that loving their profession and students facilitates their adaptation to the school, and they expressed their views as follows: "I was aware of the fact that I wanted to be a teacher while entering to the university exam. I like teaching, I want to perform as much as I can" (T2), "Seriously, I love students" (T1). Teachers also emphasized that such factors as communicating easily with people, having high self-confidence, and having an educated family facilitated their adaptation process. They also informed the researchers that their professional qualities, such as writing questions easily, gaining experience at cram schools, and having content knowledge facilitated their adaptation to the school environment. The other professional skills that were mostly emphasized by the teachers were note-taking and studying habits and the quality of pre-service teacher training they received. For instance, T2 emphasized question-writing skills: "Because you solve so many questions, your capacity to ask questions increases... for example, I can write five questions using two sentences"; while T3 emphasized the contribution of having content knowledge: "I had the opportunity to observe that the academic knowledge of some of the teachers in public schools is insufficient, so I helped them ... which made me much more popular." Having mentioned the experience, she gained at the training center, T4 thinks that "If I had been appointed right after my graduation from university, there would have been a little uneasiness and fear. So, it was an advantage to work at a training center." On the other hand, T1 indicated the contribution of qualified education before working with such words as "I believe we are well-equipped, and I have full self-confidence."

Upon examining Table 1, it is observed that other factors that facilitate teachers' adaptation process are social insurance, positive, physical and social environment of the school, and environment, parent and student characteristics. Teachers who emphasized that they previously had a more difficult working environment in terms of social insurance and they now have job security also stated that the salary is satisfactory, that the education and teaching process is extended over a period of time. To illustrate, T6 explained the hard-working conditions of the training center, stating that "It is something like seeing death and accepting the illness. A person who comes from the training center with a full motivation does not stop working at the public school." T1, on the other hand, implied that "we have the risk to lose our job at any time while working at the training center… there is no change in our salaries at state schools during the year or they cannot send us to another school." T2, stating that the presence of well-planned working systems facilitates his/her adaptation, explained this situation as follows: "Plans and programs are clearly presented. Everything you need to do in a year is obvious." Participants explained the aspects of the school environment that facilitate their adaptation as being a psychologically and mentally comfortable environment, teachers' friendly and warm behaviors, and administrators' understanding. Table 1 also presents environmental characteristics, such as working at a school that is located in the same cultural environment, positive perception by parents of working at a cram school and the level of the students.

Challenges that Teachers Encounter During the Adaptation Process

The themes and codes derived from the descriptions of the challenges that the teachers encounter after transferring from the cram schools to the school environment are summarized in Table 2.

Table 2. Teachers' Views on the Challenges They Encounter

Theme	Codes	Participant
	The presence of inclusive students in the class	T1,T2,T3,T4,T5,T6
	Failure in preparing a teaching plan for inclusive students	T1,T2,T3,T4,T5,T6
	Disapproval of supplementary resources by MoNE	T1,T4,T5,T6
Teaching process	Heterogeneous classes	T2, T3,T4,T6
	Crowded classrooms	T1,T2,T5
	Inability to implement the constructivist approach in teaching	T1,T6
	Inability to adapt the way of teaching in cram schools to the state schools	T6

Legislation/Regulations	Excessive paper work	T2,T3,T4,T5,T6
	Being uninformed about the changes	T1,T2,T4,T6
	Dealing with numerous procedures	T2,T3,T4,T6
	Sudden and frequent administrative and procedural changes	T1,T4,T5
	Compulsory dress application	T2
School environment	Physical inadequacies of the school	T1,T2,T3,T4,T5
	Lack of educational materials	T1,T2,T3,T5,T6
	Hesitation to ask guidance from colleagues	T5
Ensuring discipline	Encountering too many disciplinary problems	T1,T2,T3,T4,T5,T6
	Students' familial problems	T5,T6
	Irresponsibility of the students	T3
	Low requirements for grade-passing	T3
	Failure in listening to the teacher	T4
	Inclusive students' negative influence on class atmosphere	T6
Teaching materials	Inadequate number of test questions in textbooks	T1,T2,T5
	Scientific mistakes in the textbooks	T1,T2,T6
	Unsatisfactory/superficial knowledge in textbooks	T1,T5,T6
	Inefficiency of the activities	T1
Environment	Culture-shock (in new working environment)	T1,T2,T3
	Negative environmental conditions (socio-economic, cultural, etc.)	T1,T3
	Parental indifference	T6

	Inability to adapt to new working environment and bringing past work habits to the new working environment	T1,T2,T3,T4,T5,T6
Psychological	Teachers' familial problems	T1,T4,T5

As seen in Table 2, the challenges experienced by teachers are predominantly concentrated on teaching process, legislation/regulations, school environment and ensuring discipline. This is followed by challenges related to the teaching materials and environment as well as psychological and emotional challenges. All of the participants expressed their failure in preparing a teaching plan for inclusive students (those who are either gifted or who have a learning disability; moreover, four teachers highlighted the Ministry of National Education's disregard for auxiliary resources and heterogeneous classes. To make it clear, T5 described the challenge she experienced in making plans: "We were faced with some problems because we were unfamiliar with such concepts as daily plan, annual plan, how the interdisciplinary teaching is performed and what experiments should be made." T1 reflected on the challenge related to auxiliary resources:

> *The Ministry tells us to ignore supplementary resources. How many questions can I prepare for a student? These children should solve different questions. How will this happen? You will either tell students to buy supplementary resources or photocopy the tests. We are informed not to do both. I think this problem should be eliminated.*

Besides, the other challenges faced by teachers have been determined as not being able to implement the constructivist approach, where students are expected to take the responsibility of their own learning and teachers are expected to lead and guide the process, in teaching and some students' failure in solving the tests.

As shown in Table 2, excessive paperwork, being uninformed about the changes, dealing with numerous procedures and sudden and frequent administrative and procedural changes are the mostly reported challenges associated with legislation/regulations. T3 expressed his view regarding the current issue: "We deal with more things in terms of procedure ... many bureaucratic actions are carried out, and documents need to be prepared. That is, we do not only teach." Another teacher (T4) highlighted the sudden changes within the system: "For example, the exam system changes suddenly...once you get used to something, it changes once again." Teachers' views on the challenges related to the school environment are mostly concentrated on the inadequate infrastructure of the school and inadequate educational materials. One of the teachers (T3) commented on the physical inadequacies as follows: "I stopped working in a school with high-quality infrastructure and began to teach in classrooms which only have a small board."

Table 2 also suggests the fundamental challenge that teachers experience in the classroom environment results from the frequent disciplinary problems encountered within classes. Besides, the other challenges have been found to be the difference among students' behaviors, students' familial problems, the irresponsibility of students, and indifference to the courses. T3 explained the disciplinary problems: "No serious disciplinary problems arise in the cram schools. As students pay to the institution where they attend courses to improve their success, they do not disrupt the courses or display misbehaviors in the classroom." T6

explained it this way: "I cannot cope with the situation. I am in trouble with the inclusive students." Teachers listed the challenges they have encountered within the scope of teaching materials as the small number of test questions in textbooks, scientific mistakes in the content, the superficiality of the knowledge and inefficiency of the activities. To exemplify, T1 asserted that "There are a lot of activities in the textbooks, but they are inefficient." T6 commented that the incorrect information in the textbooks led him to search for different sources, saying "I buy different resources; this may be a mistake, but the book sent by the Ministry is superficial and includes incorrect information." Furthermore, they experience psychological and emotional challenges getting accustomed to the new working environment and the district in which the school is located.

Findings Related to Teachers' Strategies for Coping with Challenges

Table 3 displays the explanations of how teachers cope with these challenges.

Table 3. Strategies for Teachers to Cope with Challenges

Theme	Codes	Participant
Receiving support	Cooperation with school management and colleagues	T1,T2,T3,T4,T5,T6
	Cooperation with the relatives	T3,T4,T5,T6
	Cooperation with the guidance counselor	T3,T4,T5,T6
Making research	Solving problems by gathering/understanding information	T1,T2,T3,T4,T5
	Reviewing legislation	T4
Interview	Interviewing with parents/students to solve problems	T1,T2,T3,T4,T5,T6
	Interviewing with the guidance counselor	T3,T4,T5,T6
Making use of technology	Use of smart board/phone and computer	T1,T2,T3,T4,T6
Leave for another	Ignoring the problem or taking time for its solution	T1,T2,T3

Positive thinking/there is always a solution to every problem	T5
Enduring challenges due to professional love	T6

        Table 3 depicts that teachers mostly receive support from administrators and their colleagues in order to deal with the challenges they face during the adaptation process. They express this situation as follows: "I usually ask for help from my colleagues or administrators to get support if I am not familiar with the problem" (T2); "I trust in my wife/husband. S/he takes care of everything" (T4). Those who prefer to do research underlined that they gather information to identify the problem, to understand whether the assigned task falls into their area of responsibility, and to know about the environment. In this regard, T4 made a remark on the situation as follows: "I have made a detailed research. I have examined the legislation to reveal whether I have to teach whenever the administrators wish." Another teacher (T5) who interviewed with parents, students and school stated that "I usually talk to their parents and I communicate directly with the students. I also talk about their behaviors with the school." In addition, T1 indicated that they try to avoid academic problems by means of technology, saying that

> Some experiments on the web page (EBA) of the Ministry are efficient. I can utilize them, visualize my teaching and solve test questions by using smart board. The student changes, increases and decreases variables. As a result, he can see the result automatically. But when you make an experiment in the real environment, sometimes you cannot succeed.

Some of the challenges tend to be ignored by the teachers.

Discussion

        The research results reveal that being interested in the profession and students, effective communication, and self-confidence are the main characteristics that facilitate teachers' professional adaptation. These features are among the skills embraced by the teaching profession as a professional occupation in the related literature (Bunchberger, Campos, Kallos & Stephenson, 2000; Guerriero, 2016; NBPTS, 2004; NCATE, 2002), and they are the certain determinants of teachers' professional adaptation (Emmer & Stough, 2001). Teachers are expected to have professional aptitude and excitement, to love children/students, to believe in the significance of education and training, and to obtain pleasure in students' learning, regardless of the type and level of educational institution in which they are working (Engin & Çiçekli-Koç, 2014). These characteristics are also influential in teachers' professional motivation and development (Kıroğlu, 2011), and developing positive attitudes towards their profession and professional success (Cemaloğlu & Şahin, 2007). Therefore, it is likely that effective communication skills and professional love (Olusegun, 2012) make it easier for teachers to adapt to the school environment. This could be evaluated as an expected result when considering the fact that the teachers were transferred from private institutions to public schools.
        Being competent in content knowledge, having the ability to prepare and solve questions, studying/self-renewal, and immediate integration with students are considered as other professional and personal characteristics that facilitate teachers' adaptation. The ability

of teachers to effectively cater their teaching tasks depends largely on being experts in their specific fields (Guerriero, 2016; Kıroğlu, 2011; NBPTS, 2004; NCATE, 2002). Teachers may become unemployed, particularly in cram schools, when students fail due to their lack of content knowledge or when there is a complaint about them (Özoğlu, 2011; Yılmaz & Altınkurt, 2011). Thus, it can be said that these teachers, who have to constantly renew themselves, are able to adapt more easily to the school environment thanks to their in-depth content knowledge. The results show that having an educated family and being well-equipped facilitate the adaptation process. Çifçili (2007) defines the teaching profession as a model profession and indicates that the competency perceptions of people with an educated family are higher compared to those who do not. Having an educated family may be said to facilitate teachers' adaptation as they have the opportunity to be closely acquainted with the profession, to ask questions whenever they desire, to offer opportunities to share daily events, and to speak the same language.

The results of the study show that social factors that facilitate teachers' adaptation are job security, satisfactory salary, appropriate working hours, spread of education and training over a long period of time, and coming from an environment that has more difficult working conditions. The teachers' salary in cram schools differed across course hours and the teachers' branches and teachers were sometimes paid less or not paid (Boran, Atalmış, & Sağır, 2015; Uğraş, 2009). After starting to work at state schools, teachers felt financially relieved thanks to the regular payment and social insurance. This might have increased their motivation and facilitated adaptation by enabling them to feel mentally, psychologically and financially better. Working hours were longer in cram schools (Yılmaz & Altınkurt, 2011), and teachers might have to work overtime and do chores (Boran et al., 2015). Consequently, not having to do chores and use their energy for the purposes of education might have increased their performance (Demirkasımoğlu, 2012) and facilitated their adaptation to the school.

The positive social and physical environment of the school is another factor that facilitates teachers' adaptation. Sincere and warm relations among the teachers and the thoughtfulness of the administrators are the prominent features, and the teachers evaluated the school environment as socially more appealing than their previous workplaces. Excessive course load, existence of a competitive working environment and short-term acquaintances, as a result of working as contracted teachers (Boran et al., 2015; Yılmaz & Altınkurt, 2011), caused them not to spend time together or to develop interpersonal relationships. On the other hand, teachers working in state schools might have probably worked together in the same school for many years. Thus, they have pursued the same goals at state schools without the competition that was experienced by the teachers in cram schools. Therefore, they spent sufficient time together, which might have facilitated their adaptation to the new working environment. Thus, more positive perceptions of the teachers might be attributed to the changes in the social environment and the establishing and maintaining of positive relations with people (Erdoğan, 2015; Helvacı, 2010; Montgomery & Way, 1995). Solidarity between teachers and school administrators (Sökmen, 2007) plays a significant role during the professional socialization process, and the presence and cooperation of other teachers facilitate the adaptation process (Uğurlu, Kıral & Aksoy, 2011). Mullins (2005), Helvacı (2010) and Fullan (2007) note that administrators are particularly important in change and adaptation of the teachers to the new work setting. The results of the present study are in line with this idea, and the teachers emphasized the facilitating effect of the administrators' tolerance and tendency to take decisions of teachers and students with consideration for their adaptation process. This may be due to the fact that state schools are non-profit institutions where the main goal is to improve education, in contrast to the cram schools. Besides, the environmental factors that facilitate the adaptation of the teachers to the school are considered as working in an environment with the same culture, high quality infrastructure, the level of the students, and

positive parental perceptions towards the teachers who previously worked at cram schools. Several research studies have indicated that parents tend to have a positive attitude towards teachers with experience at cram schools, thinking that their children will be more successful in the exams once they are taught by these teachers (Yılmaz & Altınkurt, 2011).

The research results also reveal that the challenges faced by the teachers in the adaptation process are related to the teaching process, including the presence of inclusive students in the class and the failure to prepare plans for these students. The other challenges experienced by teachers are crowded and heterogeneous classrooms, inadequacy of teaching materials, and their inadequate knowledge in teaching according to a constructivist approach. The relevant literature review indicates that all teachers are generally faced with similar problems (Balbağ & Karaer, 2016; Charles, 2012; Geçer & Özel, 2012; Teo, 2007). However, the struggles of those who participated in the current research might be attributed to their previous teaching experience in cram schools with homogeneous classes created through the placement test format. More precisely, the number of students within the classes is smaller and there are no inclusive students in the classrooms at cram schools (Yılmaz & Altınkurt, 2011). Both the cram schools and the enrolled students were motivated to improve students' test achievements. Therefore, teaching in the classroom mostly took place in the form of direct instruction technique and test-taking. For this reason, the teachers who began to work at the state schools after teaching at cram schools encountered a very different environment during the teaching process as teaching at the cram schools were offered only through specific directed teaching techniques and question-and-answer drills.

Another issue that teachers encountered as a challenge in the adaptation to state school teaching was education-related legislation, paperwork, adherence to certain procedures, sudden changes in the system, and being uninformed about these. Some of the related literature reveals that teachers have deficiencies in preparing paperwork, daily and yearly plans, and complying with official procedures (Tunçbilek & Karakavuz, 2017; Yanık, Bağdat, Gelici & Taştebe, 2016). It is natural that the teachers who do not deal with paperwork in the cram schools perceive it as a challenge in the process of adaptation. Besides, the widespread nature of this problem and sudden changes in the system without teachers' opinions being asked (Balbağ & Karaer, 2016; Çıray et al., 2015) clarify that the Ministry of National Education has not succeeded in managing the change and has failed in teacher training. The fact that the teachers who were transferred from the cram schools to the state schools are confronted with discipline problems more frequently might be triggered by the difference between the student profiles. More specifically, students voluntarily attend to cram schools and pay a certain fee. Students who want to register for high-achieving schools with better results in the exams are more likely to be more motivated and committed to learning. Therefore, teachers who encountered problems in state schools rather than private institutions may confront disciplinary problems more frequently due to the challenges they have experienced in managing the class. The insufficient number of questions in the textbooks, scientific mistakes in the content, and the superficiality of the content are other challenges that teachers expressed about the teaching materials. This particular finding largely coincides with those of previous research that reported scientific mistakes (Balbağ & Karaer, 2016; Geçer & Özel, 2012). However, the challenges regarding the activities and the limited number of questions are thought to be the result of the examination-focused nature of teachers' textbooks. It is considered quite natural for the teachers who were newly appointed to state schools in different regions of the country to experience social and psychological situations stemming from cultural and ethnic differences of students.

According to the findings of the research, the basic strategy teachers follow for overcoming the challenges during the adaptation process is to request cooperation and negotiation from school administrators and colleagues, followed by conducting action research,

interviewing students and parents, using technology, and ignoring these challenges, respectively. This finding is also in line with Bozak, Yıldırım, and Demirtaş (2011), who conclude that colleagues are the most important source of information for teachers. The scientific approach is to understand the reason in solving a problem and to gather information related to that particular solution. It is highly rational for teachers to exhibit behaviors in this direction and to take advantage of the opportunities offered by technology. However, taking it easy about the encountered problems and thinking that they are temporary are behaviors that could be evaluated as ignoring rather than solving them (Sevinç & Gizir, 2014).

As a result, this research has shown that professional love, interest in students, effective communication and self-confidence facilitate the teachers' adaptation to the new working environment. Job security, the improvement of financial and working conditions, and the sincerity and socially non-competitiveness of the school environment are the other factors that facilitate the adaptation of these career-changing teachers to the new working environment. The teachers in concern have difficulty in teaching processes, obeying legislation, and maintaining classroom management. Collegiality, conducting research and using technology have been reported as the main contributing factors in the process of adaptation. Based upon these research results, various recommendations have been developed.

- Enforcement measures may be taken in cases where teachers have difficulties in aspects such as diversification of teaching, legislation, lesson planning, and inclusive education; priority may be attached to the subjects that teachers need and practice-based training may be performed during the in-service training.
- Priority should be given to the assignment of teachers who worked at cram schools in the training courses of the Ministry in order to better evaluate their experience in terms of exam preparation and test-taking skills.
- The field expertise of teachers having worked at cram schools may be evaluated by assigning tasks in the commissions for reviewing and creating textbooks.
- The practice of mentoring may be arranged in order to consolidate the efforts of colleagues who are important sources of information for novice teachers, in order to faciliate the adaptation process and improve the effectiveness of the teaching process in a systematic way.

This particular research was limited to an investigation of six science teachers' views on the process of adapting to the state schools to which they were newly appointed in Turkey. Further studies could explore how other teachers are influenced in this process with a core focus on their adaptation to working with the newly appointed teachers. Likewise, future studies could be conducted on the adaptation process of other teachers who previously worked in other disciplines, such as engineering, nursing, banking and policing.

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