

## DISCREPANCY IN TEACHER EMPLOYMENT: THE PROBLEM OF OUT-OF-FIELD TEACHER EMPLOYMENT

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### ABSTRACT

*Enacting changes without considering essential educational components such as number of teachers, non-teaching staff, and classes can lead to problems in education systems. One common problem is an inadequate number of teachers. In response to this, policy makers often create out-of-field teacher employment to meet the teacher shortages. While this practice meets the teacher shortages quantitatively, it decreases the quality of education. The purpose of this study is to identify the problems associated with out-of-field teachers and to make recommendations for overcoming these problems. In this study, a qualitative research method and phenomenological research design were used. The study group consisted of 20 participants (8 principals and 12 teachers) from public schools in Ankara. The data were collected with interviews and analyzed using content analysis technique. According to our research findings, participants do not approve out-of-field teacher employment. The reasons for their disapproval vary and have been grouped into themes such as "Lack of subject knowledge, teaching experience and professional specialization." The findings also show that out-of-field teachers have troubles with issues such as commitment, job satisfaction and motivation, subject knowledge in teaching, and adaptation to the job. On the other hand, out-of-field teacher employment provides advantages such as meeting the teacher shortages, decreasing unemployment and providing different perspectives on teaching. Despite these advantages, out-of-field teacher employment as a means of meeting the teacher shortages must be put to an end. Participants generally think that this practice can be prevented by means of collaboration between Ministry of National Education [MEB] and Council of Higher Education [YÖK]. The findings of this study could contribute to discussions about out of field teaching and help educational stakeholders to increase their awareness about out of field teaching by giving real life examples. Permanent employment policies must be created in order to provide better and more consistent system of education in which each teacher is employed in his or her own field of study.*

### INTRODUCTION

Human capital is an important resource for countries as well as for organizations. In order to use human resources efficiently, human resource planning is necessary. Human resource planning means projecting the number and quality of needed employee shortages in each department of the organization, determining available categories of human resources, revealing the differences between human resource shortages and available human resources, and deciding on how and where to seek for the required human resources. In this process, with the help of action plans, human resource planning aims at developing human resources by increasing their effectiveness, meeting the organization's human resource shortages, and determining the recruitment of permanent staffing (Karakütük, 2012). However, human resource planning is a difficult process because it depends on many ambiguous and changeable structures of the unforeseen future (Başaran, 1985).

In developing countries like Turkey, educational policy makers face problems of closing the gap between teacher supply and demand because well-qualified experts on statistical research methods are lacking (Karakütük, 2012). Indeed, human resource planners reveal the framework of teacher supply and demand for the employers. In this planning process, the demand for human resources subtracted from their supply gives information about the current state of employment (Adem, 1987). In order to meet the demand for teachers, human resource planning is necessary in Turkey. Many problems have appeared in the management of human resources in different sectors of the business of education (Çinkır, 2013). Thus, education is not a puzzle game as it may not be compensated with anyone who is unqualified in teaching profession.

Teachers' educational background is a significant component of teacher quality. In the 21st century, all business professionals are expected to demonstrate expertise in their areas of specialization. According to Nagle's (2010), ten factors have been identified as professional qualities such as attitudes, interpersonal, critical thinking, job specific technical, computer/technology and communication skills, drug testing issues, academic preparation, appearance and previous experience, and academic preparation or degree of certification.

#### TEACHER TRAINING AND EMPLOYMENT IN TURKEY AND ABROAD

Many variables like family, friends, school administration, environment and teachers can be responsible for students' achievement. However, teachers have direct responsibility to grow academically successful students up and they are one of the most important school-based factors affecting students' education (Rockstroh, 2013). However, in Turkey prospective teachers have preferred to be a teacher, because of their interest in teaching, their wish for serving the public, their role models, job security, long holidays, less working hours, and examination system. Some of the prospective teachers chose the teaching profession because their university admission exam score was not high enough to be selected by the faculty of law, medicine or business etc. (Çinkır and Kurum, 2014). However teaching requires dedication, devotion, and is "more than picking up a bag of instructional tricks at the schoolroom door or learning to mimic the actions of another educator—even a very good one" (Imig, 1996, p. 14A; as cited in Roth and Swail, 2000). For these reasons, qualified and internally motivated teachers may be called as a resource for good education and teaching

Wright, Horn and Sanders (1997) have stated that the most important factor affecting student learning is the teacher. Moreover good teaching is mostly the product of a highly qualified teacher. Surely some teachers have a gift to help students to learn, but knowledge of the learning process, child development, and academic content are all important components of good teaching (Roth and Swail, 2000).

Teacher training is a process that can be different from country to country. In Turkey, teacher training practice has been based on Darülmualimin, which was established in 1848 as a teacher training school (Aydın & Baskan, 2005). After Turkish republic was founded, rural and urban teacher training schools were opened in 1926 so as to train primary school teachers. In those times, the number of citizens living in villages was much more than those living in urban areas. For this reason, village institutes were established

in 1940s in order to train teachers who were accustomed to live in villages. However in 1956, village institutes were turned into a primary school teacher training institutes. In 1974, two-year education institutes were established and finally in 1982 teacher's training responsibility was passed from MEB to YÖK. Since then, high school students who can attain the required scores from higher education entrance exam have been accepted as potential teachers to be trained in four-year BA level programs (Karlı & Güven, 2011). In 2008, MEB (2008) grouped teacher competencies in six main categories: individual and professional values-professional development, knowing and understanding students, learning and teaching processes, monitoring and assessing learning and development, school-family and community relationships, and program and content knowledge. These competencies are not fully functional since teachers are neither trained nor employed according to these teacher competencies.

On the other hand, in England, teachers have been trained according to two main models. The first one is school-based/apprenticeship model, which was dominant in the 19th century. Throughout the first 50 years of 1800s, teacher training colleges emerged to meet the growing demand for qualified teachers. Following that, college or university based model has been practiced in the 20th century. At the end of the 20th century, standards for teacher training were determined and university and college-based courses have been replaced with greater emphasis put on relevant practical classroom skills and techniques and professional values (Robinson, 2006).

In the USA the practice of teacher training differs from state to state (Harmancı, 2007). In general, prospective teachers complete the courses (including student teaching) at an institution authorized by the state. After meeting the standards of the teaching profession, candidates are licensed to teach in that state. Despite the differences among the states, most authorities agree that prospective teachers should have at least a bachelor's degree received from an accredited education program with a major or minor in education and a major in a subject area they plan to teach. Hence, future teachers must pass either a state test or the widely used Praxis exams which are a series of tests that measure teacher candidates' knowledge and skills for licensing and certification in the USA (Roth & Swail, 2000).

In Finland, those who pass the required exams cannot work as teachers because prospective teachers are selected in two stages. In the first stage, candidates are evaluated according to their exam results and high school diplomas. In the second stage, they complete a written examination on pedagogy, and engage in a clinical activity in which they use their communication and social interaction skills. Then the top ones are asked about why they want to become a teacher. After this evaluation, the highly capable candidates complete a teacher training program (Sahlberg, 2010). The differences in teacher training practices can be seen in teacher employment processes. The steps in employment processes often operate independent of each other and are specific to each school organization to meet the needs of the student population, schools, and districts and to satisfy the expectations of law by operating in compliance with non-discriminatory practices (MacKenzie, 2011). In Finland, education providers are responsible for employing their educational staff and determining the types and number of posts in need. The recruitment is an open process and the vacant posts are advertised in newspapers, professional journals and relevant websites. Each education provider decides who is responsible for appointing new teachers. It may be the education committee or another equivalent committee, the municipal board, the school

board or the principals themselves who complete this hiring process. Teachers are required to have a master's degree and pedagogical training, but education providers set some other criteria as well. The aim is to select a person who is both qualified and suitable for both the position and the school community (Lönnqvist, 2013). It is possible to see the similar process in the USA and England; but in the USA there is a second recruitment type, in which teacher recruiters interview and screen all candidates. Successful candidates are placed into a pool for principals who may choose to interview the candidate. In this process, teachers are asked about their work history, current licensure, university transcripts, standardized test scores, letters of recommendation, and references (MacKenzie, 2011). Apart from these, teachers are also expected to have a master's degree in Finland (Lönnqvist, 2013).

Teacher employment processes are much more different in Turkey than these countries. Turkey has a centralized education system covering almost 90% of the students from pre-school education to high school study at public schools. In pre-school education, there are totally 1.059.495 students and 87% of them attend public schools (MEB, 2014a). The percentage is almost the same in the primary, secondary, and high school education. These statistics show that 90% of the teachers are expected to be appointed to public schools. To be appointed as a teacher, each teacher candidate has to take Public Personnel Selection Examination for Teachers 121 (Öğretmen Adayları için Kamu Personeli Seçme Sınavı [KPSS]). Around 30% of the examination score comes from general culture, 20% of it comes from educational science test, and 50% of it is from professional teaching knowledge test. KPSS is conducted annually by the Student Selection and Placement Center (Öğrenci Seçme ve Yerleştirme Merkezi [ÖSYM]), a government agency that also conducts the nationwide annual university entrance examinations. KPSS results are valid for one year in applying for a teaching job with MEB (Çınkır, 2012). As a result, teachers meeting the teacher qualifying requirements are ranked in each teaching field according to the exam scores from high to low. For example, in 2014 almost 6000 quotas were assigned to primary school teachers and the first 6000 candidates were appointed according to their score order (MEB, 2014b). The rest had to wait for the second appointment from MEB or could apply for a job at private schools although private schools' requirements are different from those required by MEB (TED, 2014).

As population increases, more students suffer from teacher shortages. Because of temporary teacher training and employment policies, different practices such as training teachers through long distance courses in 1974-75, by means of pedagogical formation courses (Özoğlu, 2010), and hiring teachers from other fields (Çınkır, 2013) have been used to meet such teacher shortages. In the past, the number of qualified teachers was less and policy makers established regulations like out of field teaching to meet the teacher shortages. But this out of field teaching practice cannot be a permanent educational policy for employment of teachers, since there are almost 300,000 teachers who have been waiting to be employed (Eşme, 2014).

## QUALITY OF TEACHER AND OUT OF FIELD TEACHING IN TURKISH CONTEXT

A strong relationship exists between qualified teachers and student achievement (Santiago, 2002). According to the World Bank (2011) report on the quality and equality of basic education in Turkey, qualified teachers can narrow the academic achievement gap between students from high and low income groups. In their research with 4th through 7th

graders in Texas, Rivkin, Hanushek and Kain (2005) found that having qualified teachers was a more important factor than school organizations, management or opportunities offered at school. According to this research, teachers have a strong effect on student achievement, especially in math and reading.

In Turkey, critiques against the poor quality of education are increasing day by day. Student achievement on higher education entrance examinations in Turkey has fallen below the required levels. In 2014, of the nearly two million candidates who took the higher education entrance examination, over fifty thousand received a zero (ÖSYM, 2014). Internationally, according to data from Turkey Education Map (Türkiye Eğitim Atlası) (2012-2013), results from the Programme for International Student Assessment [PISA] 2012 pointed out that Turkey's average scores in math (448), reading (475) and science (463) were lower than the OECD average (math 494, reading 496 and science 501). These figures and international examination results is a reflection of qualified teacher shortages in Turkey.

Teachers play an important part in determining the quality of teaching activities at school. Without teachers, school organizations do not fulfill such responsibilities as introducing culture and transferring it to new generations, equipping students with current knowledge and skills and increasing their awareness (Özoğlu, 2010). The main purpose of the teaching profession is to provide good education by guiding students and society towards learning (MEB, 2011). According to Tedmem (2013), graduates from the faculty of education score higher in public personnel selection examination for teachers in the fields of physics, chemistry, math, biology, history, geography, English and religion than the graduates from the faculty of arts and science. There is no doubt that high-quality education is best provided by qualified teachers, graduated from the faculty of education.

Various studies have been carried out to determine how the quality of teachers affects student achievement (Darling-Hammond, 1999; Harris & Sass, 2007). Good education means that students can achieve measurable objectives in literacy, math, science and life skills (UNESCO, 2014). At this point, teacher qualifications play a vital role in reaching those objectives. According to Santioga (2002), while indirectly observable features of teacher quality consist of communication, group work, classroom management skills, flexibility, creativity and mission-based behaviours, directly observable features of teacher quality consist of subject knowledge, teacher certification, academic achievement, experience and seniority. Based on this second kind of features, a qualified teacher can be an expert in his or her respective subject. Darling-Hammond (1999) also provided evidence of a positive relationship between student achievement and teacher quality (teacher certification, subject knowledge). The research of Harris and Sass (2007) also found a positive relationship between the academic development of teachers and the math achievement of secondary and high school students.

The instability of teacher demand and supply is a significant problem in Turkey as well as in other countries. There are over 700,000 teachers in Turkey, and the number of students per teacher is generally 20 at primary school, 19 at secondary school and 16 at high school (MEB, 2013a). About 300,000 teachers are currently employed at public schools (Eşme, 2014). While there is a teacher shortage in counselling (16,900), English language teaching (12,857) and preschool education (6,848), there is a teacher surplus in the subjects of physics and chemistry (MEB, 2013b). According to regulation No. 80 (07/07/2009) of the Board of Education and Discipline (Talim ve Terbiye Kurulu [TTK]-

MEB, 2009), out-of-field teachers have been employed to meet teacher demand in specific subjects like counselling or English language teaching. For instance, those holding a degree in English language and literature, translation or interpretation and who acquire a teaching certificate can be employed as English teachers. The issue of instability in teacher supply and demand was assessed in the National Teacher Strategy Draft workshop (MEB, 2011), the Attempt for Education Reform (Eğitim Reformu Girişimi, 2012) and the project of Human Resources Teacher Projections (İnsan Kaynakları Öğretmen Projeksiyonları [İKOP]) (Çınkır, 2013). According to İKOP (Çınkır, 2013) data covering 600,000 teachers, 45.5% of them are teaching out-of-field, 12.1% are teaching minor subjects and 7.5% are teaching in unknown fields. Only 34.9% of teachers have taught in their own field (Çınkır, 2013).

Out-of-field teaching is defined in different ways by different researchers. Hobbs (2013) states that out-of-field teaching occurs when teachers teach a subject for which they are not qualified. According to Ingersoll and Curran (2004), it happens when principals assign teachers to teach a subject for which they are not qualified. Out-of-field employment is a function of staff selection. Furthermore, Ingersoll and Gruber (1996) express that out-of-field teaching results from the inconsistency between teachers' field of study and their field of assignment. According to another researcher, out-of-field teachers can be grouped into four categories according to their role and phase assignment (Sharplin, 2014): *role displacement*, in which the skills and qualifications of the teacher do not match the role to which he or she is appointed; *role stretched*, in which the skills and qualifications of the teacher match some aspects of the appointed role while including additional roles for which the teacher has no prior experience or qualifications; *phase displacement*, in which the skills and qualifications of the teacher do not match the appointed sector (primary, secondary or tertiary); and *phase stretched*, in which the skills and qualifications of the teacher match the appointed sector but also include placement in part of the sector for which he or she has no prior experience. In ideal circumstances, of course, a teacher's role and phase are congruent with his or her area of expertise.

Out-of-field teaching is a common practice throughout the world, from the USA to Australia to Korea. In 1990-91, out-of-field teacher employment had a high percentage in the USA. Basic subjects such as math were taught to 7th through 12th graders at public schools by teachers who were qualified neither in math nor in teaching (Ingersoll & Gruber, 1996). According to research in the USA by Ingersoll (2003) examining the 1999-2000 school year, 38% of teachers in 7th through 12th grade math were qualified neither in math nor in minor subjects. According to McConney and Price's (2009) research in Western Australia, 24% of the participating teachers were out-of-field teachers. Furthermore, these out-of-field teachers had at least 20 years of experience. Ee-gyeong (2011) also found that in Korea, out-of-field teachers were more common in the fields of science and math at public schools.

Many reasons lead to the employment of out-of-field teachers. Hobbs (2013) has noted that teacher shortages, especially in basic subjects like math and science, have led to out-of-field teacher employment. Darling-Hammond and Berry (1999) also have stated that, in high-poverty urban and rural locations, schools have reported difficulties in recruiting qualified teachers in critical subjects such as physical science, mathematics and special education. When schools have difficulty in finding qualified teachers, educational administrators suggest three ways to resolve these difficulties: hire less-qualified teachers,

assign teachers trained in another field or grade level and make use of substitute teachers (Ingersoll, 1998). Each of these coping strategies results in out-of-field teaching. This practice occurs either through managerial decisions or through recruitment procedures (Du Plessis, 2013). In Ingersoll's (1998) view, society lacks respect for the complexity and importance of the teaching profession. Teaching is a profession that requires raising up a qualified workforce, providing peace and welfare in society and becoming a role model to society (Çelikten, Şanal & Yeni, 2005).

In Turkey, out of field teaching practice has grown due to system centralization. The implementation of 12-year compulsory education in 2012 did not provide a strategic and scientific planning of the number of teachers to be hired in primary, secondary and high school levels. Serious problems appeared because of these changes and primary school teachers could easily change their fields of teaching by attending a certificate program recognized by MEB. According to data from MEB (2012), out of the 42,000 primary school teachers, 4700 became physical education teachers; 4037 became Turkish teachers; 4219 became math teachers and 5120 became school counselors. As a result, in Turkey, any teacher can teach any subject, which is a sign of phase and role displacement according to Sharplin 's (2014) out-f-field teaching categories.

### RESEARCH SIGNIFICANCE

This is the first study that investigates the out-of-field teaching phenomenon by analyzing the views of teachers and principals. This study could contribute to the debates about the importance of teachers on students' achievement, national teacher training and employment policy, and especially the reality of out of field teaching in Turkey and other countries. Moreover, this study can help educational planners and policy makers to think about the reasons for the instability between teacher demand and supply. Out of field teaching is not a current subject. Its permanent negative effects on education should be questioned in order to minimize its negative effects.

### RESEARCH PURPOSE AND QUESTIONS

The purpose of this study is to identify the problems of out-of-field teachers and to make recommendations for overcoming these problems. In accordance with this purpose, the following questions were raised:

1. What are the views of principals and teachers about out-of-field teacher employment?
2. What are the problems principals and teachers confront with out-of-field teachers?
3. How do principals and teachers perceive the advantages of out-of-field teacher employment for the teaching profession?
4. What are the principals' and teachers' suggestions to address the out-of-field teaching issue?

## METHODOLOGY

### *Research Design*

In this study, a qualitative phenomenological research design was used. In this design, phenomenologies are emphasized in terms of awareness but not in great detail (Ersoy, 2013). Phenomena can be in the form of incidents, experience, perceptions, concepts, situation, and tendency. It is possible to encounter these phenomena in a daily life, but it does not mean that they are well known or comprehended. For this reason, phenomenological research design is used to search these phenomena, which are not well understood (Yıldırım & Şimşek, 2006, p. 72). In this study, the phenomenon was out-of-field teacher employment in Turkey.

### *Study Group*

The study group was determined by criterion sampling, in which people meeting pre-determined criteria were interviewed. The criteria in this study were in-field and out-of-field principals and teachers. The study group consisted of 20 participants (8 principals and 12 teachers of in-field/out-of-field) teaching at Ankara public schools (primary, secondary, and high school levels). Participant's background information about field of study, graduate school attended and type of employment is shown in Table 1.

According to Table 1, 8 out of 20 participants are performing their duties as out-of-field assignments and 12 participants are considered performing with in-field qualifications. Many of the out-of-field teachers were graduated from the Faculty of Science and Economics. For the confidentiality of participants in the study, the principals are referred to as P1, P2, etc., and the teachers as T1, T2, etc.

Table 1

*Distribution of Participants According to Field of Study, Graduate School, and Type Of Employment*

Participants	Field of Study	Graduate School	Type of Employment
1 (T1)	PST	Faculty of Economics	Out of Field
2 (T2)	PST	Faculty of Science	Out of Field
3 (T3)	PST	Faculty of Economics	Out of Field
4 (P1)	PST (P)	Faculty of Science	Out of Field
5 (T4)	PST	Faculty of Communication	Out of Field
6 (P2)	Special Ed Teacher (P)	Faculty of Education	In Field
7 (P3)	PST (P)	Faculty of Education	In Field
8 (T5)	English Teacher	Faculty of Education /Physics	Out of Field
9 (P4)	Turkish Teacher(P)	Faculty of Education	In Field
10 (P5)	PST(P)	Faculty of Science	Out of Field
11 (T6)	PST	Faculty of Education	In Field
12 (T7)	School Counselor	Faculty of Education	In Field
13 (P6)	Electricity Teacher(P)	Faculty of Education	In Field
14 (T8)	PST	Faculty of Education	In Field
15 (T9)	Science Teacher	Faculty of Education	In Field
16 (T10)	PST	Faculty of Education	In Field
17 (P7)	PST (P)	Faculty of Education	In Field
18 (P8)	PST (P)	Faculty of Education	In Field
19 (T11)	PST	Faculty of Education	In Field
20 (T12)	English Teacher	Faculty of Languages, History and Geography	Out of Field

Note: PST = Primary School Teacher; P = Principal



### *Data Collection*

The data of the study were collected from principals and teachers at Ankara public schools (Primary and secondary) in the 2013-2014 school year by means of structured interviews. Participants were interviewed between March 24, 2014 and April 7, 2014. The interviews were transcribed from a voice recorder. The entire transcription consisted of 45 pages.

### *Reliability-Validity of the Study*

The data collection tool was submitted to expert opinion in terms of content validity and clarity. With feedback from 7 experts, the final version of the interview forms were prepared and used with participants. According to Creswell (1998; cited by Glesne, 2012), colleague assessment is one of the methods used to increase a study's credibility. To ensure reliability in the study, the responses to interview questions were categorized, after which themes were created independently by two researchers. To test the reliability of the study, the percentage of intercoders' agreement was computed using Miles and Huberman's (1994) formula.

Using Miles and Huberman's formula, the intercoder reliability was about 88.37%. According to Miles and Huberman (1994), an intercoder reliability of .70 and above is considered adequate for internal reliability. For descriptive validity, the study group and research process were reported in detail. In order to increase external validity, raw data were stored in case they were requested or intended to be used in future studies. Furthermore, according to Yıldırım and Şimşek (2006, p.270), to provide reliability and validity, giving direct quotations is necessary. Therefore, the findings of the study are supported by direct quotations.

### *Data Analysis*

Content analysis technique was used to analyze the data. First, the data from interviews were transcribed and the raw data were organized. Then themes based on the data were created and annotated with descriptive narration in tables. Direct quotations from participants were given in quotation marks and the codes of the participants were presented in parentheses.

## FINDINGS OF THE STUDY

Participants were asked whether they approved of out-of-field teacher employment or not. While 17 participants disapproved of it, 3 of them approved of it, and they were out-of-field teachers and principals. Participants explained their reasons for approving or disapproving of out-of-field teacher employment. These reasons, themes and frequency of views are shown in Table 2. Participants who approved of out-of-field teacher employment gave two reasons: the teacher shortages and their mastery of subject knowledge. While one teacher who approved of it noted that "if there were teacher shortages, teachers from minor subjects could be employed" (T12), a principal expressed that "after 3-4 years of experience, there would be no difference between in-field and out-of-field teachers" (P1). These results indicate that teaching can be perceived as a profession that is typified by experience and the possession of a teaching certificate.

Table 2

*Participants' Reasons for Approval or Disapproval of Out-of-Field Teacher Employment*

Area of Questioning	Core Relevant Narrative Formed From Quotation (Key content summarized through relevant quotations and linked by formulated meaning statements)	Emergent Themes	Frequency of views
Perceived approval of out-of-field teacher employment?	-If there are teacher shortages, it can be applied (P1) . -If there are teacher shortages, out-of-field teachers can be employed (T12)	Teacher Shortage	3
	-Their subject knowledge is better (P5) -With teaching certificate, they get qualified in teaching (P5) -High school teachers graduated from a faculty of science and arts and they are better (P5) -Subject knowledge isn't well taught at a faculty of education (P5)	Subject Knowledge	4
Perceived disapproval of out-of-field teacher employment?	-Out-of-field teachers don't have subject knowledge (T1, T2, T3, T4, P2, P3, P4) -Out-of-field teachers don't have teaching experience (T1, T2) -Teaching can be done with professional knowledge (P2, T5) -Out-of-field teachers learn teaching in a trial and error way (T6) -They lack a teaching certificate (P2, P3, T7) -They lack teaching and practice (T6, T7, T8, T9, T10, P6, P8) -They can't teach according to the level of the students (T7, T8, T10, P18)	Lack of Subject Knowledge and Teaching Experience	36
	-Everyone must be employed in his or her field of study (T1, T2, T3, T4) -Teaching is a professional job (T5, T8, P4) -Quality of education may decrease (P3, T5) -The status of teachers can decrease (T6, P6) -Having teaching certificate can't make people teacher (T6) -Out-of-field teachers fail in teaching (P6)	Professional Specialization	13

Meanwhile, participants who disapproved of out-of-field teaching provided two reasons: a lack of subject knowledge and teaching experience, and professional specialization. To exemplify these reasons, one teacher pointed out, "In the past, sentences on the cards were cut into syllables to teach reading. An out-of-field teacher cut sentences into letters at the beginning of the semester. For instance "Ali runs." He cut it into A-L-I. Then he tried to teach reading from letters" (T6). One principal stated, "As it was known that teaching profession, including education activities and related administrative affairs, was a professional job" (P3). In accordance with these views, it is possible to say that teaching profession can be regarded as a professional job.

Participants were also asked whether they had worked with out-of-field teachers or not. While 2 of them had not, 18 participants had. This large percentage of teachers who have worked alongside with out-of-field teachers is further evidence that out-of-field teacher employment has become a common practice in Turkey. Those working with out-of-field teachers expressed that they confront problems with out-of-field teachers. These problems, themes and frequency of views are shown in Table 3.

Table 3.

*Participants' Views Regarding Problems Confronted with Out-of-Field Teachers*

Area of Questioning	Core Relevant Narrative Formed From Quotation (Key content summarized through relevant quotations and linked by formulated meaning statements)	Emergent Themes	Frequency of views
Perceived problems with out-of-field teachers?	-For them, teaching can be a compulsory job (T2,T3,T7) -They can't feel that they belong to teaching (T2,T3) -They can't internalize teaching (T1,T8) -Teaching can't be their first priority (T9) -They can't have responsibility for teaching (T9)	Commitment	11
	-Their motivation can be low (T6,T8, P6) -They have occupational burnout (P1,P3) -Their performance can be unproductive (P7) -They can't be dedicated to teaching (T6) -Their job satisfaction can be low (T1)	Job Satisfaction and Motivation	8
	-They have trouble with the principal and the methods of teaching (T2,T4,T5,T6,T7,T8,T9, P4,P6,P8) -They can be unqualified academically (T2,T3,T4,T10, P5,P7,P8) -They can have trouble with giving a lesson (T1,T2,P4,P8) -They can be unqualified in educational psychology (P1,P2,T8,T12) -They can have problems with classroom management (T3,T8,P7) -Parents can't trust out-of-field teachers because of their lack of teaching (P5,P7)	Subject Knowledge and Teaching	50
	-They can break the peace of work (T6,T9,P7) -They have trouble communicating with parents, colleagues and students (P1,P4,T3,T5,T6,T7,P7,T11,T12) -It can take a long time for them to learn how to teach (P2)	Adaptation to Profession	13

As can be seen in Table 3, participants working with out-of-field teachers noted that out-of-field teachers had trouble with commitment, job satisfaction and motivation, knowledge of teaching and profession and adaptation. Many of the participants' views were grouped under the theme of "Subject Knowledge and Teaching" ( $f=50$ ). Under this theme, one out-of-field teacher expressed that "I graduated from a chemistry program and was assigned as a primary school teacher. I was responsible for the first grade students. But I didn't know anything about first grade teaching, so I had lots of trouble teaching in that year" (T2). Another out-of-field teacher stated, "Teaching according to the level of

students was one of the biggest problems I had ever had, because there was a big difference between my field of study and primary school teaching” (T3). Under this same theme, a principal pointed out, “There was an English teacher, graduated from a physics education program. He had trouble with teaching language according to the level of students and assessment. Both parents and students complained about him” (P6).

Meanwhile, a teacher who had trouble with commitment noted, “we as out-of-field teachers believed to have done our best. We got teaching certificates. But it was upsetting to become a primary school teacher after taking 4 years of education in econometrics. We couldn’t work in our own field of study” (T3). Apart from commitment and knowledge of teaching and profession, out-of-field teachers reported feeling unsatisfied with teaching. Several participants reported that out-of-field teachers’ job satisfaction (T1,P1,P2,P7) and motivation (T5,T8,P6) were low. Furthermore, under the theme of adaptation, they noted that it took a long time for out-of-field teachers to learn teaching (T1,T3,T6,T9,P2,P5,P7), and out-of-field teachers had trouble with communicating with other educational stakeholders (T3,T5,T6,T11,P1,P4,P7).

Although out-of-field teacher employment is not approved, it is inevitable that this practice has some advantages. One of them is that graduates from different programs have become teachers. The advantages of out-of-field teaching practice according to participants are shown in Table 4.

Table 4.

*Participants’ Views Regarding the Advantages of Out-of-Field Teacher Employment*

Area of Questioning	Core Relevant Narrative Formed From Quotation (Key content summarized through relevant quotations and linked by formulated meaning statements)	Emergent Themes	Frequency of views
Perceived advantages of out-of-field teacher employment?	-Classes without teachers decrease (P4,P5P6) -The teacher shortages is met (T1,T4,T5,P4,P5P6) -Students meet teachers and education process can continue (P6)	Teacher Employment	10
	-They combine their filed of study with teaching (T3,T6,P5) -They have different perspectives on teaching (T3,T4,P2) -They change the classical perspectives on teaching (T3)	Different Perspectives on Teaching	9
	-It provides employment for people from faculty of science or letters (T1,T5,T10,P1,P3,P4) -The number of unemployed graduates decreases (T9) -Unemployed candidate teachers can be employed (T12)	Unemployment	8

As Table 4 shows, participants stated that the advantages of out-of-field teacher employment included meeting the teacher shortages, bringing different perspectives to teaching and decreasing unemployment. As far as meeting the teacher shortages is concerned, a teacher expressed that “in my first school there were a few teachers. Anyone from the street could have been taken to a classroom as a teacher” (T4). Similarly, a principal pointed out that “with out-of-field teacher employment, classes without teachers could be prevented” (P2). As for the different perspectives on teaching, a principal believed that

“out-of-field teachers could have extraordinary perspectives on teaching. They could make use of their field of study for teaching” (P5). In the same vein, a teacher noted, “Out-of-field teachers could break the teacher stereotypes. Their brains could work differently and teach students in that way” (T3). Additionally, many of the participants commented on decreasing unemployment, noting that out-of-field teacher employment could help solve unemployment (T1,T5,T9,T10,T12,P1,P3,P4).

Participants were also asked how to address the out-of-field teacher employment issue. Their suggestions to address the out-of-field teaching issue are shown in Table 5. Participants’ suggestions vary under such themes as MEB-YÖK collaboration, regulations, educational administration and planning and quality of faculty of education. Participants generally expressed that out-of-field teacher employment could be prevented by means of necessary regulations. In support of this theme, one teacher responded, “absolutely, MEB policy must be changed and new regulations should be created to prevent out-of-field teacher employment. In-field teachers should be employed” (T3). Similarly, a principal pointed out that “out-of-field teacher employment must be put to an end” (P4). This out-of-field practice can be addressed through education planning. A teacher noted, “education planning should be done before and the teacher shortages in the required subjects should be computed” (T9). Another teacher, thinking of creating regulations in accordance with education planning, expressed that “scientific studies should be conducted. Effects and negative results of out-of-field teacher employment should be discussed and policies to this problem should be created” (T20). On the theme of the quality of faculty of education, a principal thought that “qualified faculty of education should be employed” (P2). Similarly a teacher stated that “prospective teachers should get more experience at schools with students, principals and teachers. Teachers should be well prepared in better education conditions” (T9). According to participants’ suggestions, MEB-YÖK should collaborate with academicians and planners from the faculty of education to plan for sufficient well qualified teachers.

Table 5.

*Participants' Suggestions for Addressing Out-of-Field Teacher Employment*

Area of Questioning	Core Relevant Narrative Formed From Quotation (Key content summarized through relevant quotations and linked by formulated meaning statements)	Emergent Themes	Frequency of views
Perceived suggestions to address out-of-field teacher employment	-Consistent education policy should be pursued (T1T,2,T3,P2) -Education should be planned (P1,P5,T4,T9,T11) -The teacher shortages should be computed (P1,T6,T9) -Scientific studies should be done and projections for education components should be prepared in scientific way (T12) -Strategic plans should be prepared and research/development studies should be done (T1) -Education policy should be arranged according to regional differences, and national policy should be developed (P2,P3)	Educational Administration and Policy	23
	-Out-of-field teacher employment should be prohibited (T1,T3,T5,T12,P4) -There should be criteria like experience, interview and skills for teaching to be employed as a teacher (T4,T6,T7,P4) -An association for the teaching profession should be founded (T1) -Education policies shouldn't be changed inconsistently by politicians (T12) -Job selection should start from secondary school (P5,P6) -Changes to be done in education system should be run by teachers and local authorities (T1,T2)	Regulations	25
	-The quotas of universities should be checked (T8) -The number of faculties of education should decrease (P5,T6,T11) -Graduates from faculty of science and arts shouldn't be allowed to become teachers (T12) -It should be collaborated with universities (T 19)	MEB-YÖK Collaboration	8
	-Qualified faculty of education should be developed (P2) -Teachers should take better and more detailed education (T9) -The teaching profession should be more qualified (P2) -Teachers should be taught using more active methods (P4)	Quality of Faculty of Education	5

## Discussion and Conclusion

Increase of student admission to the faculty of education and establishment of policies to overcome the instability of teacher supply and demand are certainly issues to be discussed to address out-of-field teacher employment issues. While the percentage of out-of-field teachers in the USA was 13.7% in the 2011-2012 school year (Ramsay, 2013), it was over 50% of the total number of teachers in Turkey (Çınkır, 2013). This rate indicates that there is a serious problem with teacher training, employment and the education system in general.

The findings of this study indicates that most principals and teachers disapproved out-of-field teacher employment mainly because participants noted that out-of-field teachers lacked subject knowledge, teaching experience and professional specialization. In a similar study, Hobbs (2013) asked teachers why they felt that they were out-of-field teachers. Teachers' responses were grouped into such categories as issues relating to qualifications, issues relating to teaching and pedagogy, student-related issues and teachers' personal responses, attitudes and motivations. Sharplin (2014) also stated that out-of-field teachers felt alienated because of the inconsistency between their field of study and their field of assignment, thus preventing any chance to use their professional skills. According to Umoinyang, Akpan and Ekpo (2011), the employment of out-of-field teachers is one of the reasons for students' failure in basic subjects such as math and science.

According to the participants, out-of-field teachers have problems with such issues as commitment, job satisfaction and motivation, knowledge of teaching and the profession and adaptation to the job. However, participants stated that the most serious problem for out-of-field teachers was lack of subject knowledge and teaching. They do not have the requisite training and skills to fulfill the professional job of teaching. Du Plessis (2013) conducted a study about out-of-field teachers' feelings and attitudes towards teaching. In her findings, educational administrators, principals, in-field teachers, out-of-field teachers and parents were asked what the out-of-field teachers' feelings and attitudes towards teaching were. Participants believed that out-of-field teachers were stressful, anxious, hopeless and disappointed and suffered from burnout, and out-of-field teachers themselves stated that they were unhappy to do a job apart from their own field of study, and they felt guilty for being unqualified in their assigned area. In their study about history teachers, Salleh and Darmawan (2013) pointed out that in-field teachers were better role models for students and taught more effectively. Taken together, these results suggest that out-of-field teachers have psychological and professional problems, even if they are trying to do their best to teach effectively.

While out-of-field teacher employment may not have the approval of educational stakeholders, it does have some advantages. Participants pointed out that out-of-field teacher employment was advantageous in terms of increasing teacher employment, introducing different perspectives on teaching and decreasing unemployment. The most important advantage can be regarded as providing different perspectives on teaching, since out-of-field teachers can combine their field of study with teaching. Du Plesis, Carroll and Gillies (2014) similarly reported that out-of-field teachers made use of their specialization to teach effectively. Out-of-field teacher employment becomes an important source of employment. YÖK (2014) enabled about fifty thousand candidates to earn teaching certificates in the 2013-2014 Spring Term, and with these certificates, candidates could be employed as teachers at public or private schools.

Out-of-field employment is not seen in any other sector like health or law, and it must be put to an end if the education system is to bring up well-qualified generations of students and thinkers. Participants' suggestions for addressing out-of-field teacher employment were grouped into four themes: consistent educational planning and policies, regulations, MEB-YÖK collaboration and quality of faculty of education. Participants also added that MEB and YÖK played key roles in this process, as YÖK provides candidates with teaching certificates and MEB policy is responsible for employing out-of-field teachers. For this reason, MEB and YÖK could collaborate with educational administrators and planners to project the teacher shortages in the various subjects. Ingersoll and Curran (2004) have also made some suggestions for preventing out-of-field teacher employment. They suggested that standards of teacher training should be raised, that teachers should be more qualified in both subject knowledge and teaching, that out-of-field teacher employment should be prohibited and that authorities from MEB and educational administrators from schools should collaborate with institutions of higher education.

To conclude, it is fair to say that out-of-field teacher employment is not approved by most educational stakeholders, from principals to teachers. Studies abroad and in Turkey have pointed out that out-of-field teacher employment is a source of multiple problems in the education system. Such a practice, while intended to meet the teacher shortages, should not continue. Quality generations of Turkish citizens must be taught by professionally qualified teachers. Education is an open system whose output is human beings. All educational stakeholders have responsibilities to provide good quality education. It is vital to take the precautions necessary to ensure a successful education for the coming generations. One way to accomplish this is to assign well-qualified teachers for the task of teaching. Otherwise, as one of the participants said, borrowing from the Turkish saying, "When grandfather ate a plum, his grandchild's teeth were gnashed [*Dede erik yese torunun dişi kamaşır*]." In other words, the negative results of out-of-field teacher employment will most impact the next generations.

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